CULTURAL INTELLIGENCE AND ITS ROLE IN THE LEADERSHIP STYLE AND LEADERSHIP EFFECTIVENESS DOMAIN

by

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submitted in accordance with the requirements for the degree of

DOCTOR OF BUSINESS LEADERSHIP

at the

UNIVERSITY OF SOUTH AFRICA

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May 2017
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Tables and figures are numbered sequentially per chapter, for example, the first and second tables in Chapter 4 are numbered 4.1 and 4.2, respectively, whilst those in Chapter 5 are numbered 5.1 and 5.2, respectively etc.
DECLARATION

I declare that this thesis titled “Cultural intelligence and its role in the leadership style and leadership effectiveness domain” is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at the University of South Africa for another qualification or at any other higher education institution.

______________________________
Anthony Wilfred Solomon

DEDICATION

This thesis is dedicated to my darling wife, Jen, and my precious children, Madison (who left this world at just 6 months old), Jake and Kayla. I love you all so very much.

ACKNOWLEDGEMENTS

I am immensely appreciative of the exceptional guidance provided to me by my supervisor, Professor Renier Steyn, in this journey. Thank you, Professor Steyn, for your invaluable comments, quick turn-around times and willingness to always meet. Most of all, thank you for sharing your wisdom with me. I would also like to thank the MBL students who assisted with the collection of the data for the quantitative study.

PREFACE

The reader should note that this thesis is not presented in the traditional format which includes chapters on background, theoretical foundations, reviewed literature, findings and conclusions with recommendations and limitations. Rather, an adjusted structure is adopted in that such traditional format is replicated in each of chapters 2 to 6. This approach is followed since the research has five separate (two literature grounded and three empirical) objectives that are
addressed individually. Chapters 2 and 3 cover the first and second literature grounded objectives, respectively. Chapter 4 addresses the first empirical objective, chapter 5 the second and chapter 6 the third. Each of these chapters thus includes, amongst others, a targeted introduction, a focused literature review, the methodology applied, the results of the respective investigation and the recommendations arising therefrom. With this in mind, chapter 1 orientates the reader by offering a comprehensive discussion on the background of the research, the central concepts, introduces the goal and objectives (including the research problem, question and sub-questions) together with details of the design. Chapter 7, as the last chapter, provides a summary of the previous chapters and integrates both the findings and recommendations.

The in-text references and reference lists are in accordance with the requirements of the Publication Manual of the American Psychological Association (6th edition).
CULTURAL INTELLIGENCE AND ITS ROLE IN THE LEADERSHIP STYLE AND LEADERSHIP EFFECTIVENESS DOMAIN

ABSTRACT

Introduction: An interconnected world is impelling workforce composition towards cultural heterogeneity. Since leadership is a cultural construct, leaders should display those styles that enable them to function effectively in culturally varied conditions. Cultural intelligence could assist leaders in this respect. Purpose: To investigate the role cultural intelligence plays in the leadership style (empowering and directive leadership) and leadership effectiveness domain, so as to aid leader selection and development. Method: A systematic review of the cultural intelligence literature, coupled with content and thematic analysis, allowed for the knowledge to be organised per the concept, definition and truth statement (validated hypotheses) elements of the general body of scientific knowledge framework. Correlation and regression analysis of cross-sectional survey data, from 1 140 respondents, were used to assess relationships between leader cultural intelligence, leadership styles (empowering and directive) and leadership effectiveness. Results: Nine concepts associated with, and 24 different definitions of cultural intelligence, were identified. Sixty percent of hypotheses on cultural intelligence have been confirmed as truth statements. The relationship between leader cultural intelligence and empowering leadership demonstrated a large practical effect. This relationship was underpinned primarily by metacognitive and motivational cultural intelligence. The relationship with directive leadership carried a medium practical effect, and was strongest at the motivational and cognitive cultural intelligence levels. The part played by subordinates’ cultural identity in the display of empowering and directive leadership by culturally intelligent leaders was insignificant; rather, leader cultural intelligence was the dominant informant of these leadership styles. Finally, leader cultural intelligence did not impact the relationship between empowering leadership and leadership effectiveness. Although it did negatively affect the directive leadership and leadership effectiveness relationship, the moderation had no practical effect. Conclusions: The concepts associated with cultural intelligence are: accomplishment, culture, expatriates, experience, fit, intelligence, motivation, supervision and training. Cultural intelligence definitions remain mostly based on those of the seminal authors. The majority of truths cover just six themes. Leadership style (empowering and directive) is a function of leader cultural intelligence. Although leader cultural intelligence extends beyond subordinates’ cultural identity in predicting empowering and directive leadership, it does not influence their relationships with leadership effectiveness.

KEYWORDS

Cultural intelligence, cultural identity, culture, directive leadership, empowering leadership, leadership effectiveness, leadership styles, South Africa
CHAPTER 1: ORIENTATION

This research deals with cultural intelligence (CQ)\(^1\) in general and, specifically, the part it plays in the domain of leadership styles (as represented by empowering and directive leadership) and leadership effectiveness. This chapter provides the background to the research, introduces the central concepts, identifies gaps in the prevailing literature, presents the problem statement, the goal and objectives, as well as the research question and associated sub-questions. The importance of the research, the theoretical framework, propositions, hypotheses and the methodologies through which the goal and objectives have been achieved, are also described. In conclusion, the research ethics, delineations and limitations are considered.

1.1. BACKGROUND

The United Nations Population Fund (n.d.-a) points out that whilst it took hundreds of millennia for the world’s population to reach the one billion mark, in the 200 years thereafter it expanded seven times. In mid-2015 the world population stood at 7.3 billion persons (United Nations, n.d.). Although the annual growth rate shows a marginal decline it is anticipated that the population will reach 8.4 billion by 2030 (The World Bank, n.d.). Urbanisation is advancing swiftly and it is projected that, in the next 14 years, nearly 60% of the global population will be city and town dwellers (up from the current 50%) (United Nations Population Fund, n.d.-b). The worldwide expatriate population is expanding as a share of the global population and, whereas it stood at almost 51 million in 2013, it is predicted to top nearly 57 million persons by the end of 2017 (Finaccord, 2014). International migration, which has become a world-wide phenomenon (Le, Jiang & Nielsen, 2016), reflects a similar trend with the number of global migrants having risen from 154 million in 1990 to 232 million in 2013 (United Nations, 2013). To this end, Skeldon (2013) observes that “the twenty-first century has been called ‘the age of migration’” (p. 7).

This ongoing population growth and the associated movement patterns being driven, in part, by

\(^1\) This abbreviation is used, as opposed to CI, as it is adopted extensively in the cultural intelligence literature.
globalisation (Tung, 2015), can be expected to continue contributing to increased cross-cultural interactions. Similarly, the number of cultural practices that might exist within a single country (Simpson, 2016), for example, South Africa, as evidenced by the 11 official languages (Van Zyl, 2015), increases the likelihood of intercultural exchanges becoming part of everyday life (Doğutaş, 2015). Campbell (2016) contends that cultural multiplicity characterises most aspects of life whilst Menon and Narayanan (2015) point out that, nowadays, individuals routinely engage with persons having varied cultural backgrounds.

The workforce itself has also become global in nature (Ryan & Wessel, 2015; Shu, McAbee & Ayman, 2016), reflecting an increasingly greater percentage of non-native (Rosenauer, Homan, Horstmeier & Voelpel, 2016) and, thus, culturally diversified workers (Li, 2017). Primary drivers of this include the “internationalization and outsourcing of both low- and high-skilled jobs” (Sloan, Hazucha & van Katwyk, 2003, p. 235) as well as the pursuit of global operations through international mergers and acquisitions (Eberhardt & Majkovic, 2016). With this in mind, Kwantes and Glazer (2017) state that it is common, today, for many company employees to operate across cultures whilst Andresen and Bergdolt (2017) comment that staff members, in all companies, are more and more having to navigate intercultural diversity.

Migrating staff members bring their own ethnic culture, replete with acquired behaviours, customs and values to their new workplaces (Hopkins & Scott, 2016). Moreover, as Jonck and Swanepoel (2015) point out, employment equity and affirmative action programmes are fuelling domestic workforce variety. Ongoing racial and ethnic multiplicity will continue to shape the labour force going forward into 2050 (Toossi, 2006). Hence, Livermore (2010) states that “today, almost every leader engages in a myriad of cross-cultural interactions” (p. 13). In this respect, Young, Haffejee and Corsun (2017) argue that companies need leaders who can effectively adapt to new cultures. This is essential since the leader role in multicultural settings is crucial (Malik, Madappa & Chitranshi, 2017).

Owing to more numerous intercultural interfaces the opportunity for cultural misunderstandings and tensions is amplified (Jyoti & Kour, 2017; Ramirez, 2010; Smale, 2016)
and where they do result this may negate both the coordinated functioning of the workplace and the affiliated welfare of workers (Malik, Cooper-Thomas & Zikic, 2014). In this regard, Metge and Kinloch (2001) remark that cultural misunderstandings can arise despite both parties having the utmost goodwill which, per Malik et al. (2014), may be traced to a lack of cognisance of cultural dissimilarities or incapacity in altering one’s behaviours. Jacklin-Jarvis and Potter (2017), too, recognise that cultural variances can hamper both communication and common understanding.

The cross-cultural interaction may degenerate when misunderstandings are not properly managed (Alzeer, 2016) or where one or both parties are ethnocentric in nature (Kambutu & Nganga, 2008). Ethnocentrism, originally referred to by Perlmutter in 1965 (Michailova, Piekkari, Storgaard & Tienari, 2017), is reflective of “the universal proclivity for people to perceive their own group as the center of the universe, to interpret other social practices from the perspective of their own group, and to neglect persons who are culturally dissimilar while blindly accepting those who are culturally like themselves” (Myers, 1995, p. 203). As such, it emerges from an individual’s own enculturation, an absence or lack of interaction with persons of other cultures or a failure to fully comprehend other customs (Samovar, Porter & McDaniel, 2012). Logan, Steel and Hunt (2015) observe that ethnocentrism might negatively affect congenial intergroup exchanges and is associated with reduced cultural awareness. Cargile and Bolkan (2013) note that ethnocentrism not only reduces the inclination to establish intercultural relationships but also induces cross-cultural communication anxiety. Hendrickson (2016) goes so far as to describe the inability to conceive how one’s own culture influences elucidation of and interaction with the broader world as “cultural captivity” (p. 102).

Whereas ethnocentrism portrays “avoiding cultural differences”, ethnorelativism encompasses the “seeking of cultural difference” (Hammer, Bennett & Wiseman, 2003, p. 426). Ethnorelativism depicts a person’s capacity to “use a frame of reference that allows him (sic) to accept the viability of other frames of reference” (Mayer, 2012, p. 29); in other words, ethnorelativism maintains that diverse cultural viewpoints are relative rather than being better or more appropriate than one another (Sheffield, 2007). In this sense, Gerstein, Hurley and
Hutchison (2015) describe ethnorelativism as “non-ethnocentrism” (p. 252) and note that empirical evidence underpinning the connection between ethnorelativism and intercultural effectiveness exists.

Bennett (1993) identifies six phases through which individuals might evolve from ethnocentrism to ethnorelativism: denial, defence, minimisation, acceptance, adaptation and integration. Sheffield (2007) remarks that denial is the phase wherein an individual fails to notice other cultures. In this phase, the individual is devoid of the notion that cultural differences exist (Olson & Kroeger, 2001). Hammer et al. (2003) indicate that in the defence phase one’s own culture is considered to be the only feasible one. Sheffield (2007) explains the minimisation phase as consisting of the reduction of cultural differences to such an extent that one’s own culture prevails as global. Olson and Kroeger (2001) state that when the individual can recognise and appreciate cultural dissimilarities the acceptance phase has been entered. The adaptation phase commences when the individual develops the capacity to interact with persons belonging to other cultures (Olson & Kroeger, 2001) that is, individuals exhibit feelings and behaviours that are culturally apt (Hammer et al., 2003). Endicott, Bock and Narvaez (2003) comment that the final phase, integration, is entered when the individual has co-opted multiple cultural worldviews that allow him / her to transition into and out of varying cultural value contexts.

To offer insight as to why some persons flourish in cross-cultural exchanges whilst others flounder, Earley and Ang (2003) introduced the concept of CQ, which is largely viewed as “a person’s capability to adapt effectively to new cultural contexts” (Earley & Ang, 2003, p. 59). This theory thus argues that to be cross-culturally effective an individual requires more than a comprehension of other cultures but must also be able to adjust to such cultures.

Mathews (2016) declares that CQ denotes the exodus “from an ethnocentric mindset” (p. 46). Both Harrison (2012) and Young et al. (2017) established that ethnocentrism and CQ are negatively correlated with one another whilst Ersoy (2014) found that culturally intelligent managers are considered as having “far from ethnocentric thinking” (p. 6106). Peterson (2004)
maintains that the growth of CQ consists of the movement from ethnocentrism to ethnorelativism. To this end, Pusch (2009), in discussing the integration stage of Bennett’s (1993) model, remarks that an integrated individual “is able to function between and among many cultures, having mastered the skills of bridging between them” (p. 75). It is apparent that in describing this person, that is, someone who has achieved ethnorelativism, Pusch (2009) is in fact identifying such person as having high CQ. It is logical to assume then that CQ contributes towards the attainment of ethnorelativism.

Leadership holds a pivotal role in the making of successful organisations (Larsson & Vinberg, 2010). Accordingly, Livermore (2015) asserts that leaders face a formidable test in that “leadership today is a multicultural challenge” (p. 3). This is particularly relevant because it is incorrect to assume that leadership practice is universal across different cultures (Van Zyl, 2015). Pauliené (2012) suggests that “leadership styles exhibited by individuals who act in ways reflecting cultural nuances, sensitivities and values, establish a meaning for subordinates and the leaders themselves” (p. 92). Where leadership styles adopted are, however, dissonant from the cultural expectations of subordinates, it is likely that such leaders will be perceived as ineffective, with concomitant business unit and corporate level failures.

Whitaker and Greenleaf (2017) note that “leadership in cross-cultural environments” is “of increasing importance” (p. 169). Sereni-Massinger and Wood (2016) recognise an “increased need for cross-cultural leadership” (p. 259) whilst Musamali and Martin (2016) comment that leaders with cross-cultural abilities are urgently required. Chao, Takeuchi and Farh (2017) make similar remarks. Eken, Özturgut and Craven (2014) underscore this requirement most succinctly in declaring that “being a culturally competent leader is not a preferred skill but a required skill within almost any organization” (p. 154). Hence, leader CQ has become a crucial competency (Alon et al., 2016; Rockstuhl, Seiler, Ang, Van Dyne & Annen, 2011; Young et al., 2017) not only because “cultural boundaries are an aspect of business that is often overlooked” (Divyashree, 2016, p. 1539) but precisely because culture plays a central role in influencing both the development of leadership and the effectiveness thereof (Hanges, Aiken, Park & Su, 2016).
Empirical examination of CQ within the context of leadership and its various styles, however, is limited in both scope and number of studies (Groves & Feyerherm, 2011). Such lack of knowledge becomes even more conspicuous when leadership effectiveness is introduced into the equation. Groves and Feyerherm (2011), for example, illuminate this by stressing that “very few empirical studies have examined the unique contribution of leader CQ to leadership performance outcomes” (p. 535). Gutierrez, Spencer and Zhu (2012) state that “we still have a lot to learn about cross-cultural leadership” (p. 69). Barakat, Lorenz, Ramsey and Cretoiu (2015) echo analogous sentiments. Dean (2007) contends that “organizations lack an adequate understanding of how interculturally competent leadership actually functions” (p. 4).

The above discussion accentuates the need for and importance of exploring the relationship between CQ, leadership styles and leadership effectiveness. The candidate, through this thesis, thus aims to provide the reader with pertinent literature grounded and empirical insights.

1.2. THE CENTRAL CONCEPTS

The central concepts of this research comprise CQ, leadership style and leadership effectiveness. These concepts, including their theoretical foundations, are introduced below. To situate the discussion, it is apposite to first present a brief overview of both culture and intelligence.

1.2.1. Culture and intelligence

This section addresses culture and intelligence, first separately and then in combination.

1.2.1.1. Culture

Baldwin, Faulkner, Hecht and Pickell (2006) assert that culture is a vital concept in the study of the social sciences and humanities. To examine culture, it is necessary to define it. With this intent, Kroeber and Kluckhohn (1952) identified over 160 separate definitions of culture. They arranged these into various groupings, including those based on content, social heritage, problem resolution patterns and organisations as well as the procedures through which aims could be accomplished (Cohen, 2009). They concluded by offering a definition incorporating
features from these groupings (Baldwin et al., 2006): that is, “culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems, may on the one hand, be considered as products of action, on the other as conditioning elements of further action” (Kroeber & Kluckhohn, 1952, p. 181).

Other seminal definitions include those of Hofstede (1980) who believes that culture is “the collective programming of the human mind that distinguishes the members of one human group from those of another” (p. 260) whilst Schein (1996) believes that culture is “the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments” (p. 236). More recently, Divyashree (2016) proposed that culture is simply a people’s “way of life that is socially learned, shared, and transmitted from generation to generation” (p. 1539) whereas Kurpis and Hunter (2017) state that culture reflects the behavioural standards and understandings of a discrete collection of people which differs from the typical beliefs and actions of other groupings of persons.

Cohen (2009) points out, per Triandis (2007), that generally, most definitions of culture suggest that it (1) arises from connections between human beings and their surroundings, (2) comprises communal essentials and (3) crosses both time and generations. In essence then, culture, as a metonym for human identity (Armstrong, Francis & Grow, 2017), encompasses the lens that enables persons to interpret the environments in which they find themselves (Hansen, Singh, Weilbaker & Guesalaga, 2011) and is learned (Thin & Biswas-Diener, 2016; Tuleja, 2017). Javidan and House (2001) observe that cultures develop and progress as societies adjust to their surroundings and seek out methodologies through which they might better manage their internal relations.

The elements of culture include attitudes, beliefs, norms and taboos (Cui, 2016).
Cultural attitudes reflect the way persons “think and feel about culture and people from different cultures” (Songwathana & Sriratanaprapat, 2016, p. 28) whilst cultural beliefs are the “ideas and thoughts common to several individuals that govern interaction” between themselves and other groups (Greif, 1994, p. 915), and are based upon values (Tuleja, 2017). Whereas cultural norms are the “culturally established patterns of doing things” (DeCapua & Wintergerst, 2007, p. 19), cultural taboos represent those actions or behaviours that are prohibited in a culture (Cui, 2016).

Erez and Gati (2004) point out, per Schein (1992), that the characteristics of culture prevail at varying layers of visibility. The outermost layer reflects the observable and perceptible actions together with the developed physical and social milieu. The middle layer encompasses values, whilst in the innermost layer lie the non-visible conventions about human nature (Erez & Gati, 2004).

Culture manifests at a variety of levels (Nahavandi, 2016) including social collectives, such as “villages, regions, ethnic groups, nationalities and religious groups” (Huntington, 1993, p. 8). According to Trompenaars and Hampden-Turner (1998), culture exists at the national, corporate (organisational) and professional levels. National culture, submits Smale (2016), is “an interconnected web of mental models that is shared by national groups and transcends the individual” (p. 18). Robbins (1996) maintains that national culture comprises “primary values and practices that characterize a particular country” (p. 48) and is the uppermost culture type (Trompenaars & Hampden-Turner, 1998). “Organizational culture is the culture that exists in an organization” (Shafritz, Ott & Jang, 2014, p. 292) and is composed of the fairly constant views, attitudes and values that are shared amongst the members of an organisation (Kwantes & Boglarsky, 2007). Professional culture is that which exists amongst persons belonging to different functions (such as finance and marketing) within the organisation (Trompenaars & Hampden-Turner, 1998). Erez and Gati (2004) expand the above levels to include global and individual culture. Global culture, located above national culture, represents globalisation and is posited to include the inherent values of freedom of choice and free markets whilst culture at the individual level depicts the representation of cultural values in oneself (Erez & Gati, 2004).
Group type appears to be the sole real difference between the various culture levels described, that is, the levels may be characterised as comprising different assemblages of persons.

Although several scholars (such as Handy, 1991; Kluckhohn & Strodbeck, 1961; Schwartz, 1999) have proposed varying frameworks to organise the different dimensions of culture (cultural identity), the framework of Hofstede (1980) has attracted the most attention (Dickson, Den Hartog & Mitchelson, 2003; Kirkman, Lowe & Gibson, 2006; Kumar, Anjum & Sinha, 2011). Hofstede (1980) initially identified four cultural dimensions. A fifth and six dimension were subsequently recognised. Per Hofstede (2011), the six dimensions are: (1) power distance: the degree to which power amongst members of a culture is unequally disseminated. The less powerful members both anticipate and accept the power inequality, (2) uncertainty avoidance: the extent to which a society is accepting of ambiguity. Those cultures low in uncertainty avoidance resist amorphous situations through compliance with laws and rules, (3) individualism and collectivism: the magnitude to which societal members are organised and assimilated into groups. Individualistic cultures emphasise the individual whilst collectivist cultures promote the family, (4) masculinity and femininity: the degree to which values are allocated between the genders. Masculine cultures promote all-out emotional and social role distinction between the genders, whilst feminine cultures endorse minimal differentiation, (5) long- and short-term orientation: the extent to which the culture reveres tradition and pursues the satisfaction of social obligations. Cultures that have a short- term orientation value social spending and believe in the now whilst long-term orientated cultures highlight thriftiness and perseverance at the same time as accepting the future is when life’s most central events will take place, and (6) indulgence and restraint: the amount of essential and desired human needs gratification which a culture sanctions. Restrained cultures control satisfaction by means of exacting social customs. Erez and Gati (2004) explain that those cultures high in individualism, low in power distance and uncertainty avoidance can be expected to best adapt to the global culture, whilst individualistic and collectivistic values are embodied at the individual culture level in the independent and interdependent self, respectively.
1.2.1.2. Intelligence

Sternberg (2004b) contends that “looked at in one way, everyone knows what intelligence is; looked at in another way, no one does” (p. 3). Two main conventions, one in 1921 and the other in 1986, have taken place at which scholars sought to agree on the meaning of intelligence (Earley & Ang, 2003). Despite no single definition being arrived at, Earley and Ang (2003) indicate that Sternberg (1986), in attempting to record the many viewpoints expressed, developed a framework established upon the foci of intelligence or enquiry level at which intelligence is considered. Although a collection and synthesis of all the definitions that have been advanced over the years for intelligence is almost impossible, Legg and Hutter (2007) compiled a list of approximately 70. The list includes definitions proposed by psychologists, scholars in the field of artificial intelligence and those that have been agreed upon by many persons. The features that appear to be common amongst the definitions are that intelligence is (1) a capacity that is possessed by an agent as it interfaces with the environment around it, (2) concerns the competence of the agent in attaining a set aim and (3) is a function of the agent’s facility in adjusting to various objectives or surroundings (Legg & Hutter, 2007). Through an integration of the definitions collected and the features extracted, Legg and Hutter (2007) propose that intelligence is a measure of “an agent’s ability to achieve goals in a wide range of environments” (p. 9).

Intelligence theories may be grouped into four categories: (1) psychometric, (2) cognitive, (3) cognitive-contextual and (4) biological (Gardner, 2011a). Psychometric theories explain intelligence in terms of a person’s fundamental skills such as verbal and reasoning abilities (Sternberg, 1985). These theories are usually founded upon the assertion that intelligence is controlled by explicit knowledge and intentional problem-resolution approaches (Kirsner & Speelman, 1998). Examples of psychometric theories include the Two Factor (see Spearman, 1904), the Bond (see Thomson, 1951; Thorndike, 1925), the Fluid and Crystallized Ability (see Cattell, 1963) and the Structure of Intellect theories (see Guilford, 1977). In terms of the Two Factor theory (Spearman, 1904) intellect is composed of general (g-factor) and specific (s-factor) abilities (Minikutty & Nair, 2016). The g-factor varies amongst persons, is applied in all aspects of life and governs mental vigour, whilst the s-factor differs between activities.
performed by the same person and is learned and acquired (Minikutty & Nair, 2016). Thomson (1951) submitted, in terms of the Bond theory, that a mental test required the performance of varying mental procedures (known as bonds) for its solution (Gardner, 2011a). Thorndike (1925) believed that the bond quantum depicted both peoples’ ability to conclude bonds and their worldly experiences that facilitated the connecting of stimuli with reactions (Gardner, 2011a). The Fluid and Crystallized Ability theory suggests that there are two types of intelligence, (1) being fluid intelligence, which denotes the inherent capability for reasoning and which is a function of a person’s biology (Passmore, Tong & Wildflower, 2011) and (2) being crystallised intelligence, which may be developed and is thus influenced by, amongst others, education, learnings and culture (Minikutty & Nair, 2016). Gardner (2011a) points out that examples of fluid intelligence include inductive and deductive reasoning whilst crystallised intelligence incorporates cultural insights and vocabularies. The Structure of Intellect theory supposes that there are over 100 distinct human abilities (Spencer, 2011) that arise from (1) thinking (or mental operations), (2) the contents or types of operations and (3) the outputs or products of thinking (Minikutty & Nair, 2016).

Cognitive theories address intelligence in terms of core cognitive processes (Rijumol, Thangarajathi & Ananthasayanam, 2011). Such processes depict the manner “in which information is encoded, stored, retrieved, and utilized by the brain in performing cognitive tasks such as those presented in traditional IQ tests” (Earley & Ang, 2003, p. 34). Some researchers have focused on simple sensory processes, others on various facets of visual uneasiness, while still others have looked at working memory processes and information processes in answering intelligence tests (Gardner, 2011a). The Triarchic theory (see Sternberg, 1985) made up of three sub-theories, (1) contextual, (2) experiential and (3) componential (Lohman, 1989), is illustrative of a cognitive theory (Gardner, 2011a). The contextual sub-theory tries to identify behaviours that would be considered intelligent in a specific culture whilst the experiential sub-theory submits that intelligence is best revealed when the mission or circumstance is original (Lohman, 1989). The componential sub-theory proposes the cognitive arrangements and processes that underpin all behaviours which are deemed intelligent (Lohman, 1989). Galati (2015) indicates that the three sub-theories represent configurations of
successful intelligence as opposed to intelligence types (see the Multiple Intelligences theory below).

Cognitive-contextual intelligence theories have as their goal the elucidation of intelligent behaviour according to the context in which it takes place (Gardner, 2011a). They may be distinguished from the cognitive theories in that they concentrate on groups of processes rather than separate processes per se (Gardner, 2011a). The Multiple Intelligences theory (see Gardner, 1983) and the Stage Theory of Development (see Piaget, 1954) are reflective of cognitive-contextual theories (Gardner, 2011a). The Multiple Intelligences theory asserts that intelligence is composed of many independent sets known as intelligences (Cline, 2015). These intelligences are classified as (1) linguistic, (2) logical-mathematical, (3) musical, (4) bodily-kinaesthetic, (5) spatial, (6) interpersonal and (7) intrapersonal (Gardner, 2011a). Passmore et al. (2011) point out that bodily-kinaesthetic intelligence involves body use in the resolution of problems, that is, movement synchronisation whilst spatial intelligence is conceptualised as the ability to reason multi-dimensionally.

The Stage Theory of Development is mainly a theory of child development (Gardner, 2011a). This theory indicates that children progress through four stages: the sensorimotor stage in which the child begins to understand the setting through sensory and motor acts, the preoperational stage wherein the child employs symbolism to comprehend the world, the concrete operational stage in which a child begins to use quantitative and logic activities during particular experiences and the formal operational stage in which the child, who has now become an adolescent, considers both concepts and theoretical ideas (Gardner, 2011a).

Intelligence has also been studied at the biological level (Cline 2015). Variations in intelligence levels have been considered in terms of both brain hemisphere and brain wave activity differences, as well as the effect of blood movement on mental activities (Spencer, 2011). Brain size and intelligence associate with the relationship improving as brain size measurements have become increasingly accurate (Gardner, 2011a). Electroencephalographic measurements and cerebral glucose absorption measures concentrate on how the brain
operates rather than its structure (Earley & Ang, 2003).

Bearing in mind the definition of intelligence by Legg and Hutter (2007), provided earlier, Ang, Van Dyne and Tan (2011) note that “there is now consensus that intelligence applies beyond the classroom” and refer to this as “real-world” (p. 583) or non-academic intelligences. Weis and Süß (2005) and Du Plessis (2011) refer to these types of intelligence as “so-called new intelligences” (p. 204) and “applied” intelligences (p. 30), respectively. Earley (2002) talks about the move away from intelligence being ruled by the g-factor. Kumar, Rose and Subramaniam (2008a) point out that the limited ability of intelligence tests to predict performance in non-academic settings has been the catalyst in furthering the concept that intelligence incorporates more than just general academic intelligence.

Examples of non-academic intelligences include emotional and social intelligence (Van Dyne, Ang and Nielsen, 2008). Jordan, Ashkanasy, Härtel and Hooper (2002) observe that emotional intelligence encompasses four elements: (1) the assessment and manifestation of emotion, (2) self and other emotion regulation, (3) emotional information and (4) the production of emotions to aid problem resolution. Thus, Boyatzis (2006) argues that emotional intelligence reflects those competencies that facilitate peoples’ awareness of themselves as well as the emotions of others, together with their capacity to manage proprietary emotions and relationships.

Social intelligence is the ability “of a person to adjust to and interact with others in an effective fashion”, in other words, the capacity to deliver action both together with and via other people (Earley, 2002, p. 284). Social intelligence was initially viewed as a unitary concept but was later considered to consist of both interpersonal (the capacity to discern the moods, drives and mental standing of others) and intrapersonal (the ability to understand one’s own feelings and to employ them in behaviour adaptation) competencies (Crowne, 2009).

In summation then, Gottfredson (1997) offers, in her editorial covering the mainstream science on intelligence, a particularly instructive perspective: “intelligence is a very general mental
capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather it reflects a broader and deeper capability for comprehending our surroundings – ‘catching on,’ ‘making sense’ of things, or ‘figuring out’ what to do” (p. 13).

1.2.1.3. Culture and intelligence combined
Cocodia (2014) observes that culture and intelligence are “interwoven” (p. 193). Berry and Ward (2006) assert that “intelligence is a cultural product” (p. 69). Sternberg (2004a) offers an exposition of the association between culture and intelligence through the employment of various combinations of (1) the nature of intelligence as conceptualised across cultures and (2) the tools used to quantify intelligence in different cultures. In the first combination, both the nature of intelligence and the instruments for the measurement thereof are the same across cultures. The second combination depicts the conceptualisation of intelligence as differing across cultures, although the tests to measure it remain consistent. In the third model, intelligence remains stable despite cultural differences whilst the measuring instruments differ. In the fourth and final combination, both the nature of intelligence and the tools that measure it vary across different cultures.

Ng and Earley (2006) specify two alternative approaches by which culture and intelligence may be assimilated. The first approach, similar to that of Sternberg (2004a), targets the cultural variation of intelligence which proposes that the characteristics of intelligence can be expected to vary across cultures (Ng & Earley, 2006). The second method comprises CQ (Ng & Earley, 2006). According to Ng and Earley (2006), “both approaches represent valid yet different ways of integrating culture and intelligence” (p. 5). Hence, Ng and Earley (2006) maintain that the cultural variation of intelligence method is predicated upon an emic, whilst CQ depicts an etic, perspective of intelligence. CQ, therefore, is established as a “culture-free construct that applies across specific cultural circumstances” (Ng & Earley, 2006, p. 10).
1.2.2. Cultural intelligence

This section covers the conceptualisation of CQ, differentiates it from other intelligence types (and personality characteristics) and considers how it may be developed.

1.2.2.1. CQ conceptualisation

CQ depicts the capacity of an individual to adjust effectively to situations of cultural miscellany (Earley & Ang, 2003), originating from dissimilarities of race, ethnicity and nationality (Ang, Van Dyne, Koh, Ng, Templer & Chandrasekar, 2007) as well as gender, age and even job experience (Earley & Mosakowski, 2004b). CQ, spurred by the actuality of globalisation in the workplace (Aziz, 2016; Ang & Inkpen, 2008), prevails as a distinct intelligence type (Brislin, Worthley & MacNab, 2006), which is not limited to “culturally-bound notions of intelligence” (Ang et al., 2015, p. 279). It is located within the non-academic intelligence domain (Kumar et al., 2008) and presents as a measurable gamut of individual variation along which persons may be organised according to the magnitude of the attribute they exhibit (Thomas et al., 2008).

Alternative conceptualisations of CQ exist (Bovornusvakool, Ardichvili & Rana, 2015). Thomas and Inkson (2005) submit that CQ is composed of three elements, (1) knowledge – of the nature of culture, how it diverges and how it influences behaviour (Thomas & Inkson, 2005), (2) mindfulness – a “heightened awareness of and enhanced attention to current experience or present reality” (Thomas, 2006, p. 84), that is, a considered attentiveness to and reflection on signals that occur during intercultural interfaces (Bovornusvakool et al., 2015) and (3) behaviour – the selection and display of suitable behaviours for the cross-cultural exchange (Tuleja, 2014).

Earley and Ang (2003) initially considered CQ as comprising cognitive, motivational and behavioural dimensions. Ang and Van Dyne (2008) subsequently recognised metacognition as a fourth dimension (Van Dyne et al., 2012). More recently, Fung and Lo (2017) conceived of CQ as being composed of (1) diversity attitudes, (2) reflectivity and (3) experience.

Du Plessis (2011) points out that the variation in the first two abstractions described above appears to be mostly conceptual in that the metacognitive element in the Earley and Ang (2003) / Ang and Van Dyne (2008) model forms part of the cognitive component in the model of
Thomas and Inkson (2005). Ott and Michailova (2016) however, argue that there are two main variations between these conceptualisations. Earley and Ang (2003) and Ang and Van Dyne (2008) locate the CQ dimensions at the matching level of the aggregate construct itself whilst Thomas and Inkson (2005) promote their conceptualisation as “a latent construct”, in other words, it is the interplay between the dimensions that gives rise to CQ (Ott & Michailova, 2016, p. 7). The second variation concerns the motivational dimension. Earley and Ang (2003) present motivational CQ as the dimension that impels a person to partake positively in cross-cultural situations whilst in the Thomas and Inkson (2005) model, being motivated towards affirmative exchanges is not a pre-requisite for CQ (Ott & Michailova, 2016).

This research made use of the conceptualisation of CQ by Earley and Ang (2003) and Ang and Van Dyne (2008) as it is the one that has been used most often in CQ investigations (Ott & Michailova, 2016). This conceptualisation, point out Ng, Van Dyne and Ang (2012) as well as Presbitero (2016a), is premised upon the multiple loci of intelligences framework proposed by Sternberg and Detterman (1986). This framework maintains that intelligence incorporates various loci; metacognition, cognition and motivation as mental competencies and behaviour as the external reflection of conduct (Ang et al., 2011). Metacognitive intelligence depicts the regulation of cognition, that is, the mechanism through which individuals receive and comprehend knowledge (Ang et al., 2007). Cognitive intelligence refers to a person’s knowledge (Ang et al., 2011). The mental ability to concentrate on and deliver energy towards a specific activity denotes motivational intelligence whilst behavioural intelligence reflects actions as opposed to thoughts (Ang et al., 2007).

Given the above, metacognitive CQ thus reflects awareness levels and competence in strategizing during intercultural exchanges (Livermore & Ang, 2016). Through metacognitive capability individuals knowingly review both their own cultural assumptions and those that they have about persons belonging to other cultures (Van Dyne, Ang, Ng, Rockstuhl, Tan & Koh, 2012). Individuals high in metacognitive CQ are aware of the divergent cultural preferences of others, both prior to and throughout cultural exchanges (Ang et al., 2007). Such persons are better able to comprehend new cultures as they are competent in forming mental models of
novel cultural situations (Ramsey, Barakat & Aad, 2014). Cognitive CQ represents cultural knowledge, that is, “general knowledge and knowledge structures about culture” (Ang, Van Dyne & Koh, 2006, p. 101). The information consists of cultural customs, practices and conventions (Ang et al., 2007) and is acquired and built up through academic and personal learnings (Lin, Chen & Song, 2012). Motivational CQ accounts for the desire to learn about other cultures and partake in intercultural exchanges (Matsumoto & Hwang, 2013). This component of CQ is founded upon enhancement (the desire for feelings of self-worth), growth (the aspiration to test and develop oneself) and continuity (the wish for stability and sureness) (Ramalu, Rose, Kumar & Uli, 2010). In sum, motivational CQ activates attention and energy, sparking cultural information and strategies into directed action during cultural interactions (Templer, Tay & Chandrasekar, 2006). Behavioural CQ signifies the demonstration of culture germane actions and reactions (Lin et al., 2012) and may be both verbal and non-verbal (Wu & Ang, 2011). Persons strong in behavioural CQ regulate their actions in cross-cultural exchanges by consciously procuring or subconsciously imitating behaviours that are apropos to the interaction (Lovvorn & Chen, 2011). In unison, the dimensions thus blend together the skills necessary for effective adaption in those cultural contexts that deviate from that which an individual is innately accustomed to (Nunes, Felix & Prates, 2017).

Van Dyne et al. (2012) identified sub-dimensions for each of the four primary CQ dimensions discussed above. The sub-dimensions of metacognitive CQ comprise (1) planning – preparing for a cross-cultural interaction through considering the culture of the other participant(s) and formulating an appropriate strategy, (2) awareness – consisting of real-time understanding of cultural logic, oneself and others and (3) checking – refining suppositions when reality differs from anticipations (Van Dyne et al., 2012). The cognitive CQ sub-dimensions are (1) culture-general knowledge – insights covering the general aspects of a cultural environment such as economic and political system types and (2) context-specific knowledge – data pertinent to a specific culture (Van Dyne et al., 2012). Motivational CQ is represented by (1) intrinsic interest – deriving fulfilment purely from the cross-cultural exchange itself, (2) extrinsic interest – benefits arising pursuant to the interaction and (3) self-efficacy to adjust – the belief that one will be successful in the exchange (Van Dyne et al., 2012). The behavioural CQ sub-dimensions are
made up of (1) verbal behaviour – articulation flexibility, (2) non-verbal behaviour – motion and signal flexibility and (3) speech acts – flexibility in the delivery of messages such as appeals and offers (Van Dyne et al., 2012).

The four dimensions of CQ (Ang & Tan, 2016; Ang, Rockstuhl & Tan, 2015) may or may not share a correlation with one another (Ang et al., 2007). As noted earlier, these dimensions exist on the same plane as CQ itself (Ng et al., 2012). Persons high in CQ are able to coordinate the employment of all four of the dimensions harmoniously (Crowne, 2008). This is important because concentration on simply a single dimension may actually promote greater cultural incompetence (Van Dyne, Ang & Livermore, 2010), for example, persons who possess relevant cultural knowledge (cognition) but who lack the motivation to use it will, likely, be ineffective in cross-cultural settings (Andresen & Bergdolt, 2017).

1.2.2.2. CQ and other intelligences

CQ may be distinguished from both academic intelligence as well as other non-academic intelligence types. Specifically, it contrasts general mental skill (Kurpis & Hunter, 2017) as it covers a broad range of loci, such as motivation and behaviour, whilst general intelligence only targets the cognitive positioning of intellectual talents (Ang, Van Dyne & Rockstuhl, 2015).

Although CQ shares some commonalities with emotional intelligence (Aziz, 2016; Gunkel, Schlaegel & Taras, 2016) in that both extend further than academic and mental aptitudes, it may be distinguished from the latter in that emotional intelligence is culture constrained, that is, it does not extend across cultures (Ang et al., 2011). In other words, whilst emotional intelligence reflects an individual’s capacity to address personal emotions, CQ allows for the management of emotions independently of cultural settings (Alshaibani & Bakir, 2016). It is for this reason that Jonck and Swanepoel (2015) state that the lack of cultural knowledge (cognition) in emotional intelligence is what differentiates CQ from the former.

Both Crowne (2009) and Kumar (2008) posited CQ as being a subset of social intelligence. The rationale for such a proposition was that because CQ covers the cultural components in
social interfaces, someone who is competent in interacting with culturally diverse others should be similarly capable of successful social intracultural exchanges (Crowne, 2009). However, the opposite may not be true as those individuals who are proficient in social interactions in their own culture may not be so when interfacing across cultures where they lack requisite cultural knowledge (Crowne, 2009). Empirical analysis by Crowne (2013a) nevertheless revealed that social intelligence is not only not super-ordinate to CQ but that in fact evidence exists to support their discriminate validity.

CQ contrasts other cultural perspectives in that it does not represent the capacity to operate effectively in a single culture but instead crosses numerous intercultural interactions (Ang et al., 2015). In this regard, Livermore (2011) comments that [with CQ] “the emphasis is not only on understanding different cultures, but also on problem solving and effective adaptations for various cultural settings” (p. 5). CQ also differs from personality characteristics (Tran, 2014) since the latter are reflective of thoughts, feelings and action patterns, which are comparatively durable through time and conditions, thereby allowing for the separation of persons from one another (Roberts & Mroczek, 2008) whilst CQ comprises capabilities for effective multicultural interactions (Ang, et al., 2015).

1.2.2.3. CQ development

Ang and Tan (2016) note that CQ is “malleable” (p. 47), that is, it may be stimulated and enhanced. Fung and Lo (2017) comment similarly. In fact, Earley and Mosakowski (2004a) claim that CQ can be developed by anyone who is sufficiently attentive, interested and driven, and that CQ can be improved through both global experiences and multi or intercultural interactions (Ang & Van Dyne, 2008). Griffer and Perlis (2007) remark that the first step towards the growth of CQ is the “study of oneself and the awareness that everyone has a multiperspective identity” (p. 29). In similar vein, Triandis (2006) declares that key to developing CQ is the exploration of both the attractive and undesirable characteristics of one’s own as well as other cultures.

Divyashree (2016) suggests that an individual’s CQ may be augmented through the progression
of one’s observational alertness, being cognisant of cultural dissimilarities, embracing the examination of cultural differences and the associated behavioural signals and, finally, enthusiastically participating in intercultural activities. Likewise, there exist four imperatives that organisations should pursue in boosting staff members’ CQ: (1) prepare for expatriate projects with formal cultural learning interventions, (2) promote cross-cultural work interactions such as social get-togethers, (3) ensure work teams are representative of multiple cultures and (4) incentivise CQ scholarship (Divyashree, 2016).

Van Dyne and Ang (2008), as cited in Van Dyne, Ang and Livermore (2010), adopt a more sequential approach in submitting a five-step methodology, that employs the CQ dimensions, to describe how an individual’s CQ can be nurtured. Specifically, (1) motivational CQ drives the pursuit of required cultural knowledge and planning whilst (2) cognitive CQ provides a comprehension of cultural prompts; (3) metacognitive CQ then facilitates application of cultural knowledge in the preparation for and analysis of the happenings in the varied context which subsequently (4) allows the person to demonstrate culturally applicable behaviour. In the fifth step, responses to the displayed actions generate further development of motivational CQ causing the cycle to start again (Van Dyne et al., 2010).

1.2.3. Leadership styles

To anchor the discussion of leadership styles, this section first contemplates the leadership concept and explains how leadership theory has evolved. Thereafter, leadership styles, in line with the leadership typology of Pearce, Sims, Cox, Ball, Schnell, Smith and Trevino (2003), are examined.

1.2.3.1. Leadership

Leadership has been focussed on throughout the ages (Arvey, Zhang, Avolio & Krueger, 2007; Day, Youssef & Luthans, 2012; Fleenor, Atwater, Sturm & McKee, 2014; Hassan, Asad & Hoshino, 2016a; Kotterman, 2006). It is significant and it matters (Bennis, 2007; Alvesson & Sveningsson, 2003). As such, interest in it spans continents as well as the political landscape and
is not limited by temporal confines (Mackenzie & Barnes, 2007).

Describing leadership, though, has proven to be a challenge. From the 1970s scholars, such as Burns (1978) and Stogdill (1974), were already commenting on the difficulty associated with defining it. The confusion continues today given the abundance of leadership definitions and descriptions (Lease, 2006). Adler (1997,) remarks that “there are hundreds of definitions of leadership” (p. 174) while Penceliah (2011) states that “leadership has diverse meanings and connotations and has been described variously” (p. 46). In this respect, Yukl (1989) points out that leadership definitions have been premised on individual qualities, actions, interaction methodologies, role relationships, follower perceptions, influence on followers and task objectives, and the ability to shape organisational culture. Northouse (2013) argues that, notwithstanding the varied conceptualisations of leadership, certain elements appear to be pivotal. These are that leadership is (1) a process, (2) involves influence, (3) takes place within groups and (4) targets shared objectives (Northouse, 2013). With this in mind, Jans (2016) defines leadership “as the process of engaging others in concerted efforts to pursue a goal, in conditions of complexity and ambiguity or in anticipation of such conditions” (p. 48).

1.2.3.2. Leadership theory evolution

Although experiencing some early vicissitudes, the advancement of leadership predominantly took place during the last century given its application as a principal influence in organisational direction and success (Esteves & Lopes, 2016). Leadership theory has progressed through various eras. In the 1920s the focus was on the characteristics of leaders (Trait theories). The 1950s saw leader behaviours being highlighted (Style theories). In the 1960s the situation or context in which leadership occurred took central stage (Contingency theories). During the 1970s, leadership was investigated as a function of charisma (Charismatic theory). Through the 1980s attention was devoted to the transformational competence of leaders, that is, leadership entailed a range of qualities over and above charisma (New Leadership or Neo Charismatic theory). In the late 1990s, leadership was explored in terms of strategic decision-taking and change management (Strategic Leadership and Change Leadership) (Pendleton & Furnham,
Rubenstein (2005) points out that the multitude of leadership theories have gone on to produce a surfeit of leadership brands. In the context of leadership research, Day and Antonakis (2012) declare that “transformational and charismatic leadership .... make up the single most dominant leadership paradigm over the past decade” (p. 11). Meuser, Gardner, Dinh, Hu, Liden and Lord (2016) affirm that “transformational leadership has captured the most attention among leadership theories from researchers for decades” (p. 1385). Both Clark and Waldron (2016) and Sims et al. (2009) make parallel observations.

1.2.3.3. Leadership style typology

With the above in mind, Pearce et al. (2003) offered a leadership typology encompassing “four theoretical behavioral types” (p. 273): transformational, transactional, empowering and directive leadership. The value of this typology is that it extends beyond transformational / transactional leadership to incorporate more recent conceptualisations (that is, empowering leadership) as well as classical leadership perspectives (that is, the directive style) (Sims, Faraj & Yun, 2009; Yun, Cox, Sims & Salam, 2007).

Despite the afore-mentioned scholarly focus on transformational and transactional leadership, Hmieleski and Ensley (2007) argue that such leadership styles “have been viewed by some as less distinct conglomerations of various leadership behaviors” (p. 867). In contrast, empowering and directive leadership embody basic, discrete and opposing leadership elements (Hmieleski & Ensley, 2007). Hence, whilst a leader may display both empowering and directive behaviours at various stages of engagement with subordinates, these leadership styles are incongruent as they relate to a particular task in the light of their conflicting natures (Leren, 2016). Research on empowering and directive leadership has attracted substantially less attention than that which has been accorded to transactional and transformational leadership. In this regard, Sharma and Kirkman (2015) emphasise that empowering leadership is “widely practiced, but relatively under-researched” (p. 29) whilst Li, Liu, Han and Zhang (2016) indicate that “little research has
focused on empowering leadership” (p. 1). Kalaluhi (2013) proclaims that “surprisingly little has been published in peer-reviewed scholarly leadership journals concerning the use of directive leadership in organizational settings” (p. 139) while Martin, Liao and Campbell (2013) point to [the] “current lack of attention to directive leadership” (p. 1386).

In view of the above discussion, this research concentrates on the empowering and directive leadership styles. These are introduced below. To aid contextualisation, a brief overview of transformational and transactional leadership is also provided.

*Empowering leadership:* Drawing on relevant literature, Sharma and Kirkman (2015) define this leadership style as “leader behaviors directed at individuals or entire teams and consisting of delegating authority to employees, promoting their self-directed and autonomous decision making, coaching, sharing information, and asking for input” (p. 194). Lorinkova, Pearsall and Sims (2013) state that empowering leadership involves “sharing power with subordinates and raising their level of autonomy and responsibility, and it manifests through specific behaviors such as encouraging subordinates to express opinions and ideas, promoting collaborative decision making, and supporting information sharing and teamwork” (p. 573). Empowering leadership can thus be seen to incorporate four elements: (1) enhancing meaningfulness in work, (2) expressing confidence in employees’ high performance, (3) fostering participation in decision making and (4) providing autonomy from bureaucratic constraints (Ahearne, Mathieu & Rapp, 2005). Behaviours representative of this leadership type are, therefore, “primarily developmental or person-orientated” (Burke et al., 2006, p. 293) with an acute focus on the skills necessary for self-management (Mohamed, 2016).

Enabling followers to unearth their potential is thus the central tenet of empowering leadership (Sims et al., 2009), that is, to advance both the self-leadership capabilities of followers and their concomitant proactive actions (Biemann, Kearney & Marggraf, 2015) or, as Tuckey, Bakker and Dollard (2012) point out, “encouraging and facilitating employees to lead and manage themselves” (p. 17). Hence, empowering leadership increases the probability staff members will experience career satisfaction (Kim & Beehr, 2017a).
The theoretical roots of empowering leadership are numerous (Vecchio, Justin & Pearce, 2010). These include behavioural self-management theory, social cognitive theory, cognitive behaviour modification and participative goal setting (Pearce et al., 2003). Behavioural self-management entails an individual directing and motivating his or her own work actions through formulating objectives, performing the preferred behaviours, monitoring advancement and self-rewarding pursuant to goal attainment (Saks & Ashforth, 1996). Social cognitive theory holds that, through both observing and interacting with others, individuals acquire know-how, expertise, beliefs, instructions and attitudes as well as insights regarding the suitability, practicality and outcomes of particular actions (Schunk & Usher, 2012). This theory is premised upon a three-tier model comprising personal influences, behavioural factors and environment happenings that impact each other (Bandura, 1999). Cognitive behaviour modification proposes that cognitions (thoughts, understandings, perceptions and so forth) play a fundamental role in shaping behaviour and thus behaviour may be adjusted by leveraging cognitive variables (Schwartz, 1982). Participative goal setting holds that commitment to the attainment of goals is enhanced when staff members contribute to goal formulation as opposed to when goals are allocated to them (Lee & Wei, 2011).

In spite of the positive effects of empowerment (for example, see Davies, Laschinger & Andrusyszyn, 2006; Enz & Fulford, 1995; Fernandez & Moldogaziev, 2013; Guthrie 2001; Kim, 2002; Kirkman & Rosen, 1999; Kuokkanen, Leino-Kilp & Katajisto, 2003; Sarmiento, Laschinger & Iwasiw, 2004), its universal employment across diverse cultures has been cautioned against (Gibson & McDaniel, 2010) and, in fact, could be deemed detrimental in some cultures (Robert, Probst, Martocchio, Drasgow & Lawler, 2000). Indeed, scholars such as Cheong, Spain, Yammarino and Yun (2016) argue that, although empowering leadership improves the self-efficacy and performance levels of subordinates, it does incorporate an element of burden, which manifests in the form of increased job induced tensions that, in turn, reduce the benefits of empowering leadership for subordinate work role performance.

*Directive leadership:* The importance of providing staff members with direction through the articulation of clearly laid out duties and responsibilities (Zhu, Kraut & Kittur, 2013) lies at the
core of directive leadership, which is thus task-focused (Chen, Eriksson & Giustiniano, 2017; Dewettinck & Van Ameijde, 2011). This leadership style is premised upon positional or legitimate power (Houghton & Yoho, 2005): a top-down approach wherein dictates and orders dominate (Bowers, Hall & Srinivasan, 2017; Sims et al., 2009). The directive style, favoured in high power distance cultures (Mustafa & Lines, 2016), is evidenced through the leader expounding work requirements, scheduling responsibilities, stipulating the assignment rules, protocols and processes to be followed, setting communication frameworks and assessing delivery (Mehta, Dubinsky & Anderson, 2003). Fisher (2016) contends that clarity of direction and stimulating goals promotes staff member engagement and that through directive leadership, organisations can escape inertia flowing from factionalism in that directive leaders make prompt decisions.

Muczyk and Reimann (1987) comment that the directive elements of leadership must be distinguished from participative leadership. This is especially necessary because direction is often described as being contrary to participation (Muczyk & Reimann, 1987). Accordingly, these authors submit that decision making should be detached from the act of giving effect to the decision. A leader may thus be participative in that he / she involves subordinates in decision making yet “directive by following up closely on progress” (Muczyk & Reimann, 1987, p. 303). In light of the distinction between direction and participation, Muczyk and Reimann (1987) propose two directive leader types. The first is the Directive Autocrat, a leader who singly takes decisions and who closely oversees consequent subordinate activities. Such leaders could be particularly effective in small and medium enterprises where job roles lack clarity (Mesu, Sanders & van Riemsdijk, 2015). The second is the Directive Democrat who involves employees in decision making but who also strictly monitors the performance of their tasks. Situations where correct execution carries more weight than the time it takes to make the decision benefit from directive democrat behaviours (Muczyk & Reimann, 1987).

Pearce et al. (2003) indicate that directive leadership has its theoretical beginnings in Theory X (McGregor, 1960), the Ohio State and Michigan studies on leader behaviours, and punishment research. McGregor (1960) argues that the suppositions a manager holds about subordinates
manifest themselves as a self-fulfilling prophecy (Kopelman, Prottas & Falk, 2010). Theory X managers assume that people have an aversion to work, will attempt to evade it, lack ambition and hence need to be directed (Bobic & Davis, 2003). In this regard, Pearce et al. (2003) remark that the Theory X manager thus adopts behaviours that include both command and the application of power in leading subordinates.

As noted previously, in the 1950s and 60s the leadership research effort began to concentrate on leader behaviours, rather than leader traits, and was predominantly undertaken at the Ohio State University and the University of Michigan (Vroom & Jago, 2007). The Ohio State studies explained leader behaviours as encompassing the provision of structure and nurturing (Madlock, 2008). The Michigan studies distinguished between behaviours centred on subordinates (relationship orientated) and production (task orientated) (Madlock, 2008). Pearce et al. (2003) state that the structure provision and production focussed behaviours underpin directive leadership. In terms of punishment, Arvey and Ivancevich (1980) mention that the application of it is a “relatively common phenomenon” in the organisational context (p. 123). Pearce et al. (2003) point out that punishment may be classified as contingent and non-contingent, where contingent punishment reflects punishment that is informed by performance insufficiency (Deng & Leung, 2014). Non-contingent punishment, in contrast, is independent of performance (Shore, Bommer & Shore, 2008). Directive leadership incorporates both of these punishment types (Pearce et al., 2003).

**Transformational leadership:** This style involves the growth of employees’ ambitions and the stimulation of their ideals so that they are aroused by the leader’s vision and thus deliver optimal performance (Avolio, Walumbwa & Weber, 2009). This leadership type, which is viewed by many scholars as incorporating the charismatic style (Sims et al., 2009), is displayed in four behaviours (Bass, 1998): (1) fostering increased delivery by staff members (idealised influence), (2) inspirational motivation or moving employees towards collective interests rather than their only pursuing personal objectives, (3) individualised consideration, that is, assisting employees to take charge of their own development and (4) intellectual stimulation of employees thereby facilitating their discovery of new mechanisms to solve challenges being
faced (To, Tse & Ashkanasy, 2015). Although transformational leaders may exhibit empowering behaviours it is entirely possible that they could also, at the same time, be autocratic (Martin et al., 2013); that is, they might not assign any significant control or authority to their subordinates. The purpose of transformational leadership is to entrench leader magnetism and confidence in the leader (Tuckey et al., 2012).

**Transactional leadership:** In this approach to leadership, clearly demarcated transactions between a leader and subordinates occupy central stage (Rowold, 2011). The leader outlines rewards that will result from particular efforts and uses such work reward mechanisms to underpin increased levels of employee motivation (Pearce & Sims, 2002) with the rewards being highlighted over time (Hollander & Offerman, 1990). In delineating the anticipated reward, transactional leaders do not directly contemplate employee needs (Avolio & Bass, 1995) nor is change a primary objective of theirs (Bedeian & Hunt, 2006). Employee behaviour modification is thus only incremental (Avolio & Bass, 1995). The focus of transactional leaders is on instructions and compliance therewith (Avolio & Bass, 1995); employees do not have decision making power.

### 1.2.4. Leadership effectiveness

Hogan and Judge (2013) state that the origins of leadership effectiveness, being a leader’s “ability to mobilize and influence followers” (Cicero, Pierro & Van Knippenberg, 2010, p. 411), might be traced to either the circumstances in which leaders function or their inherent characteristics. They advocate the latter to be the more robust of the two because of various challenges associated with ascribing leadership effectiveness to circumstances. Such problems include (1) accountability, that is, leaders cannot be recognised for their successes nor held accountable for their failures if their performance is solely due to circumstances, and (2) not only is it not possible to quantify situational contingencies but there is no universal agreement on the meaning of situational contingencies (Hogan & Judge, 2013).

Although it has been shown that effective leadership boosts individual, team and firm level outcomes (Muchiri, Cooksey, Di Milia & Walumbwa, 2011), the practical assessment of
leadership effectiveness has, however, proven to be a substantial obstacle to overcome in that leader appraisals are often biased, inequitable and opinionated (Jogulu & Wood, 2008). The situation is further compounded in that there is a lack of certainty as to what a leader needs in order to be effective (Rosete & Ciarrochi, 2005).

Given the paucity of agreement in the literature as to which actions contribute to effective leadership, Yukl, Gordon and Taber (2002) conducted meta-analysis of applicable research outputs leading to the construction of a taxonomy of effective leader behaviours that could be arranged according to task, relations and change behaviour. The taxonomy was expanded by Yukl (2012) to include a fourth category, being external behaviour. Task orientated leader behaviours comprise clarification, planning, operations monitoring and problem solving. Behaviours depicting a relations orientation include those of supporting, developing, recognising and empowering. Promoting and envisioning change, encouraging innovation and enabling collective learning reflect change orientated behaviours. Externally orientated leader behaviours are represented by networking, external monitoring and representing (Yukl, 2012). Other scholars, such as Nielsen and Halfhill (2006), propose that effective leader behaviours incorporate (1) change management, (2) the production of a convincing vision, (3) motivating others, (4) behaving as they require others to and (5) sourcing and growing their successors.

Effective leadership may also be generated through the establishment and preservation of leadership relationships (Graen & Uhl-Bien, 1995). Alabi (2012) states that leadership effectiveness depends on, amongst others, “the interactions between the leader and members” (p. 265). Leader-Member Exchange (LMX) theory suggests that leaders cultivate “different exchange relationships” with their staff members (Kim, Liu & Diefendorff, 2015, p. 216). Whilst poor quality relationships are founded in economic interactions, the more fertile exchanges are grounded in mutual confidence, commitment and respect (Breevaart et al., 2015). The nature of the relationship determines the extent to which leadership manifests (Sue-Chan, Au & Hacket, 2012; Vidyarthi, Erdogan, Anand, Liden & Chaudhry, 2014). In this regard, Alabi (2012) found that the quality of LMX significantly influenced leadership effectiveness.
Yan and Hunt (2005) point out that the extent of subordinates’ intent and inclination to cooperate and accomplish requisite tasks is a function of the degree to which they perceive the leader as effective. Follower perceptions may be classified as inference-based and recognition-based (Lord & Maher, 1991). Inference-based perceptions depict the ascription of leader characteristics after conclusions to relevant events (Ensari & Murphy, 2003). This perception type highlights the functional role of leadership in that leadership is recognised when subordinates have knowledge of positive organisational outputs (Yan & Hunt, 2005) for which the leader is responsible (Eckert, Ekelund, Gentry & Dawson, 2010). Recognition-based perceptions arise from the classification of leader characteristics into applicable typcasts (Ensari & Murphy, 2003), that is, perceived leader behaviours are matched with follower pertinent implicit leadership theories (de Vries, Bakker-Pieper & Oostenveld, 2010) of what constitutes effective leadership. These leadership insights, note Yan and Hunt (2015), may be “learned or experienced and often differ across cultures” (p. 52).

1.3. LINKING THE CENTRAL CONCEPTS

In proceeding towards a more holistic understanding of the central concepts it is important that they be considered collectively, that is, in relationship with one another. To position this discussion, it is appropriate to first place leadership (and by extension, its styles) and leadership effectiveness within the context of culture.

Extant literature reveals that leadership cannot be considered in isolation from, or divorced from, culture. Steers, Sanchez-Runde and Nardon (2012) observe that “leadership is a cultural construct” (p. 481) whilst McClellan (2016) declares that “leadership is a cultural phenomenon” (p. 20). Snaebjornsson and Edvardsson (2013) remark that “there is no doubt that culture influences leaders” (p. 91). Petan and Bocarnea (2017) point out that leadership preferences vary between industrialised and less-developed nations particularly in terms of cultural profiles. Bass and Bass (2008) and House, Javidan, Hanges and Dorfman (2002) extend the leadership / culture relationship beyond leadership to leadership styles. “The patterns of behavior that are regarded as acceptable in leaders” differ from “one culture to another” (Bass & Bass, 2008, p. 3) and there is “a strong connection between culture and leadership styles” (House et al.,
Culture thus plays an integral role in not simply shaping expectations of favoured leadership styles (Paulienė, 2012; Rockstuhl et al., 2011) but also the manner in which leader behaviours are both interpreted and assessed (Jogulu, 2010). Leaders, consequently, face a “double-edged” sword in that, in addition to having to productively navigate the many cultures, they may be exposed to or operate within, they now need to modify or adapt their respective leadership styles to match those most preferred by their followers, given the peculiarities of the particular cultures of the latter (that is, their cultural identities). Where leaders ignore the cultural frameworks of their subordinates, it is probable that such leaders will fail to interpret follower behaviours correctly (Connerley & Pedersen, 2005). Caldwell (2015) thus argues for the importance of leaders possessing “the necessary attributes that allow them to lead well while at the same time becoming an integral part of an active and evolving society” (p. 55).

The effects of culture on leadership effectiveness have been studied empirically, particularly as part of the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project. The GLOBE project examined what bearing cultural values had on the effectiveness of leaders across 62 countries (Wang, Waldman & Zhang, 2012). An aim of the GLOBE project was to discover world-wide leadership characteristics (Dickson, Castaño, Magomaeva & Den Hartog, 2012). GLOBE determined that universally, 22 characteristics of leadership were considered positive whilst a further eight were viewed negatively. Desired attributes included honesty, decisiveness and being motivational (Javidan & Dastmalchian, 2009). The unattractive qualities incorporated irritability and ruthlessness (Dorfman, Javidan, Hanges, Dastmalchian & House, 2012). Despite these positive and negative global leadership features, importantly, GLOBE established that (1) societies have diverse assessments regarding the various aspects of leadership and their associated effectiveness (Javidan & Dastmalchian, 2009), (2) cultural values may be used to estimate particular leadership profiles (Javidan & Dastmalchian, 2009) and (3) both national and organisational culture guide culturally dependent leadership (Dorfman et al., 2012).
With the above discussion on leadership (styles and effectiveness) and culture in mind, the relationships between CQ, leadership styles and leadership effectiveness are now considered. A number of scholars, in addressing culture and leadership, tend to limit the leader’s required cultural competency to cultural understanding. Schein (2004), for example, states that “cultural understanding is essential to leaders if they are to lead” (p. 23). Dickson et al. (2012) submit that “leaders must have a basic understanding of the local culture” (p. 490). However, being able to contrast or understand different cultures is insufficient for the leader in that “although understanding cultural differences is an important part of the puzzle, being able to function effectively across cultures also requires the capability to bridge such differences” (Ang et al., 2015, p. 274).

Van Dyne et al. (2010) conclude that CQ “helps leaders develop an overall perspective and repertoire that results in more effective leadership” (p. 132). Sharpe (2016) maintains that to be effective in a globalised world, leaders must be culturally intelligent whilst Dean (2007) affirms that CQ positively enhances leadership processes. Scharoun, Peng and Turner (2016) state that high CQ is a fundamental capability sought after by employers.

In emphasising the importance of CQ to leadership, Livermore (2015) replaces ‘cultural understanding’ with ‘cultural intelligence’ in replicating the afore-mentioned remark by Schein (2004); “cultural intelligence is essential for leaders in order to lead” (p. 228). It follows that to stimulate optimal performance from culturally diverse employees, it is vital that leaders be culturally intelligent.

Only a handful of studies, however, have explicitly examined the relationship between CQ and leadership styles as well as CQ and leadership effectiveness. In terms of CQ and transformational leadership: (1) although Ismail, Reza and Mahdi (2012) established that each of the four CQ dimensions impacted transformational leadership positively, Keung and Rockinson-Szapkiw (2013) only observed such an impact in respect of cognitive and behavioural CQ, while (2) CQ moderated the relationship between the transformational style and (i) both expatriate performance and adjustment (Lee, Veasna & Wu, 2013) and (ii) the adoption rate of
innovation (Elenkov and Manev, 2009). Although motivational CQ was found to be associated with democratic leadership (Eken et al., 2014) no association was found between CQ and autocratic and laissez-faire leadership (Eken et al., 2014), respectively. Finally, Vogelgesang, Clapp-Smith and Palmer (2009) theorised a model wherein they proposed how CQ might moderate “the relationship between authentic leadership and morally grounded cultural adaptation” (p. 113).

Regarding CQ and leadership effectiveness, it has been shown that CQ predicted cross-border leadership effectiveness (Rockstuhl et al., 2011). CQ also positively impacted cross-cultural leadership effectiveness (Deng & Gibson, 2008; Ersoy, 2014) whilst metacognitive, cognitive and motivational CQ each demonstrated statistically significant relationships with select elements of effective leadership (Musamali & Martin, 2016). CQ has, furthermore, been revealed to predict international leadership potential (Kim & Van Dyne, 2012) and leader performance as perceived by followers (Groves & Feyerherm, 2011).

1.4. GAPS IN KNOWLEDGE

Taking cognisance of the debate thus far, a number of gaps in the CQ and leadership literature have been identified. These are examined below, noting that they form the basis of the problem statement that follows thereafter.

1.4.1. Gap 1: A systematic organisation of the CQ literature according to a recognised knowledge framework was not located

Interest in and focus on CQ has flourished (Ng et al., 2012) since it was originally theorised in 2002 (Thomas, Liao, Aycan, Cerdin, Pekerti, Ravlin et al., 2015). Ang et al. (2015) remark that the CQ research programme has been “broad and diverse” (p. 308). The variety of studies has resulted in an extensive volume of CQ material becoming available for consumption by both the academic and business communities, in areas such as:

• Alcohol consumption (for example, Arli, Pekerti, Kubacki & Rundle-Thiele, 2016),
• Antecedents (for example, Engle & Nehrt, 2012; Engle, Dimitriadi & Sadrieh, 2012; MacNab & Worthley, 2012; Moon, Choi & Jung, 2013; Young et al., 2017),
• Conflict resolution (for example, Chen, Wu & Bian, 2014; Gonçalves et al., 2016; Haykali & Salavati, 2015),
• Cross-cultural adjustment (for example, Adikari, 2016; Aziz, 2016; Guðmundsdóttir, 2015; Huff, 2013; Konanahalli et al., 2014; Malek & Budhwar, 2013; Mohammed & Viswanathan, 2016; Nunes et al., 2017; Schreuders-van den Bergh & Du Plessis, 2016; Shu et al., 2016; Zhang, 2012),
• Culture shock (for example, Presbitero, 2016a),
• Export performance (for example, Charoensukmongkol, 2016; Magnusson, Westjohn, Semenov, Randrianasolo & Zdravkovic, 2013),
• Implicit cultural beliefs (for example, Chao et al., 2017),
• Intrinsic motivation for expatriation (for example, Presbitero, 2017a),
• Job performance (for example, Jyoti & Kour, 2017),
• Knowledge sharing (for example, Tsai, Joe, Lin, Wu & Cheng, 2017),
• Leadership (for example, Deng & Gibson, 2008; Eken et al., 2014; Ismail et al., 2012; Keung & Rockinson-Szapkiw, 2013; Vogelgesang et al., 2009),
• Life satisfaction (for example, Le et al., 2016; Sousa & Gonçalves, 2017),
• Managerial effectiveness (for example, Du Plessis, 2011; Earley & Peterson, 2004),
• Measurement of CQ (for example, Al-Dossary, 2016; Johnson & Buko, 2013; Şahin, Gürbüz, Köksal & Ercan, 2013; Thomas et al., 2015; Van Dyne et al., 2012),
• Multiculturalism and (1) entrepreneurial intentions (for example, Dheer & Lenartowicz, 2016) and (2) innovative work behaviour (for example, Korzilius, Bucker & Beerlage, 2017),
• Nationality diversity (for example, Rosenauer et al., 2016),
• Negotiation effectiveness (for example, Gregory, Prifling & Beck, 2009; Groves, Feyerherm & Gu, 2015; Imai & Gelfand, 2010),
• Religious symbols (for example, O’Sullivan, 2017),
• Social media (for example, Hu, Gu, Liu & Huang, 2017),
• State suspicion (for example, Luu, 2017),
• Strategic alliances (for example, Yitmen, 2013),
• Task performance (for example, Chen, Lin & Sawangpattanakul, 2011; Duff, Tahbaz & Chan, 2012; Jyoti & Kour, 2015) and its relationship with language ability (for example, Presbitero,
• Teams (for example, Adair, Hideg & Spence, 2013; Chen & Lin, 2013; Moon, 2013; Silberstang & London, 2009),
• Training and education (for example, Baker & Delpechitre, 2016; Bücker & Korzilius, 2015; Chen, 2015; Fischer, 2011; Kurpis & Hunter, 2017; Li, Mobley & Kelly, 2013; MacNab, 2012; McRae, Ramji, Lu & Lesperance, 2016; Peng, Van Dyne & Oh, 2014; Ramsey et al., 2014; Short & St. Peters, 2017; Whitaker and Greenleaf, 2017; Wood & St. Peters, 2014),
• Translation services (for example, Rafieyan, 2016), and
• Voice behaviour (for example, Jiang, Le & Gollan, 2017).

To date, however, there has been little effort to review the insights apart from that by Ang et al. (2015), Bovornusvakool et al. (2015) and Ott and Michailova (2016), with no attempt having been made to place the literature within an acknowledged framework such as that of the general body of scientific knowledge (see Babbie & Mouton, 2011). Such an arrangement is imperative as Blasco, Feldt and Jakobsen (2012) argue, stating that the prevailing CQ literature is both complicated and multifarious making the practical application thereof, especially in commercial settings, difficult.

1.4.2. Gap 2: Empirical evidence explaining the relationship between leader CQ and select leadership styles is limited

Although the importance of leaders being able to function effectively in different cultures is highlighted by various scholars (see Alon & Higgins, 2005; Deng & Gibson, 2008; Ismail et al., 2012; Rockstuhl et al., 2011) there is a scarcity of research concerning the relationship between CQ and leadership (and by extension, leadership styles). Groves and Feyerherm (2011) comment that “research on leader cultural intelligence is remarkably sparse” (p. 535). Analysis of CQ literature (see Chapter 3) indicates that a mere 7% of studies, representing just 4% of total hypotheses examined, addressed the CQ / leadership association. The focus of the research, too, was narrow in that it was overwhelmingly focussed on the transformational style.

The candidate is not aware of any study that has specifically examined CQ and empowering
leadership. This apparent deficiency is further illuminated by the fact that none of the studies, in a 27-study review by Sharma and Kirkman (2015), concerning the effects of empowering leadership on individual and team-level constructs, considered or addressed the role of CQ. Empirical investigation of CQ and directive leadership appears to be equally scant in the literature. In addition, just a single study (by Eken et al, 2014) considered CQ and autocratic leadership, a style of leadership that Yun, Faraj and Sims (2005) remark is similar to directive leadership. The findings of this study are however of limited value in that the sample comprised just 29 participants. It appears then that research into the relationship between CQ and leadership styles is, in general, inadequate and in respect of the empowering and directive styles, seemingly absent.

1.4.3. Gap 3: Empirical evidence explaining the relationship between leader CQ and leadership effectiveness is scarce
Despite some research on the effectiveness of different leader behaviours (Yukl, 2012) the candidate is merely aware of a small number of studies that have specifically probed CQ and leadership effectiveness. Deng and Gibson (2008) as well as Ersoy (2014) found that the effectiveness of cross-cultural leadership was impacted positively by CQ. Groves and Feyerherm (2011) established that the CQ of leaders predicted staff member perceptions of their performance. Kim and Van Dyne (2012) concluded that CQ mediated previous intercultural contact effects on the potential of international leadership. As Musamali and Martin (2016) confirmed, effective leadership practices and CQ were significantly correlated whilst Rockstuhl et al. (2011) validated the ability of CQ in predicting the effectiveness of cross-border leadership. None of these studies, though, considered leadership effectiveness in respect of the empowering and directive styles.

1.5. PROBLEM STATEMENT
An understanding of CQ and its relationship with leadership styles (empowering and directive) and leadership effectiveness appears to be missing, as reflected in the literature presented above. Whilst the candidate hopes to contribute to addressing this void, it is important to note that it does not exist as a matter of concern solely at an academic level. In the absence of such
an understanding, it is possible that the selection of leaders, by the business community at large, may in fact be damaging to their organisations in this age of heightened global and domestic cross-cultural interactions.

The development of leaders to operate successfully in cross-cultural situations, too, should be of prime importance to business since Pusch (2009) declares that “whilst some [persons] may be born to be leaders in their own culture, leaders with an ability to deal constructively in intercultural situations are made” (p. 67). The determination of requisite skills, as echoed in leader CQ (and its dimensions), nevertheless remains unclear.

Moreover, business needs to select those leaders who can – and / or develop leaders to – “capitalize on the varied skills and capabilities brought by diverse staff rather than attempt to homegenize them” (Offermann & Phan, 2008, p. 191). A multicultural workforce, as such, offers advantages in the form of superior customer service, enhanced decision making and innovation (Egel & Fry, 2016) as well as creative thinking and productivity improvements (Kapoor & Sherif, 2012). To this end, the performance of the workforce, argue Taylor, Beechler and Napier (1996), is the core variable in the separation of corporate champions from corporate failures. Hence, Wijewantha & Kailasapathy (2015) affirm that managing talent is a key focus of leaders across the world. Gibson (2016) makes a similar point. The literature, nonetheless, has been concerned in the main with the managing of cultural dissimilarities as opposed to the optimisation thereof (Jensen, 2013) as borne out by the minimal concentration on leader CQ.

Although Ardichvili, Dag and Manderscheid (2016) state that many organisations spend more than a third of their training budgets on leadership development, Mannor (2008) submits that the upskilling of leaders to be successful in culturally varied leadership positions remains sub-optimal. This is alarming because effective leaders, who are culturally intelligent, are in high demand (Sharpe, 2016) yet remain in short supply (Winn, 2013).

1.6. GOAL AND OBJECTIVES
The goal of this research was to develop an understanding of CQ and its relationship with
leadership styles (empowering and directive) and leadership effectiveness, to inform leader selection and development. This goal has been achieved by addressing one literature grounded and three empirical objectives.

1.6.1. Literature grounded objectives

- To organise the extant CQ literature in terms of the concept and definition statement elements of the general body of scientific knowledge framework (see Babbie & Mouton, 2011) (hereinafter referred to as the first literature grounded objective), and
- To organise the extant CQ literature in terms of the truth statement element of the general body of scientific knowledge framework (see Babbie & Mouton, 2011) (hereinafter referred to as the second literature grounded objective).

1.6.2. Empirical objectives

- To assess whether leadership style (empowering and directive) is a function of leader CQ (hereinafter referred to as empirical objective 1 or the first empirical objective),
- To investigate the part played by subordinate cultural identity in the display of leadership styles (empowering and directive), given leader CQ (hereinafter referred to as empirical objective 2 or the second empirical objective), and
- To determine whether leader CQ affects the relationship between leadership style (empowering and directive) and leadership effectiveness (hereinafter referred to as empirical objective 3 or the third empirical objective).

1.7. RESEARCH QUESTION AND SUB-QUESTIONS

Given the problem statement, goal and objectives, the research question emerged:

What is the relationship between leader CQ, leadership styles (empowering and directive) and leadership effectiveness?

The sub-questions were:

- What concepts are associated with CQ?
- How could CQ be described?
• What do the CQ truths reveal?
• Is leadership style (empowering and directive) a function of leader CQ?
• Do culturally intelligent leaders display leadership styles (empowering and directive) dependent on the cultural identities of their subordinates?
• Is the relationship between leadership style (empowering and directive) and leadership effectiveness moderated by leader CQ?

1.8. IMPORTANCE OF THE RESEARCH

This research contributes to knowledge by addressing each of the afore-mentioned gaps.

1.8.1. Gap 1

To optimise extraction of value from the CQ research literature it is essential that the information be organised. In this respect, Chapter 2 covers an arrangement of the literature according to the concept and definition statement elements of the general body of scientific knowledge framework (see Babbie & Mouton, 2011). The concepts most commonly associated with CQ are distilled in order to position it within the arena of cross-cultural activity. The full range of CQ definitions is presented, thereby expanding the work of Andresen and Bergdolt (2017) as well as Thomas et al. (2008). An alternative description of CQ, based on an assimilation of the key elements from the various definitions, is offered. Chapter 3 continues the arrangement of the extant CQ material, according to the previously mentioned framework, but with specific focus on the truth statement components thereof. The output of this delivers an integrated view of what the CQ truths reveal, that is, what has been theorised and validated in respect of CQ. Chapters 2 and 3 thus provide much needed assistance to (1) business representatives, in cultivating their comprehension of CQ and its benefits and (2) scholars, in determining the focus of future CQ research endeavours.

1.8.2. Gaps 2 and 3

As leaders do not operate in isolation but interact with followers (Campbell, Ward, Sonnenfield & Agle, 2008; Wyper, 2014) it is crucial that the association between leader CQ, leadership styles and leadership effectiveness be ascertained. In this regard, Chapter 4 offers empirical
evidence of the relationship between leader CQ, both at a composite and dimensional level, and each of empowering and directive leadership. Chapter 5 expands this relationship (in respect of composite CQ) by reporting on subordinate cultural identity as an additional independent variable. Chapter 6 explores whether composite and dimensional leader CQ moderate the relationships of empowering and directive leadership with leadership effectiveness. Chapters 4, 5 and 6 thus deliver a comprehensive analysis of how the central concepts relate to each other. By means of this, business is supplied with valuable insights to inform the selection and development of leaders. The said analysis also assists leaders in appreciating “that leading in a global society is about ethnorelativism and pushing beyond one’s ethnocentrism” (Caldwell, 2015, p. 56).

Furthermore, from an academic perspective, the research contributes to satisfying the calls by (1) Brannen (2016) for studies of leadership styles, other than transformational, “as they relate to cultural intelligence to determine the leadership model with the strongest relationship with cultural intelligence” (p. 85), (2) Caldwell (2015) for further investigation into “how to be a culturally intelligent global leader” (p. 57), (3) Clark and Waldron (2016) for research into “the predictors of different types of leadership” (p. 36) and (4) Sharma and Kirkman (2015) regarding the identification of factors that “predict empowering leadership” (p. 219).

1.9. THEORETICAL FRAMEWORK

The empirical study was grounded in CQ theory as well as the theories of empowering leadership and directive leadership. These theories were covered in section 3 of this chapter. However, they may be insufficient in explaining or predicting the relationships between the central concepts of this study. The theories of complex adaptive systems and cognitive dissonance, as grand theories, were therefore also considered.

1.9.1. Complex adaptive systems theory

Although Dale and Newman (2005) remark that no conclusive definition of complex adaptive systems exists, Mitchell (2009) suggests that they are systems “in which large networks of components with no central control and simple rules of operation give rise to complex
collective behavior, sophisticated information processing, and adaptation via learning or evolution” (p. 13). To remain relevant, components or agents must adjust themselves (Uraz & Makhzoum, 2016). Whilst agents are able to develop jointly when responding to environmental and other vicissitudes (Potgieter, April, Cooke & Lockett, 2006) they are influenced differently, given the interaction type (Uraz & Makhzoum, 2016). Agent adaptations arise because of their interfaces and are thus not the result of any one agent’s particular actions (Lichtenstein et al., 2006). Hence, Uraz and Makhzoum (2016) submit that it is the “heterogeneity of the agents” that is key to the system’s results (p. 317).

Silberstang and Hazy (2008) state that organisations reflect complex adaptive systems. Furthermore, agents include both leaders (Lichtenstein et al., 2006) and employees (Baltaci & Balci, 2017). Hence, taking into account the culturally heterogeneous environment in which this research was conducted, it was anticipated that discrete relationships would be observed between the CQ of leaders and their display of empowering and directive leadership. Equally, the relationship between leadership style (empowering and directive) and leadership effectiveness was expected to be influenced by leader CQ.

1.9.2. Cognitive dissonance theory

The theory of cognitive dissonance was proposed by Festinger (1957). Cognitive dissonance depicts an unsettling stimulus flowing from a lack of consistency between cognitions or a cognition and a behaviour (Rozkwitalska, 2016). The dissonance arises from an individual’s psychological view (rather than from logic) that the cognitions, or cognition and behaviour, are discordant (Cooper, 2012). The state of uneasiness is motivational in that it promotes efforts to overcome it (Maertz, Hassan & Magnusson, 2009). Energies to eradicate the dissonance become manifest either as rationalisation of the viewpoint or behaviour, or as emendation of viewpoints or behaviours so that they are more harmonious with one another (Vaghefi & Qahri-Saremi, 2017).

Sadler and Hofstede (1976) argue that when an employee is subjected to a leadership style which conflicts with that which is perceived as attractive, such dissonance may be addressed by
amending perceptions or preferences. It is submitted that the employee is only able to alter perceptions or preferences in this case, not behaviour, as the behaviour is demonstrated by the leader. In contrast, though, it is plausible that any cognitive dissonance which culturally intelligent leaders might experience, should their default style (behaviour) not accord with that which in terms of their CQ would be preferable for subordinates, may be dissipated through leadership style modification. With this in mind, it was expected that displayed leadership styles (empowering and directive) and leader CQ would share strong positive relationships. Flowing from this, leader CQ, rather than subordinate cultural identity, would thus be the main predictor of the empowering and directive leadership styles.

1.10. RESEARCH DESIGN

According to Kumar (2011) research design is “a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems” (p. 95). This research followed a non-experimental cross-sectional design. Non-experimental research is defined by Polit and Beck (2008) as “studies in which the researcher collects data without introducing an intervention” (p. 759). Cross-sectional research refers to a study in which “data are generated at only one point in time, thereby providing a snapshot of the attributes, behaviors, or phenomena that the researcher is studying” (O’Dwyer & Bernauer, 2014, p. 69).

Research designs should, at a minimum, address (1) a statement of the research problem, (2) the methodology to be followed in gathering data, (3) a description of the population and sample and (4) the methods to be applied in analysing the data (Kothari, 2004). The problem statement, including the implications thereof for the business community, was described in section 5 of this chapter. Requirements 2 – 4 as they relate to the literature grounded and empirical objectives of this research, respectively, are covered below.

Before proceeding it is, however, necessary to consider the paradigms that underpinned this research.
1.10.1. Research paradigms

A paradigm portrays the favoured traditions for comprehending reality, how knowledge is assembled and information about the world collected (Tracy, 2013). A research paradigm, thus, constitutes a “general theory that informs most scholarship on the operation and outcomes of any particular system of thought or action” (Entman, 1993, p. 56). Kasi (2009) offers a more concise definition, that is, research paradigms are the “broad approaches to research” (p. 95).

The two primary research paradigms are interpretivism and positivism (Collis & Hussey, 2014). Interpretivism pursues the explanation of social phenomena through interpretation (Collis & Hussey, 2014). Levy (2006) notes that interpretivism “includes consideration of multiple realities, different actors’ perspectives, researcher involvement, taking account of the contexts under study, and the contextual” (p. 375). Positivism, on the other hand, may be defined as a “deductive method of inquiry seeking for theory confirmation in value-free, statistical generalisations” (Riege, 2003, p. 77). Therefore, according to positivism, empirical sciences are the exclusive foundation of truthful knowledge (Dawson, 2013): in other words, “the scientist adopts the position of objective researcher, who collects facts about the social world and then builds up an explanation of social life by arranging such facts” (Noor, 2008, p. 1602). Mack (2010) states that when research is conducted within the ambit of the positivist paradigm the aim is to “prove or disprove a hypothesis” (p. 6).

Collis and Hussey (2014) contrast interpretivism and positivism through a comparison of their assumptions. The ontological (nature of reality) assumption of interpretivism is one of many realities whilst positivism assumes that reality is unique (Collis & Hussey, 2014). The epistemological assumption (the composition of acceptable knowledge) of interpretivism admits knowledge sourced pursuant to subjective evidence accumulation whereas objective evidence based knowledge characterises positivism (Collis & Hussey, 2014). The role of values or axiology of interpretivism contends that outcomes are prejudiced and loaded whilst positivism submits they are not (Collis & Hussey, 2014). The rhetoric (research language) of interpretivism and positivism is, respectively, one wherein qualitative terms are embraced and set definitions employed (Collis & Hussey, 2014). Finally, the interpretivist methodology makes
use of inductive reasoning, generates patterns and ensures outputs are correct and dependable via confirmation (Collis & Hussey, 2014). However, the positivist methodology, as indicated earlier, features deduction wherein the accuracy and reliability of findings are established through validity and reliability (Collis & Hussey, 2014). Against this background, interpretivism anchored the achievement of the literature grounded objectives of this study, with positivism informing the attainment of the empirical objectives.

**1.10.2. Methodologies for the literature grounded objectives**

This section covers the methodology, population and sample, stated propositions and data analysis techniques as they relate to the literature grounded objectives.

**1.10.2.1. Methods**

Research methodologies may be classified as either qualitative or quantitative (Goubil-Gambrell, 1992). Strauss and Corbin (1990) define qualitative research as “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” (p. 17). As the literature grounded objectives sought to arrange the prevailing CQ literature in terms of a recognised framework, rather than conduct statistical integration thereof, a qualitative methodology was selected.

**1.10.2.2. Population and sample**

A population represents “the total collection of all the elements” a researcher is interested in whilst a sample is a “subgroup of the population” (Ross, 2010, p. 5). The population comprised all scholarly, peer reviewed articles on CQ that were published during the period 1 January 2002 – 31 May 2015. No sampling techniques were undertaken as the aim was to identify all such afore-mentioned articles.

**1.10.2.3. Propositions**

The following propositions were set:

- The concepts associated with CQ can be identified through a synthesis of the keywords contained in scholarly publications on CQ,
• An integrated description of CQ can be provided via the combination of both unique and
common elements identified in the various CQ definitions, and
• CQ truths (validated hypotheses) can be organised through a thematic classification of CQ
hypotheses.

1.10.2.4. Data analysis
A systematic literature review, performed in accordance with the techniques recommended by
Cronin, Ryan and Coughlan (2008) and Nightingale (2009), as well as subsequent content and
thematic analyses, were carried out. Applicable details are contained in chapters 2 and 3. The
credibility and confirmability of the results (see Brink, 1993) as they pertain to the
propositions are indicated in Chapter 7.

1.10.3. Methodologies for the empirical objectives
The methodology, population and sample, hypotheses set, classification of variables,
questionnaire and data analysis procedures as they pertain to the empirical objectives follow.

1.10.3.1. Methods
A quantitative methodology was followed. Yilmaz (2013) describes quantitative research as
explaining “phenomena according to numerical data which are analysed by means of
mathematically-based methods, especially statistics” (p. 311). It follows that the knowledge
garnered, which is undertaken systematically, is thus founded in objective observation and
measurement (Adams, Collair, Oswald & Perold, 2004).

10.3.2. Population and sample
The population comprised all leaders in all organisations operating in South Africa.

Given comments in the literature on the value of leadership competence throughout the
organisation, it was decided not to restrict the population to just a specific leadership profile
(for example, senior leadership). In particular, Koohang, Paliszkiewicz and Goluchowski (2017)
point out that all areas of an organisation require leadership. Pusch (2009) argues that
“it is becoming essential that leadership skills be widely dispersed rather than concentrated in a few at the top. Leadership happens at all levels of organizations and in society. It is essential to prepare as many people as possible to function as leaders …” (p. 78). Likewise, Northouse (2013), based on the work of Katz (1955), emphasises the imperative of embodying “human skills”, in other words, “abilities that help a leader to work effectively with subordinates, peers and superiors to accomplish the organization’s goals”, as being vital at all management echelons (p. 44). Lawler (2005) addresses the situation from a slightly different perspective, choosing rather to emphasise that most of the leadership literature has concentrated on what he refers to as “distant” leaders, or leaders with whom staff members enjoy little to no direct interaction rather than those to whom they report directly (p. 126).

The benefits of employing subordinate ratings of leaders rather than self-reporting are pointed out by various researchers (for example, Conway, 2000; Kim & Yukl, 1995; Schaveling, Blaauw & van Montfort, 2017). Ang et al. (2015) also argue that, because most of the CQ empirical research efforts have made use of self-report mechanisms, the measurement of CQ according to informant-based methodologies could contribute to not only the strength of CQ research but also facilitate the triangulation of research outcomes. Along the same lines, Harrison (2012) states that “it is less certain that [individuals] are able to accurately assess their ability to interact across cultures” (p. 234). Sample data on the leaders was, consequently, sourced from the subordinates of the leaders comprising the population (that is, the respondents were those persons who report to leaders).

Obtaining access to an organisation in which to conduct research is often a challenge; even more so when attempting to conduct research in multiple entities. Accordingly, students pursuing a Master of Business Leadership (MBL) degree at the Graduate School of Business Leadership at the University of South Africa (GSBL) were offered the opportunity to assist in collecting the data, thereby leveraging their access to their respective employer organisations. Eighteen MBL students voluntarily accepted this offer. Data were also collected by the candidate from his employer organisation. The sample was thus one of convenience, representing 19 organisations and comprising 1 140 respondents. Sample convenience was
somewhat mitigated by the richness in diversity of the said organisations as well as the fact that the respondents in each organisation were randomly chosen.

1.10.3.3. Hypotheses

The hypotheses that were investigated are listed per empirical objective.

**Empirical objective 1**

- **H1₀**: There is no statistically significant relationship between the CQ (as a composite value) and the empowering leadership style of leaders at organisations operating in South Africa,
- **H1ₐ**: There is a statistically significant relationship between the CQ (as a composite value) and the empowering leadership style of leaders at organisations operating in South Africa,
- **H2₀**: There is no statistically significant relationship between the CQ (as a composite value) and the directive leadership style of leaders at organisations operating in South Africa,
- **H2ₐ**: There is a statistically significant relationship between the CQ (as a composite value) and the directive leadership style of leaders at organisations operating in South Africa,
- **H3₀**: The relationship between leader CQ (as a composite value) and the empowering leadership style does not differ from that between leader CQ (as a composite value) and the directive leadership style,
- **H3ₐ**: The relationship between leader CQ (as a composite value) and the empowering leadership style does differ from that between leader CQ (as a composite value) and the directive leadership style,
- **H4₀**: There is no statistically significant relationship between each of the CQ dimensions and the empowering leadership style of leaders at organisations operating in South Africa,
- **H4ₐ**: There is a statistically significant relationship between each of the CQ dimensions and the empowering leadership style of leaders at organisations operating in South Africa,
- **H5₀**: There is no statistically significant relationship between each of the CQ dimensions and the directive leadership style of leaders at organisations operating in South Africa,
- **H5ₐ**: There is a statistically significant relationship between each of the CQ dimensions and the directive leadership style of leaders at organisations operating in South Africa,
- **H6₀**: All the leader CQ dimensions do not contribute uniquely and significantly in predicting
the empowering leadership style of leaders at organisations operating in South Africa,

• H6a: All the leader CQ dimensions do contribute uniquely and significantly in predicting the empowering leadership style of leaders at organisations operating in South Africa,

• H7o: All the leader CQ dimensions do not contribute uniquely and significantly in predicting the directive leadership style of leaders at organisations operating in South Africa, and

• H7a: All the leader CQ dimensions do contribute uniquely and significantly in predicting the directive leadership style of leaders at organisations operating in South Africa.

Empirical objective 2

• H1o: Subordinate cultural identity does not play a part in the display of empowering leadership, given leader CQ,

• H1a: Subordinate cultural identity does play a part in the display of empowering leadership, given leader CQ,

• H2o: Subordinate cultural identity does not play a part in the display of directive leadership, given leader CQ, and

• H2a: Subordinate cultural identity does play a part in the display of directive leadership, given leader CQ.

Empirical objective 3

• H1o: The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness,

• H1a: The CQ of leaders (as a composite value) does moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness,

• H2o: The CQ dimensions of leaders do not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness,

• H2a: The CQ dimensions of leaders do moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership
effectiveness,

- **H3₀**: The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness,

- **H3₁**: The CQ of leaders (as a composite value) does moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness,

- **H4₀**: The CQ dimensions of leaders do not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness, and

- **H4₁**: The CQ dimensions of leaders do moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness.

1.10.3.4. **Variables classification**

Independent, dependent and moderator variables were included in this research. An independent variable is “an explanatory variable that is a presumed cause of variation in other explanatory variable(s)” whereas a dependent variable is “an explanatory variable that is presumed to be affected by the independent variable(s)” (Bacon-Shone, 2015, p. 24). Gordon, Tucker, Burke and Carron (2013) state that a moderator variable is a “factor that can change the basic nature and / or strength of the relationship between an independent variable and the dependent variable” (p. 288). The table that follows sets out how the variables were classified in this study.

**Table 1.1: Variables classification**

<table>
<thead>
<tr>
<th>Empirical objective</th>
<th>Independent</th>
<th>Dependent</th>
<th>Moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leader CQ (and each of its dimensions)</td>
<td>Leadership style (empowering and directive)</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Subordinate cultural identity (the dimensions of culture) and leader CQ</td>
<td>Leadership style (empowering and directive)</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Leadership style (empowering and directive)</td>
<td>Leadership effectiveness</td>
<td>Leader CQ (and each of its dimensions)</td>
</tr>
</tbody>
</table>
1.10.3.5. **Questionnaire**

Quantitative investigation necessitates the employment of a pre-developed standardised tool or pre-defined groupings into which respondent perceptions are anticipated to fit (Yilmaz, 2013). Hence, data were collected through a single consolidated questionnaire that comprised several standard instruments. The instruments are discussed per variable.

The CQ of leaders was measured using the 20 item Cultural Intelligence Scale (CQS) developed by Van Dyne, Ang & Koh (2008). Although this instrument is highly reliable and generalisable across samples and across time as well as cultures (Rockstuhl et al., 2011), Schlägel and Sarstedt (2016) caution researchers to be aware that the CQS may be invariant across different jurisdictions. The CQS has, however, been proven to be both reliable and valid within the South African context (Mahembe & Engelbrecht, 2014). Further, both the self-report and observer-report versions of the CQS reflect evidence of convergent, discriminant and criterion validity (Van Dyne et al., 2008). Exploratory factor analysis was, nonetheless, conducted to affirm the validity of the CQS given the concern of Schlägel and Sarstedt (2016) and the fact that the sample size of the Mahembe and Engelbrecht (2014) study was relatively small. The observer-report version, based on a seven-point Likert scale, was used in this research. Permission to use the CQS was obtained from Linn Van Dyne.

Empowering leadership was assessed using a 10-item instrument constructed by Ahearne et al. (2005). This instrument is reliable (Yoon, 2012) and has been shown to be reflective of both the distinctiveness of the empowering leadership dimensions as well as the overall construct itself (Zhang & Bartol, 2010). The instrument delivered a Cronbach alpha of 0.93 when used as an observer-based report (Yoon, 2012) and 0.95 and 0.97, respectively, in a study by Kwak (2011) across two-time periods. A seven-point Likert scale was applied. Permission to use the instrument items was obtained from Mike Ahearne.

Directive leadership was measured by six items extracted from an instrument developed by Pearce and Sims (2002). These six items were augmented by four items from Hwang et al., (2015). Hinrichs (2011) achieved a Cronbach alpha of 0.88 when making use of the directive
items of Pearce and Sims (2002) whilst Hwang et al. (2015) attained an alpha of 0.85. All items were rated on a five-point Likert scale. Permission to use the instrument items of (1) Pearce and Sims (2002) was obtained from Hank Sims Jr and that for (2) Hwang et al. (2015) was received from Louis Quast.

Subordinate cultural identity was measured according to the cultural dimensions of Hofstede (1980, 2011) because Kumar et al. (2011) state that these dimensions have “been the benchmark for much of the research on world cultures” (p. 154). The specific instrument applied was the Individual Cultural Values Scale (CVS) (Yoo, Donthu & Lenartowicz, 2011). The CVS, consisting of 26 items, has demonstrated both validity and reliability (Mazanec, Crotts, Gursoy & Lu, 2015; Yoo et al., 2011) and may be used across countries and sample types (Yoo et al., 2011). Per Jakubczak & Rakowska (2014), the CVS may be employed to compare individuals both at a national level and cross-culturally. All items were rated on a five-point Likert scale. Permission to use the CVS was obtained from Boonghee Yoo.

Leadership effectiveness was measured through four items from Cicero et al. (2010), using a seven-point Likert scale. These items have delivered high levels of reliability; for example, a Cronbach alpha of 0.83 (Cicero et al., 2010). Permission to use the instrument items of Cicero et al. (2010) was obtained from Daan van Knippenberg.

Sample respondents completed all the questionnaire items with reference to their respective leaders except for those items covering cultural identity, which they answered regarding themselves.

1.10.3.6. Data analysis
A combination of applicable statistical procedures was used. These included (1) descriptive analysis, (2) reliability analysis, (3) factor analysis, (4) correlation analysis, (5) stepwise regression analysis and (6) moderated multiple regression analysis. All statistical tests were conducted at the 5% significance level as such alpha is generally accepted for testing hypotheses (Cohen 1992; Lazaraton, 1991; Sakoda, Cohen & Beall, 1954). Thompson (2002)
however points out, “statistical significance does not evaluate whether results are important” (p. 65). Likewise, Hair, Black, Babin and Anderson (2010) indicate that in addition to considering statistical significance, researchers must assess the practical significance of their findings. Practical significance differs from statistical significance in that whilst the latter “determines whether the result is attributable to chance”, the former “assesses whether the result is useful (i.e., substantial enough to warrant action)” (Hair et al., 2010, p. 2). The statistical results arising from this study were thus evaluated in terms of their practical significance. Effect size estimates are valuable in quantifying the practical significance of a study (Fritz, Morris & Richler, 2012; Hojat & Xu, 2004). In this regard, the guidelines of Cohen (1988) were used.

1.11. ETHICAL CONSIDERATIONS

Permission to conduct the research was granted by the Research Ethics Review Committee of the GSBL under approval number 2016_SBL_003_CA (for the data collection by the MBL students and the candidate) and approval number 2016_SBL/DBL_015_SD (for the candidate to make use of the data as collected by the students). The Research Permission Sub-Committee of the Senate Research, Innovation, Postgraduate Degrees and Commercialisation Committee of the University of South Africa also authorised the research under reference number 016_RPSC_064.

The students who assisted with the data collection benefited therefrom in that they were given access to the consolidated data for the purposes of completing a required assignment towards the attainment of their MBL degrees. Students were required to obtain formal written approval from the Chief Executive Officer or other relevant executive of their respective employer organisation before selecting and contacting potential respondents. The candidate followed the same approach before administering the questionnaire in his employer organisation. In addition, all potential respondents received a comprehensive information sheet explaining, amongst others, (1) the purpose and importance of the research, (2) that participation in the research was both voluntary and anonymous and (3) that by completing and submitting the consolidated questionnaire they would be deemed to have consented to such participation.
1.12. RESEARCH DELINEATIONS

Three factors were used to delineate the scope of the research as it related to the literature grounded objectives. The first factor addressed the framework that was selected to organise the CQ literature. The general body of scientific knowledge framework was used, with a particular focus on the concept, definition and truth statement components thereof. Conceptual structures were excluded. The second factor covered the nature of CQ material that qualified for organisation. Just peer reviewed articles on CQ published in non-predatory journals were considered. The focus was thus on material that had passed review by the scientific community. All other publications, whether electronic or not, as well as non-published outputs, such as dissertations, were omitted. The third factor concerned the time frame within which such CQ articles were published. The commencement date was set as 1 January 2002 so as to ensure that the period during which CQ was conceptualised was included. The end date was taken as 31 May 2015 because May 2015 was the month in which the systematic literature review was conducted.

The research, as it related to the empirical objectives, focused on the relationship between leader CQ and leadership styles as well as the impact of leader CQ on the relationship between leadership styles and leadership effectiveness. The empowering and directive leadership styles were examined exclusively. Attention was deliberately diverted from the transformational and transactional styles as they have tended to dominate scholarly leadership enquiry and have previously been explored in the CQ context. The population studied was restricted to leaders at companies carrying on operations in South Africa. The sample drawn was limited to those companies to which GSBL students had access. This decision was taken because the sample companies, as a reasonably large group, were diverse in terms of both their size and industry represented. Finally, just staff members’ perceptions of their leaders were concentrated on. Leader observations were, accordingly, excluded.

1.13. RESEARCH LIMITATIONS

A number of limitations governed the achievement of the objectives. The chief limitation faced in organising the CQ literature is that it was possible some published CQ studies may not have
been identified. To address this prospect a variety of data bases were examined and an extensive search was conducted using Google Scholar. The primary limitation of the quantitative study concerned the use of a convenience sample since the extent to which the findings may be generalised, might be constrained. The broad range of participating organisations as well as the selection of respondents randomly, within each of the organisations, however, serves to allay this somewhat.

Chapter 7 presents a full discussion of the limitations.

1.14. CHAPTER COMPOSITION

In addition to this chapter, this thesis comprises:

Chapter 2: Cultural intelligence: Concepts and definition statements

Chapter 3: Exploring cultural intelligence truths: A systematic review

Chapter 4: Leadership styles: The role of cultural intelligence

Chapter 5: The relationship between subordinate cultural identity, leader cultural intelligence and empowering and directive leadership

Chapter 6: Leadership style and leadership effectiveness: Does cultural intelligence moderate the relationship?

Chapter 7: Summation, conclusions, limitations and recommendations

Reference list and appendices
CHAPTER 2: CULTURAL INTELLIGENCE: CONCEPTS AND DEFINITION STATEMENTS

In this chapter, the first literature grounded objective, that is, to organise the extant CQ literature in terms of the concept and definition statement elements of the general body of scientific knowledge framework (see Babbie & Mouton, 2011), is addressed.

2.1. INTRODUCTION
CQ has been the subject of increasing interest. The principal driver underpinning such focus is globalisation. To this end, Guðmundsdóttir (2015) comments that “globalization has led to a significant increase in cross-cultural interactions” (p. 175). To function effectively in the international arena, it is imperative that leaders, managers and staff members alike demonstrate both competence and sensitivity in intercultural dealings as intercultural misunderstandings are common and frequently cause significant impact to the organisation (Earley, 2002). Thomas, Elron, Stahl, Ekelund, Ravlin, Cerdin et al. (2008) state that “the outcome of culturally intelligent behavior is more effective intercultural interaction” (p 125). Demonstrating culturally intelligent behaviour is therefore vital if individuals and organisations are to overcome the challenges presented by cross-cultural exchanges.

Whilst the research and associated insights on CQ are building, the optimal application of the learnings in commercial activities is being somewhat hampered given the multifaceted and dense lattice of ideas (Blasco, Feldt & Jakobsen, 2012). An effort to organise such knowledge is therefore called for. Although the candidate notes the work of Ang, Van Dyne and Rockstuhl (2015) and Bovornusvakool, Ardichvili and Rana (2015) in reviewing the CQ literature he believes additional value could be added by situating it within the concept and definition statement elements of the general body of scientific knowledge framework (see Babbie & Mouton, 2011), as described below.

2.2. RESEARCH PURPOSE AND QUESTIONS
The purpose of this analysis was to arrange the literature on CQ according to the concept and definition statement elements of the general body of scientific knowledge framework, through
a systematic literature review and subsequent synthesis thereof. Hence, the questions that this analysis sought to answer were: (1) what are the concepts that are associated with CQ and (2) how is it defined?

2.3. LITERATURE REVIEW
The literature review covered two areas. The first addressed the systematic review methodology. The second dealt with the manner in which the valid systematically sourced literature could be organised according to the general body of scientific knowledge framework.

2.3.1. Systematic literature reviews
A literature review is performed with the aim of gleaning a richer understanding of the nature and meaning of the problem that is being investigated (De Vos, Strydom, Fouche & Delport, 2013) and is an integral component of most research activities (Nightingale, 2009). Literature reviews may be undertaken for a number of different reasons (Kable, Pich & Maslin-Prothero, 2012). These include the discovery of up-to-date respected theorising on the subject, to discern the most widely acknowledged empirical observations in the study domain, to detect relevant measures that have demonstrated validity and reliability and to assess established definitions of key concepts pertaining to the subject (Mouton, 2013). In sum, they most often serve to frame the researcher’s efforts by positioning the topic in a greater knowledge repository (De Vos et al., 2013). Systematic reviews, which have become increasingly accepted (Kable et al., 2012), were specifically advanced in an attempt to reduce or obviate the researcher’s own bias (White & Schmidt, 2005). As such, they employ overt criteria to locate, source, review and synthesise all the literature on the topic (Cronin, Ryan & Coughlan, 2008). They make use of an explicit search strategy that is clearly documented and which is targeted at reducing possible prejudice or partiality and random error (Cook, Mulrow & Haynes, 1997). The purpose of elucidating the respective search methodology is to provide readers with (1) a succinct and unambiguous understanding of the mechanism through which the literature was identified, assessed, evaluated and the outputs thereof and (2) so as to ensure repeatability. Schutte and Steyn (2015) conclude that through the use of “transparent and reproducible procedures, systematic reviews improve the quality and outcome of the review process” (p. 4).
The review of the CQ literature that follows made use of the systematic review methodology. However, without a framework via which to analyse data the possibility exists that the review will be directionless (Rocco & Plakhotnik, 2009). Consequently, this analysis sought to organise the literature in terms of the concept and statement (specifically definition) elements of the general body of scientific knowledge framework.

2.3.2. The general body of scientific knowledge framework

Babbie and Mouton (2011) suggest that research should be situated within the framework of the general body of scientific knowledge. Scientific knowledge is collective in nature and the output of demanding, meticulous and organised enquiry (Babbie & Mouton, 2011).

De Vos et al. (2013) note that the building blocks of science comprise concepts, statements (definitions, hypotheses and propositions), conceptual frameworks (typologies, models and theories) and paradigms. As this report concentrates on the concepts and definition statements of CQ, the discussion that follows is confined to these two elements:

2.3.2.1. Concepts

Concepts are those words or short phrases that represent an abstract or general idea. Concepts existing in relation to a profession are inexorably a diverse group consisting primarily of notions indigenous to that profession, those borrowed from the underlying sciences and from adjacent vocations (De Vos et al., 2013). Concepts convey meaning through both connotation and denotation (Mouton & Marais, 1996). Connotation reflects the “subjective attitude or emotion” carried by the concept whilst “objective description” is captured through denotation (Riahi-Belkaoui, 1995, p. 32). Concepts thus comprise the core ingredients of knowledge. A concept that has been methodically defined for application in scientific theory production depicts a construct (Hox, 1997).

2.3.2.2. Definition statements

Definition statements describe the exact or precise meaning of words or phenomena. As such, they facilitate comprehension in that they ensure common understanding. They exist to
demarcate the contextual sense of words (Mouton, 1996), aiding their expression and thereby enriching communication. Definitions may be classified as either (1) constitutive, that is, a concept is defined through the employment of other concepts, terms or words or (2) operational, wherein the procedures that must be adopted in measuring a concept are stated (Ary, Jacobs, Sorenson & Razavieh, 2010).

2.4. RESEARCH DESIGN AND METHODOLOGY

In the main, literature review processes comprise 3 distinct components – data collection, data analysis and synthesis (Crossan & Apaydin, 2010). This analysis was structured accordingly. Furthermore, a systematic literature review should include (1) the purpose and research question(s) of the review study, (2) the criteria set to determine whether a report will be included or excluded, (3) the procedures by which reports will be identified and sourced and (4) the mechanism through which the included literature will be analysed (Cronin et al., 2008; Nightingale, 2009). In accordance therewith, relevant details of the manner in which the CQ literature was systematically reviewed appear below (noting that the purpose and research questions have been presented above).

2.4.1. Inclusion and exclusion criteria

The first criterion for inclusion was that of time. Thomas et al. (2008) note that CQ has recently been introduced. Although Earley and Ang first described CQ in 2003 (Ang, Van Dyne & Tan, 2011; Ng, Van Dyne & Ang, 2012), Earley (2002) had in fact already made reference to it. Consequently, the commencement date for the systematic search was set at 1 January 2002 with the termination date being 31 May 2015. The termination date was selected so as to represent the present in that the search was conducted primarily during May 2015.

Babbie and Mouton (2011) point out that only data which has been examined and recognised by the scientific community should be incorporated. The second criterion thus required the material to have been published in a peer-reviewed journal in order for it to be included. Badger, Nursten, Williams and Woodward (2000) point out that “being systematic does not mean being all embracing and if exclusion / inclusion criteria are carefully selected then the
search can be kept manageable” (p. 227). The third and fourth criteria hence required the studies to be in English and to have CQ (in any format) incorporated into the article, respectively. Where studies were presented in a language other than English or the reference to CQ was, at best, incidental they were eliminated.

2.4.2. Identification of the studies

To boost the likelihood that studies satisfying the inclusion criteria would be located, several databases were examined. These were (1) EBSCO Host Business Source Complete, (2) ProQuest ABI/Inform Global, (3) ProQuest Psychology and (4) SAGE (including archive 1879 onwards). Google Scholar was also scrutinised. As the intention was to identify all relevant studies on CQ no sampling was made use of. The databases were searched for the exact phrase “cultural intelligence”. The results from the database searches and Google Scholar were then compared and duplicates eliminated.

In total, 157 unique studies were found across 101 journals. Approximately 71% (112) of the studies were undertaken in the years 2011 through 2015 indicating the exponential increase in published outputs on CQ and underscoring the timely performance of this review. To satisfy criterion two, all journal titles were compared against Beall’s list (see Scholarly Open Access, 2015) in order to identify any that are considered to be potentially, possibly or probably predatory in nature. None of the 101 journal titles were included in Beall’s list. Finally, Ulrichsweb (see Serials Solutions, 2015) was searched to validate the journals follow a peer review process. In this regard, 14 journals, representing 18 of the identified studies, were found to not practice peer review. The titles of another ten journals were not listed on Ulrichsweb and thus their respective websites were examined with a view to establishing compliance with criterion two. The websites of three of these journals did not provide any details on peer review; hence a further three of the identified studies were discarded. The final number of included studies was 136.

2.4.3. Data analysis and reporting

As previously indicated, this review analysed the included material according to the concept
and definition statement elements of the general body of scientific knowledge framework. Concepts were recognised as the key words listed in the studies. A similar strategy followed by Schutte and Steyn (2015) and Sethibe and Steyn (2015) provided satisfactory results. Definition statements were identified where the studies made use of words such as “define”, “describe” or “explain” and associated these directly with CQ. The results of the investigation are reported under findings and are more fully considered in the discussion section that follows thereafter.

2.5. FINDINGS

The findings are separated between concepts and definition statements. Concepts were examined from a connotative perspective whilst constitutive definitions were considered.

2.5.1. Concepts

Out of the 136 articles, 28 did not present any key words. The 108 remaining articles contained, in total, 515 key words of which 439 were listed just once. Cultural intelligence appeared 96 times whilst the acronym “CQ” was listed three times (99 in total). Cross-cultural adjustment was listed 12 times whilst nine of the articles included emotional intelligence as a key word. Culture, cross-cultural management, cross-cultural training and intelligence appeared seven times. Expatriate and international experience were recorded six times whilst performance was listed five times. Cultural adaptation, expatriates, job performance and self-efficacy appeared four times. Cultural competence, motivation, motivational cultural intelligence, personality, social intelligence and transformational leadership were observed three times. The key words that were listed fewer than three times were mostly attendant variations of those identified above and were thus not directly considered during the process of distilling the concepts.

2.5.2. Definition statements

In aggregate, 123 studies contained either a definition of CQ or referenced a definition of it through direct quote or paraphrase. As seminal authors in the field of CQ, the definitions provided by P. Christopher Earley and Soon Ang were noted to be those most frequently referenced.
2.5.2.1. Definitions from Earley (and others, including Ang)

Earley (2002) defined CQ as “a person’s capacity to adapt to new cultural settings” (p. 271). This definition was referenced in one article as a direct quote and was paraphrased in a further three studies. Earley (2002) and Earley and Ang (2003) offered a related definition being “CQ captures a person’s capability to adapt effectively to new cultural contexts” (p. 274) and (p. 59), respectively. This definition was referenced in 22 additional articles (11 each by quote and paraphrase). Chen (2015) highlighted the definition by Earley and Ang (2003) that CQ “is an individual’s capability to adapt effectively to situations of cultural diversity” (p. 3). This definition was quoted in a second article whilst the authors of a further 29 studies chose to reference such definition through paraphrasing it. An additional 17 articles rephrased a combination of the two afore-mentioned definitions by Earley and Ang (2003).

Earley and Mosakowski (2004a) collaborated to offer the following definition of CQ: “a seemingly natural ability to interpret someone’s unfamiliar and ambiguous gestures in just the way that person’s compatriots and colleagues would, even to mirror them” (p. 139). This definition appeared in three additional articles, once as a direct quote and twice through paraphrase. Earley and Mosakowski (2004b) advanced a second description of CQ in terms of which they defined it as “a manager’s capability to adjust to new cultures”. This definition was not found in any of the other included studies (p. 154).

Earley and Ang, in conjunction with Tan, (2006), expanded on their previous definition in defining CQ as “a person’s capability for successful adaptation to new cultural settings, that is, unfamiliar settings attributable to cultural context” (p. 5). This definition appeared as a direct quote in Groves, Feyerherm and Gu (2015) and Eken, Özturgut and Craven (2014) whilst two additional articles paraphrased it.

2.5.2.2. Definitions from Ang (and others)

Ang, Van Dyne, Koh, Ng, Templer, Tay and Chandrasekar (2007) interpreted CQ as “an individual’s capability to function and manage effectively in culturally diverse settings” (p. 336). Three of the included studies quoted this interpretation and seven referenced it. A further
seven articles (three through direct quote and four via paraphrase), however, ascribed the 
afore-mentioned description to Ang and Van Dyne (2008). Ang et al. (2007) went on to expand 
their definition through describing CQ as “a specific form of intelligence focused on capabilities 
to grasp, reason and behave effectively in situations characterized by cultural diversity” 
(p. 336).

Ang worked with Inkpen (2008) in proposing that firm-level CQ is “a form of organizational 
intelligence or firm-level capability in functioning effectively in culturally diverse situations” 
(p.338). This definition was referred to by paraphrase in one other article.

Van Dyne, Ang and Livermore (2010) presented two expositions of CQ, both of which were 
referenced through direct quote in Fakhreldin (2011, p. 3). These definitions are: “one's 
capability to effectively understand and adapt to a myriad of cultural contexts as an essential 
skill set needed to lead effectively across cultures” and CQ is “an individual's capability to 
function effectively across cultures - this can include national, ethnic and organizational as well 
as other types of culture”. This last definition was paraphrased in a second included study.

2.5.2.3. Definitions from Thomas (and others)
Thomas and Inkson (2004) defined CQ as “a multifaceted competency consisting of cultural 
knowledge, the practice of mindfulness, and the repertoire of behavioral skills” (pp. 182-183) 
and was referenced twice by Crowne (2008, 2013a). This definition was found as paraphrase in 
an additional three of the included articles. Thomas and Inkson (2005) later advanced a similar 
yet more descriptive definition of CQ, that is: “being skilled and flexible about understanding a 
culture, learning increasingly more about it, and gradually shaping one’s thinking to be more 
sympathetic to the culture and one’s behavior to be more fine-tuned and appropriate when 
interacting with others from the culture” (p. 7). This definition was quoted in one further study. 
Through his own work, Thomas (2006), as a single author, defined CQ as “the ability to interact 
effectively with people who are culturally different” (p. 80). This definition was observed twice 
amongst the included studies (one article quoted it whilst another paraphrased it).
In association with other scholars, Thomas advanced an alternative definition: “a system of interacting knowledge and skills, linked by cultural metacognition, that allows people to adapt to, select, and shape the cultural aspects of their environment” (Thomas et al., 2008, p. 126). One article directly quoted this last-mentioned definition whilst a further three referenced it through paraphrase.

A number of other scholars proposed their own definitions of CQ, in particular:

• Brislin, Worthley and MacNab (2006): CQ “addresses a set of skills, from basic to advanced, that allow an individual to become effective at eventually transferring social skills from one cultural context to another” (p. 53). This definition was recorded as a direct quote in a second article within the study group. An additional study by these authors referred to CQ as “a set of skills and traits that allow one to more effectively interact with novel cultural settings” (MacNab, Brislin & Worthley, 2012, p. 1321). This definition was referenced as a direct quote in another of the included studies,

• Creque and Gooden (2011): CQ is “an individual's cognition or knowledge that influences his perception to a cultural environment or state and which leads to how he behaves in that environment” (p. 143),

• Khodadady and Ghahari (2012): CQ is “the ability to interact effectively in multiple cultures” (p. 22),

• Lee and Sukoco (2010): CQ refers to “the ability of each expatriate to adapt effectively across cultures” (p. 964). This definition was included in one other study as a direct quote,

• Lin, Chen and Song (2012): CQ refers to “the ability to collect and process messages, to make decisions, and the relative approaches needed in order to adjust to a new environment” (p. 542),

• Mansuri (2014): CQ is “the ability one possesses to adjust and adapt to differences in all aspects, especially culture” (p. 264),

• Moon (2010): CQ is “an organization’s capability to function and manage effectively in culturally diverse environments” (p. 458), and

• Peterson (2004): CQ is “the ability to engage in a set of behaviors that uses skills (i.e. language or interpersonal skills) and qualities (e.g. tolerance for ambiguity, flexibility) that
are tuned appropriately to the culture-based values and attitudes of the people with whom one interacts.” (p. 89). This view of CQ was quoted by Crowne (2009) and paraphrased in two of the included articles.

Many of the articles incorporated more than one of the CQ definitions identified above.

2.6. DISCUSSION
The discussion addresses both the concepts and definition statements.

2.6.1. Concepts
The first research question related to the concepts associated with CQ. Given the quantity of articles included in this review it was not unexpected that a large volume of key words would be identified. As it was CQ being investigated, it was anticipated that the majority of the included studies would list “cultural intelligence” or “CQ” as a key word. To this end, approximately 92% (99 / 108) of the studies that incorporated key words recorded it as such. This is important in that it validated the focus of the studies as being the direct examination of CQ rather than CQ being addressed purely as a subsidiary consideration.

The following concepts were distilled through a scrutiny of the key words:

• Accomplishment (representing job performance, performance, cultural competence and self-efficacy): Culture appropriate and relevant task execution predicated upon self-belief capability,
• Culture (representing culture): The behaviours, beliefs and customs characteristic of different person groupings,
• Expatriates (representing expatriate and expatriates): Persons who are not of or different from the people, place or environment, that is, culturally different or distinct,
• Experience (representing international experience): Direct, real and practical involvement in or exposure to cross-cultural events or occurrences,
• Fit (representing cross-cultural adjustment and cross-cultural adaptation): An indication of the extent to which a person combines appropriate, suitable, apt and proper actions and
reactions. Fit addresses the extent to which a person is able to acclimate successfully in situations of cultural unfamiliarity and, as such, concerns the inherent emphasis of CQ in that adaptation to a new culture extends beyond the hygiene to a position where outcomes are effective and not merely supplementary,

- Intelligence (representing CQ, emotional intelligence, intelligence, social intelligence and personality): The facility to realise an objective,
- Motivation (representing motivation and motivational cross-cultural intelligence): The desire or will to acquire knowledge of other cultures and participate in cross-cultural interactions,
- Supervision (representing cross-cultural management and transformational leadership): Direction, coordination or influence of culturally heterogeneous resources in the attainment of specific goals, and
- Training (representing cross-cultural training): The process or system through which knowledge is delivered and received, including action / experiential learning.

In Figure 2.1, the key words that were identified are thematically grouped into logical spheres allowing for the portrayal of the above-named concepts. The spheres are shown as (1) overlapping in order to reflect an affiliation between the concepts and (2) in an ascending typology to reveal a process by which CQ might be developed by individuals within a multicultural work environment.

![Figure 2.1: Concepts associated with CQ](image)

Note: Numbers in brackets represent the number of times the key word appeared
Per Figure 2.1, it is submitted that the cultivation of CQ activates with an individual’s *motivation* to pursue intercultural interactions. In preparation therefore, participation in *cross-cultural training* takes place. The individual enters the foreign culture as an *expatriate* with his / her CQ further evolving through the accumulation of *experience*. A successful *fit* within the culture ensues. This fit contributes to adept *supervision* and fruitful *performance* delivery.

The above process proposes a possible arrangement of the identified concepts and is thus indicative rather than being based upon empirical evidence. Alternative approaches by which CQ may be boosted are offered by Divyashree (2016) and Van Dyne and Ang (2008).

### 2.6.2. Definition statements

The second research question concerned CQ definition statements. In total, 24 definitions were identified amongst the included studies.

The initial, and certainly the most popular, definitions of CQ are those formulated by Earley (2002) and Earley and Ang (2003) which reflect CQ as a person’s / individual’s capacity / capability to adapt / adapt effectively to new cultural settings / new cultural contexts / situations of cultural diversity. These initial, yet pivotal, definitions appear to be the foundation upon which all subsequent elucidations of CQ are built.

Whereas Earley (2002) and Earley and Ang (2003) initially chose to offer concise definitions of CQ, that is, not directly identify nor reference the CQ dimensions (being metacognitive, cognitive, motivational and behavioural CQ) in their descriptions, other commentators put forward more elaborate explications. To this end, Thomas and Inkson (2005) included what they advocate the three dimensions of CQ to be (that is, knowledge, mindfulness and behaviour) in their definition. It was not until 2007 that Ang, in collaboration with Van Dyne, Koh, Ng, Templer, Tay and Chandrasekar, offered a definition that incorporated the CQ dimensions as conceived by Earley and Ang (2003). This definition, though, references the dimensions rather than explicitly naming them per Earley and Ang (2003).
An important observation is that the word “new” in relation to cultural settings or contexts, whilst being included in the definitions of Earley (2002) and Earley and Ang (2003), was omitted from all other definitions apart from those of Lin et al. (2012), Earley, Ang and Tan (2006) and Earley and Mosakowski (2004b). It is suggested that the reason for this could be that CQ was originally conceptualised in relation to situations of cultural diversity that the individual had not previously been exposed to. The elimination of “new” from later descriptions might thus serve to draw attention to the role that CQ has to play in all cultural interactions irrespective of whether the individual has previously been exposed to or operated within such cultural contexts.

Trompenaars and Hampden-Turner (1998) comment that “culture also presents itself on different levels” (p. 7). They indicate that the highest level of culture is that of the nation and point out that culture also exists at the corporate (organisation) and professional levels. It is particularly illuminating then that only the definition of Van Dyne et al. (2010), as quoted by Fakhreldin (2011), highlights the aptitude to function effectively across cultures in fact concerns all levels of culture including “national, ethnic and organizational” (p. 3). The other definitions in describing CQ leave it to the reader to infer that CQ prevails at all cultural levels.

A related observation, garnered from the definitions, is that CQ references the capability to adjust effectively to many, as opposed to only a single or few, cultures. To stress this Khodadady and Ghahari (2012) and Van Dyne et al. (2010) make use of the words “multiple” and “myriad”, respectively.

Earley and Ang (2003), Rehg, Gundlach and Grigorian (2012) and Wood and St. Peters (2014) all point out that CQ can be taught and learnt. With this in mind, the use of “natural” to qualify “ability” in the definition by Earley and Mosakowski (2004a) could be misinterpreted as indicating that CQ is innate, that is, the acquisition and enhancement of CQ is not possible. Rather, it is submitted that Earley and Mosakowski (2004a) are actually emphasising the competence of the culturally intelligent person.
CQ is predominantly defined or described in relation to the individual. Just Ang and Inkpen (2008), and later Moon (2010), offered a description of CQ at the firm or organisational level. Apart from the afore-mentioned definitions, it was solely Van Dyne et al. (2010) who included a reference to the organisation in their definition. However, the reference is to organisational culture as opposed to organisational CQ per se.

Finally, although some of the included studies examined CQ and leadership (including, Eken et al., 2014; Ismail, Reza & Mahdi et al., 2012; Keung & Rockinson-Szapkiw, 2013), it was solely Van Dyne et al. (2010) who described CQ within the context of leading effectively in unfamiliar cultural conditions. Similarly, just the definition by Earley and Mosakowski (2004b) described CQ with specific reference to the manager. Three other definitions did contain the word “manage”, however the inclusion appeared to be more directed at the individual managing him/herself in culturally varied situations rather than to the management of subordinates, for example.

It is argued that an integrated definition of CQ should thus cover, at a minimum, those items discussed above. Despite the challenge of improving on the various definitions that have been articulated for CQ, the candidate ventures that CQ could be described as “a discrete intelligence type, that embraces the ability (which may be enhanced, learned and developed) of individuals to adjust to and thus function effectively across all types and levels of culture and culturally diverse settings, that they may or may not have previously been exposed to, and which sprouts from the desire to acquire and embodying the capacity to process culture-specific knowledge and is demonstrated through culture appropriate behaviours.”

2.7. CONCLUSION

In this age of amplified intercultural interactions, CQ is attracting ever-increasing attention. To maximise utility from the mounting insights, it is imperative that the business and academic communicates have a clear understanding of it. With the aim of facilitating an improved comprehension, this review has organised the literature in terms of the concepts associated with and the explications used to define CQ.
As integral components of science, concepts and definition statements are essential in laying the groundwork upon which understanding is developed. To this end, the CQ concepts present as a narrow band with particular focus on accomplishment, culture, expatriates, experience, fit, intelligence, motivation, supervision and training. The definition statements have become increasingly descriptive yet continue to centre on the capacity to function effectively in cross-cultural interfaces.

2.8. LIMITATIONS AND RECOMMENDATIONS

This review is subject to four primary limitations. It is possible that pertinent CQ reports may not have been identified. Likewise, applicable insights would have been missed had they been included in non-published sources only. The CQ dimensions, whilst identified, were not considered nor was the denotative meaning of CQ probed.

The connotative meaning of CQ could be further enriched through an exploration of its dimensions whilst examination of the instruments that have been developed to assess CQ, including relevant supporting evidence, would contribute to denotative understanding. Moreover, the suggested growth of CQ, as illustrated in Figure 2.1, could be expanded into a conceptual model that is subsequently tested for validity. It is recommended that these research avenues be investigated.

2.9. CONTRIBUTION

This review identifies the most common concepts associated with CQ thereby positioning it within the context of inter or cross-cultural activity. It consolidates the many CQ definition statements and in so doing extends the work of Thomas et al. (2008). An analysis of these definition statements is offered and, through a synthesis thereof, an integrated description is suggested. It follows on that the reader should be better positioned to grasp the meaning of CQ.
CHAPTER 3: EXPLORING CULTURAL INTELLIGENCE TRUTHS: A SYSTEMATIC REVIEW

In this chapter, the second literature grounded objective, that is, to organise the extant CQ literature in terms of the truth statement element of the general body of scientific knowledge framework (see Babbie & Mouton, 2011), is addressed.

3.1. INTRODUCTION

Globalisation, a force firmly rooted within the current era of unprecedented technological advancement, is increasingly exposing both individuals and organisations to situations of cultural heterogeneity in which they are required, and indeed expected, to function effectively (Alon et al., 2016). With the aim of explaining why some persons are able to operate more successfully than others in such circumstances, Earley and Ang (2003), through their seminal work, conceptualised CQ. CQ targets capabilities to comprehend, process and act effectively in an array of intercultural exchanges and interactions (Ang et al., 2007).

CQ is presently experiencing increased momentum in terms of research efforts to better explain it. In this regard, Bücker, Furrer, Poutsma and Buyens (2014, p. 2068) affirm that CQ is “attracting growing attention in academic literature”. In evaluating such literature, it would be important to ascertain the degree to which it situates within the general body of scientific knowledge framework (see Babbie & Mouton, 2011), particularly in terms of the truth statement elements thereof. Although there have been some efforts to explore the literature, for example, Ang, Van Dyne and Rockstuhl (2015), who reported on the origins, conceptualisation, evolution and methodological diversity of CQ, and Bovornsuvakool, Ardichvili and Rana (2015), who considered different CQ approaches, the candidate is of the view that further value could be provided if the CQ truths were to be systemised accordingly.

Truth statements consist of knowledge declarations and may arise from hypotheses testing (Schutte & Steyn, 2015), that is, they are generated following the production of empirical
evidence in support of the hypotheses in question. As such, they are indicative of theory reflected as reality. Hypotheses comprise statements of expectation concerning a proposed relationship between two variables (De Vos, Strydom, Fouche & Delport, 2013) and are normally associated with quantitative research (Schutte & Steyn, 2015) in that they necessitate the use of measures (Whetten, 1989).

3.2. RESEARCH PURPOSE
The purpose of this analysis was to report on CQ truths. As a result, non-validated hypotheses were not considered.

3.3. RESEARCH QUESTION
The question this analysis aimed to address was the following: What do the CQ truths reveal?

3.4. LITERATURE REVIEW
As this analysis covered CQ truths, the literature review targeted an explication of both truth and CQ and was hence divided into two separate sections. In the first section, attention was devoted to understanding the concept of truth and the role that science plays in the quest to achieve it. The second section covered CQ and its constituent dimensions.

3.4.1. Truth and scientific knowledge
For millennia the topic of truth has stimulated much debate (Glanzberg, 2014). Disagreement exists amongst scholars as to a uniform definition of truth (Badenas, 2012) and this has given rise to a variety of different truth theories, examples of which include the Correspondence, Coherence and the Deflationary theories. The Correspondence theory argues that truth is with a fact and is most often attendant with metaphysical realism, that is, truth is the equation of thing and intellect (Marian, 2015) or the “correspondence between a statement and the reality” (Badenas, 2012, p. 8). As such, the Correspondence theory suggests that a proposition is true only when that proposition and a fact actually correspond. Young (2015) indicates that the Coherence theory of truth asserts that a proposition is considered to be true when it is in coherence with a definite set of propositions. The Coherence theory thus differs
from the Correspondence theory in that in the former the truth of a proposition ascends from
the existence of an association between additional propositions and the proposition being
considered, whilst in the latter a proposition is assessed as true when it is related to a worldly
fact. The Deflationary theory of truth holds that in saying a statement is true is actually nothing
more than to declare the statement itself (Stoljar & Damnjanovic, 2014). Galinon (2015) points
out that the deflationism thesis contends that the “truth predicate has no explanatory power”,
that is, truth is “a purely expressive device” (p. 268).

Sloan (1979) points out that “science is a search for the truth” (p. 2), whilst Weingart (2002)
notes that “science produces ‘true’ knowledge” (pp. 704-705). It follows on that scientific
knowledge is motivated by the pursuit of truth through the accumulation of evidence (Babbie &
Mouton, 2011). In contrast, ordinary knowledge, which Babbie and Mouton (2011) observe to
be “unsystematic and rather haphazard”, is predicated upon either “personal authority” or
“secondary sources” (p. 5).

Scientific knowledge thus holds a hallowed position in authoritative dialogues which has
resulted in it becoming the architype of logical practice (Fuchs, 1992). Hence, knowledge
generation through scientific endeavour remains inimitable (Weingart, 2002) in the search for
truth. Indeed, Mouton (2013) states that “the search for ‘truth’ or ‘truthful knowledge’ is the
overriding goal of science” (p. 138). To this end, a hypothesis or theory is recognised as “true”
when it has been shown that it is a “good approximation of reality” (Babbie & Mouton, 2011,
p. 10).

Srňka and Koeszegi (2007) remark that “the accepted view in the business and management
sciences is that ‘good’ science is based on research leading to results that are valid, reliable, and
thus generalizable” (p. 38). As a basis for conceptualising research problems and the rationality
of the research process, Mouton (1996) proposed a structure comprising “three worlds”.
The first world consists of everyday life and lay knowledge (Mouton, 2013). In this world,
humans attain knowledge through learning, practice and introspection, the outputs of which
are often referenced, amongst others, as common sense, insight and wisdom (Babbie &
Mouton, 2011). Although lay knowledge is required in order to handle everyday life better (Mouton, 2013), Babbie and Mouton (2011) point out that such knowledge is “extremely varied in origin, kind and especially truth value” (p. 7). In the second world, the objective is to produce truthful, that is, reasonable and credible elucidations of the world. The second world is thus that of science and scientific endeavour (Mouton, 2013). In this world, phenomena from the first world are researched. Accordingly, the second world is demarcated by the epistemic imperative (Babbie & Mouton, 2011). Leplin (1981) notes that “a connection between knowledge and truth is characteristic of analyses of second world knowledge” (p. 271). Truth in the second world is reflected, as pointed out above, to be a best estimate and not absoluteness nor infallibility (Babbie & Mouton, 2011; Mouton, 2013). Reflection is the foundation of the third world. In this world, researchers consider the methodologies or mechanisms through which science may be progressed (Babbie & Mouton, 2011). The third world is thus that of meta-science (Mouton, 2013).

3.4.2. Cultural intelligence

CQ is a non-academic intelligence (Kumar, Rose & Subramaniam, 2008b) that portrays a person’s competence in functioning seamlessly in those environments that are representative of cultural variety (Earley & Ang, 2003). It epitomises a “theoretical extension of Gardner’s (1993, 2011b) multiple facets of intelligence” (Chen, 2015, p. 102). CQ incorporates a collection of mental, motivational and behavioural abilities (Presbitero, 2016b). Hence, it may be distinguished from general academic talent in that the latter focuses exclusively on the positioning of intellectual aptitudes (Ang et al., 2015). Being an etic type of intelligence (Klenke, 2009), CQ is also distinct from emotional and other non-academic intelligences in that such intelligences are culture constrained (Thomas et al., 2008) as they do not transfer across the cultural spectrum.

Ng, Van Dyne and Ang (2009a) observe that CQ, as conceptualised by Earley and Ang (2003), comprises four factors or dimensions: (1) metacognition, (2) cognition, (3) motivation and (4) behaviour. All of metacognition, cognition and motivation situate within the head in that they are mental capabilities, whilst behaviours manifest as explicit actions (Ang et al., 2007,
Metacognitive CQ encompasses the capacity to both procure and comprehend cultural knowledge (Ang et al., 2015). As such, metacognitive CQ mirrors the ability to think about prevailing cross-cultural assumptions and to modify these as appropriate (Groves, Feyerherm, & Gu, 2015) thereby assisting persons to have an improved awareness of their cultural predilections both prior to and in the course of cross-cultural exchanges (Eisenberg et al., 2013). Cognitive CQ refers to the knowledge one has about different cultures (Presbitero, 2016b). This knowledge may be sourced from, and developed through, both personal and educational experiences (Huff, 2013). The desire to immerse oneself in other cultures is evidenced by motivational CQ. This dimension also incorporates the utilisation of energy in transitioning to cultural settings that one may be unaccustomed to (Groves et al., 2015). The fourth dimension of CQ is that of behaviour, that is, a person’s ability to act and react appropriately during cross-cultural exchanges (Huff, 2013). The actions may be both verbal and non-verbal (Ang et al., 2007).

Thomas (2006) offered an alternative conceptualisation of CQ comprising (1) knowledge, (2) mindfulness and (3) behaviour. Knowledge covers both the principles of cultural behaviour (such as greetings, rituals, etc.) and understanding, for example, the history of a culture (Tuleja, 2014). In addition to having cultural knowledge, the culturally intelligent person is mindful, that is, pays “attention to the subtle cues in cross-cultural circumstances” and processes these in terms of his or her cultural knowledge (Tuleja, 2014, p. 10). Behaviour reflects the capacity to select suitable actions based on the nature of the intercultural situation (Thomas & Inkson, 2005).

The difference between the above CQ constructs appears to be purely conceptual as metacognitive CQ forms part of the knowledge dimension in the model of Thomas (2006) (du Plessis, 2011).

3.5. RESEARCH DESIGN

Details of this part of the research design follow.
3.5.1. Research approach

A systematic review of the CQ literature was undertaken. Systematic reviews, having become broadly accepted (Kable, Pich & Maslin-Prothero, 2012), have as their aim the discovery of all material concerning a particular research question so that a fair and impartial summary of the literature may be offered (Nightingale, 2009). To this end, Crossan and Apaydin (2010) indicate that systematic reviews employ “an explicit algorithm, as opposed to a heuristic” in delivering on their objective (p. 1156). As such, they may be distinguished from literature reviews pursuant to their repeatable, methodical and dispassionate search style (Burke, 2015). Systematic reviews most often comprise (1) the collection of data, (2) data analysis and (3) data synthesis (Olckers & du Plessis, 2012). This review followed these steps.

3.5.2. Research method

As this analysis sought to report on CQ truths, that is, it did not merge nor integrate the results from the reviewed studies statistically, the methodology was qualitative in nature. With this in mind, O’Neil and Koekemoer (2016) point out that qualitative research employs “a naturalistic and interpretive stance” (p. 2).

3.5.3. Sampling

Ross (2010) defines a sample as a “subgroup of the population” (p. 5). As the intention was to identify all research studies on CQ that satisfied the inclusion criteria set, no sampling techniques were used.

3.5.4. Data collection

In describing the method by which data were collected, it is necessary to provide details as to both the inclusion and exclusion criteria adopted, as well as the manner in which the studies were identified (Cronin, Ryan & Coughlan, 2008; Nightingale, 2009).

3.5.4.1. Inclusion criteria

Four criteria governed the inclusion of studies.
Publication time frame was set as the first criterion. Despite Earley and Ang (2003) having formally introduced CQ for the first time in 2003 (Thomas et al., 2008), Earley (2002) had already discussed it. Accordingly, the beginning of January 2002 was set as the commencement date for the systematic search so as to ensure that the period during which CQ was conceived was included. As the search was performed during May 2015, the end date was taken as 31 May 2015. The time frame was thus 13.4 years.

The second criterion for inclusion required the study to have been reported on in a peer-reviewed journal, that is, textbooks and unpublished material were excluded. The premise for this criterion was the recommendation by Babbie and Mouton (2011) that only research outputs that have been specifically inspected and accepted by the scientific community be incorporated. In this respect, the titles of all journals in which relevant articles were identified were compared against Ulrichsweb (see Serials Solutions, 2015) to confirm their application of a peer review process.

The third and fourth criteria addressed language of publication and focus, respectively. Only those studies articulated in English were included. The main focus of the study had to be CQ, that is, it was mandatory that the article title incorporated the term cultural intelligence or CQ.

3.5.4.2. Study identification
A comprehensive electronic search was conducted. Cultural intelligence and CQ were used as the search terms. In sum, 404 articles were discovered and split as to EBSCO Host Business Source Complete (90), ProQuest ABI/Inform Global (105), ProQuest Psychology (60), SAGE (30) and Google Scholar (119). The 404 article titles from the different databases were then compared and duplicates were removed. The number of unique studies was 157 (representing 101 different journals). Beall’s list (see Scholarly Open Access, 2015) was then scrutinised to identify whether any of the journals in which the identified studies were reported on are considered to be potentially, possibly or probably predatory in nature. This investigation indicated that none of the 101 journals were reflected as such. The examination of Ulrichsweb
(see Serials Solutions, 2015) revealed that 14 of the journals do not follow a peer review process. A further 10 journals’ titles were not found on Ulrichsweb (see Serials Solutions, 2015) and thus their respective websites were inspected in an attempt to establish whether the articles published in them are peer reviewed. Seven of these journals were found to have peer review policies whilst three did not. The 17 (14 + 3) journals that did not meet the second inclusion criterion represented 21 of the identified studies. These studies were thus removed from the review. This reduced the number of studies to 136 (representing 84 journals).

3.5.5. Data extraction and analysis

The abstract of each of the 136 studies was first examined to further confirm the focus on CQ. All the articles were then listed on a spreadsheet. Details captured were (1) journal title, (2) article title, (3) author(s), (4) date of publication, (5) key words (6) hypotheses (if any) and (7) propositions (if any). In sum, 76 of the 136 articles presented hypotheses that had been the subject of empirical investigation, 11 articles included propositions that had not been empirically tested, whilst 49 articles did not put forward any hypotheses or propositions. The final number of included studies was therefore 76 (representing 48 journals).

Where a single hypothesis contained multiple components, each was counted as a separate hypothesis; for example, a hypothesis that referenced a relationship between a variable and each of the four CQ dimensions was counted as four hypotheses. This resulted in 590 hypotheses being identified across the 76 studies.

Thematic analysis was used to categorise the hypotheses. Fox (2004) states that thematic analysis is “a generic approach to data analysis that enables data sources to be analysed in terms of principal concepts or themes” (p. 1). Categories (i.e. grouped concepts) become themes (Fox, 2004, p. 1). Ryan and Bernard (2003) describe various techniques by which themes may be identified. They note that certain techniques are “more suited to rich, complex answers, whilst others are more appropriate for short responses” (Ryan & Bernard, 2003, p. 85). They assert that the technique of repetition identification is a suitable method through which themes in short text may be detected and specifically point out that “the more the same
concept occurs in a text, the more likely it is a theme” (Ryan & Bernard, 2003, p. 89). As hypotheses comprise short text, the repetition identification strategy was followed.

All the hypotheses were scrutinised to discover included concepts. Thereafter the concepts were recorded on the spreadsheet with same or similar ones being arranged into separate groups. In seeking guidance as to the number of times a concept should be repeated (that is, it appeared in different hypotheses), direction was, once again, taken from Ryan and Bernard (2003, p. 89) who submit that “only the investigator can decide”. To keep the decision pragmatic, it was resolved that the same concept had to be included in two or more separate hypotheses. Those concepts that appeared just once, that is, they did not appear in more than a single hypothesis, were then gathered together and designated “not classified”. Examples of these last-mentioned concepts are marketing mix adaptations and career competencies. Finally, the results section of each of the included studies was inspected to identify those hypotheses that had been validated. These hypotheses were then marked up as truth statements. The themes thus reflect confirmed CQ relationships based upon the afore-mentioned concept groupings.

3.5.6. Data synthesis and reporting
The findings are reported on per identified theme. The discussion section follows the same approach.

3.6. FINDINGS
The number and percentage of hypotheses and truth statements are presented, per identified theme, in Table 3.1. on the next page. Out of the 590 hypotheses, 352 were confirmed by the respective studies of which they formed part or, in other words, 60% of all the CQ hypotheses, empirically investigated in the period covered by the systematic review, gave rise to truth statements. In total, 13 themes were determined plus the ‘not classified’ group. The 13 themes are arranged in descending order based on the number of identified hypotheses included in each. The “not classified” group is listed below them.
Based on the above order, approximately 55% of the truth statements could be classified into just the first four themes. The top six themes, in turn, accounted for 64% of all the truth statements. These themes are (1) CQ and cross-cultural adjustment relate positively, (2) cross-cultural training and experiential learning stimulate CQ, (3) CQ improves job performance, satisfaction, involvement and adaptation, (4) international experience and exposure progress CQ, (5) CQ advances team knowledge sharing, performance and development of shared values, whilst team trust enhances CQ and (6) CQ predicts leadership potential and styles and advances leadership effectiveness.

Table 3.1: Hypotheses and truth statements per identified theme (% rounded)

<table>
<thead>
<tr>
<th>No.</th>
<th>Theme</th>
<th>Hypotheses</th>
<th>Truth statements (TS) (Hypotheses supported)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(a) No. %</td>
<td>(b) Cumu %</td>
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<tr>
<td></td>
<td></td>
<td>(c) %</td>
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<tr>
<td></td>
<td></td>
<td>(d) No. %</td>
<td>(e) Cumu %</td>
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<tr>
<td></td>
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<td>(f) %</td>
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<tr>
<td></td>
<td></td>
<td>(g) %</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>CQ and cross-cultural adjustment relate positively</td>
<td>126 21</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cross-cultural training and experiential learning stimulate CQ</td>
<td>74 13</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CQ improves cross-cultural job performance, satisfaction, involvement</td>
<td>71 12</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>and adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>International experience and exposure progress CQ</td>
<td>54 9</td>
<td>55</td>
</tr>
<tr>
<td>5</td>
<td>CQ advances cross-cultural team knowledge sharing, performance and</td>
<td>28 5</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>development of shared values whilst team trust enhances CQ</td>
<td></td>
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<tr>
<td>6</td>
<td>CQ predicts international leadership potential, effectiveness and</td>
<td>23 4</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>styles</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>CQ increases cross-cultural communication effectiveness</td>
<td>23 4</td>
<td>68</td>
</tr>
<tr>
<td>8</td>
<td>CQ correlates with personality</td>
<td>21 3</td>
<td>71</td>
</tr>
<tr>
<td>9</td>
<td>CQ promotes organisational agility, adaptive capability and</td>
<td>16 3</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CQ exists as a discrete intelligence type</td>
<td>14 2</td>
<td>76</td>
</tr>
<tr>
<td>11</td>
<td>CQ cultivates cross-cultural collaborative dealings</td>
<td>8 1</td>
<td>77</td>
</tr>
<tr>
<td>12</td>
<td>CQ and self-efficacy share a positive relationship</td>
<td>6 1</td>
<td>78</td>
</tr>
<tr>
<td>13</td>
<td>CQ and psychological capital are positively related</td>
<td>4 1</td>
<td>79</td>
</tr>
</tbody>
</table>
Although the truth statement mean percentage was 65% per theme, the associated range extended from a low of 44% in respect of CQ increasing the effectiveness of communication to a high of 94% regarding CQ and its influence on organisational agility, commitment and adaptive capability. These outcomes should, however, be seen in the context of the relative number of hypotheses, which were tested in the reviewed studies, forming part of the respective themes.

In view of the large number of truth statements it was not practical, because of space limitations, to offer a synthesis of the findings and associated discussion for each theme. The commentary in this report is hence limited to (1) the first six themes and (2) key observations therein. The reader is reminded that the purpose of this review was to report on CQ truths and thus other findings (that is, hypotheses that were not confirmed by the included studies), are not presented.

**Theme 1: CQ and cross-cultural adjustment relate positively**

A number of studies hypothesised about and tested the relationship between CQ and cross-cultural adjustment, in terms of both the concepts themselves and their respective components. Six studies (Guðmundsdóttir, 2015; Jyoti & Kour, 2015; Lee & Sukoco, 2010; Lin, Chen & Song, 2012; Ramalu, Rose, Kumar & Uli, 2010; Ramalu, Wei & Rose, 2011) established that CQ and cross-cultural adjustment are positively related. Two studies (Chen, Wu & Bian, 2014; Konanahalli et al., 2014) examined the relationship between CQ in aggregate and the components of cross-cultural adjustment (general, interaction and work adjustment). Both of these studies validated a positive association between CQ and (1) general and (2) interaction adjustment, whilst Konanahalli et al. (2014) confirmed the same result in respect of work adjustment (Chen et al., 2014, did not hypothesise about CQ and work adjustment).
The relationships between the dimensions of CQ and the components of cross-cultural adjustment have also been the subject of hypotheses investigated by a number of studies. Motivational CQ was found to be positively related to each of general, interaction and work adjustment (Ang et al., 2007; Guðmundsdóttir, 2015; Huff, 2013; Ramalu, Rose, et al., 2010; Ramalu Wei, et al., 2011, Templer, Tay & Chandrasekar, 2006) and explained the variance in general, interaction and work adjustment beyond that which the five-factor personality model could (Huff, Song & Gresch, 2014). Metacognitive CQ showed a positive association with (1) all three of these cross-cultural adjustment components (general, interaction and work) (Guðmundsdóttir, 2015) and (2) with only the general and interaction components (Ramalu et al., 2010; Ramalu et al., 2011). Cognitive CQ and interaction adjustment shared a positive relationship (Ramalu et al., 2010; Ramalu et al., 2011). Lastly, behavioural CQ predicted each of general, interactional and work adjustment (Ang et al., 2007). The relationship between groups of CQ dimensions (achieved through factor analysis) and the cross-cultural adjustment components have also been examined and reported on in the literature. “Awareness CQ” (comprising metacognitive and cognitive CQ) was positively related to each of the components of cross-cultural adjustment (Malek & Budhar, 2013) whereas “Interaction CQ” (consisting of motivational and behavioural CQ) related positively to both general and interaction adjustment only (Malek & Budhar, 2013).

Finally, a single study hypothesised about the moderating effect of the four CQ dimensions on the link between expatriate supporting practices (ESP) and each of the cross-cultural adjustment components. Motivational CQ improved the effect of ESP on work adjustment whilst metacognitive and cognitive CQ reduced the influence of ESP on (1) general and work adjustment and (2) interaction adjustment, respectively (Wu & Ang, 2011).

**Theme 2: Cross-cultural training and experiential learning stimulate CQ**

The benefit of undergoing academic cross-cultural training with a view to developing CQ was validated by Eisenberg et al. (2013). At a dimension level, (1) academic training was shown to improve metacognitive CQ (Eisenberg et al., 2013), cognitive CQ (Rehg, Gundlach & Grigorian, 2012) and behavioural CQ (Rehg et al., 2012), whilst (2) experiential learning interventions
increased metacognitive CQ (MacNab, 2012; Wood & St Peters, 2014), cognitive CQ (Wood & St Peters, 2014), motivational CQ (MacNab, 2012; Wood & St Peters, 2014) and behavioural CQ (MacNab, 2012). Inversely, both metacognitive and motivational CQ acted as stimulants of a learner’s commitment to study international business (Ramsey, Barakat & Aad, 2014). Motivational CQ was also found to positively impact cultural effectiveness following a participant’s completion of cross-cultural training (Peng, Van Dyne & Oh, 2014). Undergoing expectancy disconfirmation during an experiential education intervention positively associated with the development of each of the CQ dimensions. Further, such expectancy disconfirmation experience mediated the relationship between the perception of optimal cross-cultural contact and the development of metacognitive, cognitive, motivational and behavioural CQ (Rosenblatt, Worthley & MacNab, 2013).

Whilst the extensiveness of cross-cultural training had a positive effect on each of the CQ dimensions, just cognitive CQ was positively influenced by the duration of the training (Moon, Choi & Jung, 2012).

**Theme 3: CQ improves cross-cultural job performance, satisfaction, involvement and adaptation**

Job performance, or the completion of work obligations (task performance) and the formation and growth of relationships with host country employees (contextual performance), has also been studied in the domain of CQ. CQ demonstrated a positive influence on job performance (Chen, Lin & Sawangpattanakul, 2011; Ramalu et al., 2010; Ramalu, Rose, Uli & Kumar, 2012) and task performance (Jyoti & Kour, 2015). At a CQ dimension level, each of metacognitive, cognitive, motivational and behavioural CQ was positively associated with job performance (Chen et al., 2011). Metacognitive CQ exhibited a positive association with each of task performance (Ang et al., 2007) and contextual performance (Rose, Ramalu, Uli & Kumar, 2010) whilst behavioural CQ was similarly associated with task performance (Ang et al., 2007; Duff, Tahbaz & Chan, 2012) and contextual performance (Rose et al., 2010).

CQ, in aggregate, positively influenced job satisfaction (Bücker et al., 2014) as did the
dimensions of metacognition, motivation and behaviour (Yeşil, 2013). Whilst all four of the CQ dimensions displayed a positive impact on job involvement (Chen, 2015), it was just motivational and behavioural CQ that positively affected adaptive performance (Şahin & Gürbüz, 2014).

Finally, the personality trait of openness and metacognitive CQ interacted to enhance task performance, whilst openness and cognitive CQ and openness and motivational CQ constricted task performance (Duff et al., 2012).

Theme 4: International experience and exposure progress CQ

Several studies confirmed the positive effect of international experience on all of the CQ dimensions (Engle & Crowne, 2014; Morrell, Ravlin, Ramsey & Ward, 2013; Şahin, Gürbüz & Köksal, 2014). The same result was achieved by Eisenberg et al. (2013) in respect of metacognitive, cognitive and motivational CQ. International non-work (i.e. leisure) experience was positively related to each of the CQ dimensions, whilst international work experience shared a positive association with only metacognitive and cognitive CQ (Moon et al., 2012).

Exposure to other cultures also contributed to improving CQ (Crowne, 2013b; Kim & Van Dyne, 2012). Both the depth and breadth of exposure showed positive relationships with CQ (Crowne, 2013b). The previous working experience of expatriates (1) in the overseas department of their employer and (2) with foreign nationals within their home country prior to their expatriation displayed a positive relationship with cognitive CQ and metacognitive CQ, respectively (Moon, Choi & Jung, 2013). The number of local staff members in the host country with whom expatriates worked presented a positive relationship with all of the CQ dimensions (Moon et al., 2013). The number of co-expatriates that expatriates worked with in the host country revealed a negative association with each of cognitive, motivational and behavioural CQ (Moon et al., 2013). Expatriates’ perceptions of promotion following conclusion of the foreign assignment positively related to metacognitive and motivational CQ, whilst their knowledge of the duration of the assignment moderated the relationship between such perceptions and their motivational and behavioural CQ (Moon et al., 2013). The self-monitoring
of expatriates positively associated with all of the CQ dimensions, whereas the extent of their interaction with local employees moderated the relationship between the number of local employees and the expatriate’s metacognitive and behavioural CQ (Moon et al., 2013).

The duration of international work experience and CQ were positively related (Li, Mobley & Kelly, 2013) although even a short-term international experience positively associated with all of the CQ dimensions (Engle & Crown, 2014).

**Theme 5: CQ advances cross-cultural team knowledge sharing, performance and development of shared values whilst team trust enhances CQ**

Metacognitive, cognitive and motivational CQ were shown to directly promote knowledge sharing amongst team members, whereas behavioural CQ required the mediation of perceived team efficacy to deliver the same effect (Chen & Lin, 2013). Initial performance levels and the speed with which performance improved were superior for those cross-cultural teams with higher, rather than lower, CQ levels (Moon, 2013). CQ also had a positive impact on the quality of teamwork in creative, as opposed to analytical, jobs (Scholz, 2012).

Team metacognitive and behavioural CQ had a positive influence in facilitating the development of shared values amongst culturally mixed team members (Adair, Hideg & Spence, 2013), whilst team trust enhanced the CQ of team members (Erez et al., 2013).

**Theme 6: CQ predicts international leadership potential, effectiveness and styles**

CQ was validated as a predictor of international leadership potential (Kim & Van Dyne, 2012) and was found to be positively associated with leadership effectiveness, specifically in the context of (1) cross-border activities (Rockstuhl, Seiler, Ang, Van Dyne & Annen, 2011) and (2) culturally heterogeneous teams (Groves & Feyerherm, 2011). CQ and transformational leadership demonstrated a positive relationship both in terms of CQ as an aggregated concept (Ismail, Reza & Mahdi, 2012; Keung & Rockinson-Szapkiw, 2013) and in respect of (1) each of the CQ dimensions (Ismail et al., 2012) and (2) cognitive and behavioural CQ (Keung & Rockinson-Szapkiw, 2013). Motivational CQ and the democratic leadership style were also
shown to correlate (Eken, Özturgut & Craven, 2014). CQ acted as a moderator of the relationship between transformational leadership and (1) both expatriate adjustment and performance (Lee, Veasna & Wu, 2013) and (2) organisational innovation (Elenkov & Manev, 2009).

3.7. DISCUSSION

This analysis was undertaken with the aim of reporting on CQ truths. The discussion that follows is thus a fusion of the findings described above.

**Theme 1: CQ and cross-cultural adjustment relate positively**

CQ has been shown to positively affect the ability of persons to successfully navigate and adapt to the many and varied manifestations of the new cultures they may find themselves exposed to, including living conditions (such as housing and healthcare), daily interfaces with host culture citizens and unique local employment and education practices. The consistency of this CQ and cross-cultural adjustment relationship prevails across a range of persons (including expatriates and students) and countries. Metacognitive CQ, followed by motivational and behavioural CQ, reveals the most association with and thus positive influence on the components of cross-cultural adjustment.

The moderating effect of the CQ dimensions on the association strength between ESP and cross-cultural adjustment reveals that those expatriates who are more motivated to integrate into the new culture are similarly enthused by and exploit more fully the efforts of their employers to assist with work integration. In addition, those expatriates who have knowledge about foreign cultures and increased ability to process cultural knowledge are less dependent on, and derive reduced benefit from, dedicated support provided by their employers when embarking on international work assignments. In pursuing cross-cultural adjustment, CQ is an indispensable competence.

**Theme 2: Cross-cultural training and experiential learning stimulate CQ**

Although training interventions were shown to advance CQ and, in particular, all of
metacognitive, cognitive and behavioural CQ, it is important that training programmes be carefully designed to ensure both the thoroughness and applicability of their content. The duration of training, though, appears to be less of a factor.

Experiential learning-type interventions are a key mechanism through which CQ may be developed in that they positively impact each of the CQ dimensions. To promote the study of international business, educators should directly target the enhancement of students’ higher-order cognitive cultural processing skills (metacognitive CQ) and desire to engage in intercultural exchanges (motivational CQ). Cross-cultural training and experiential learning interventions should thus be employed when the aim is to cultivate CQ.

**Theme 3: CQ improves cross-cultural job performance, satisfaction, involvement and adaptation**

CQ and each of its dimensions play a key role in promoting cross-cultural job performance. However, only two of the dimensions, metacognitive and behavioural CQ, specifically influence task and contextual performance. Without the display of culturally apposite behaviours, it is unlikely that a person will be considered to have functioned optimally during exchanges characterised by cultural diversity. The implication is that those persons who wish to ignite their work output and relationships with host country work colleagues should target the growth of their behavioural CQ followed by their metacognitive CQ capabilities.

It is not only cross-cultural job performance but also job involvement and satisfaction that are positively influenced by a person’s CQ and its dimensions. Motivational and behavioural CQ also positively impact adaptive performance. It follows on that the development of motivational and behavioural CQ is key in enhancing one’s feelings of job involvement and satisfaction whilst also equipping one to adapt as work imperatives evolve. The findings regarding the negative moderating effect of openness on the relationship between (1) each of cognitive and motivational CQ and (2) task performance may suggest that those persons who are open-minded need to pay special attention to completing the task at hand rather than becoming distracted by the cross-cultural interaction itself (Duff et al., 2012).
In preparing for a job in cross-cultural circumstances, persons should develop their levels of CQ with specific attention to the metacognitive and behavioural dimensions thereof.

**Theme 4: International experience and exposure progress CQ**

Opportunities to experience foreign cultures, be they leisure or of a work-related nature, impact positively the development of a person’s CQ. The reason why the leisure interactions influence all of the CQ dimensions whilst the work exchanges only affect metacognitive and cognitive CQ could be that leisure activities offer a greater assortment of interfaces and thus occasions through which CQ may be developed. Although longer periods of cross-cultural interactions allow for greater experience to be acquired leading to more developed CQ levels, the value of short-term opportunities to interface cross-culturally should not be underestimated.

Interestingly, although cognitive CQ was positively influenced by working in an overseas department within the home country, for metacognitive CQ to be similarly influenced, the individual needed to have actually interacted with foreign nationals in his or her home country. These findings suggest that where an opportunity was availed to acquire cultural knowledge, knowledge acquisition took place but the actual processing thereof only materialised when expatriates were required to really use such knowledge (that is, when interactions with foreigners occurred). It is submitted that the negative effect of on-going exchanges with co-expatriates on cognitive, motivational and behavioural CQ is because such exchanges essentially serve to entrench cross-cultural stereotypes and misconceptions (in respect of cognitive and behavioural CQ) whilst familiarity breeds inertia (in respect of motivational CQ).

Experiencing other cultures, particularly in a non-work context, assists in CQ improvement especially where persons engage in actual interactions with those native to such cultures.

**Theme 5: CQ advances cross-cultural team knowledge sharing, performance and development of shared values whilst team trust enhances CQ**

To build an effective team, members need to collaborate in the sharing of knowledge.
To this end, all of the CQ dimensions, with the exception of behavioural CQ, fuel information distribution in multi-cultural teams. A possible reason why behavioural CQ only indirectly influences knowledge sharing may be because of behaviour being the physical display of (or failure to display) applicable knowledge, that is, behaviour occurs as a result of knowledge. The fact that metacognitive, cognitive and motivational CQ stimulate and encourage knowledge sharing amongst team members is expected as metacognitive and cognitive CQ represent intellectual processing and cultural knowledge whilst motivational CQ depicts, amongst others, the desire and effort to acquire cultural knowledge.

In building a base of common values for the team, focus should centre on expanding the ability of team members to process how their culturally heterogeneous colleagues think as well as displaying culturally appropriate behaviours. As trust between team members grows, it is not unreasonable to expect that they will increasingly be pre-disposed to sharing aspects of their respective cultures with their co-workers and hence team member CQ improves. Individual team member CQ is thus especially necessary to ensure the successful building and functioning of multi-cultural teams.

**Theme 6: CQ predicts international leadership potential, effectiveness and styles**

Since CQ assists one to function effectively across the cultural spectrum, it is rational that CQ would be associated with all of international leadership potential, leadership effectiveness across borders (that is, spanning at least two national cultures) and leadership of teams whose members are culturally dissimilar. Apart from the positive relationship between democratic leadership and motivational CQ, it is transformational leaders who are associated with having CQ. The inference is that when organisations select leaders required to operate in cross- or multi-cultural environments they should pursue and select those persons who premise their leadership upon the formulation of a vision of the future and who are adept at arousing their followers to action in the realisation of such vision; that is, leaders who are transformational. Similarly, being culturally intelligent, allows transformational leaders to better assist their expatriate followers in adapting to the host country as well as improving their work outputs whilst organisational innovation is advanced.
3.8. LIMITATIONS AND RECOMMENDATIONS

The primary limitation of this systematic review is that it is possible that some material satisfying the inclusion criteria may not have been identified. Despite the broad examination of various databases, it is conceivable that some CQ empirical studies may only have been referenced in databases not scanned. Furthermore, unpublished reports and theses were not considered. It was also not feasible to report on and discuss all of the truth statements, given space restrictions.

It is recommended that future efforts to explore CQ truths target those themes that exhibited a low truth statement ratio because they are reflective of the areas in which CQ has not acted in a manner consistent with that anticipated. Such themes cover leadership, communication and self-efficacy in particular. Equally, attention should be devoted to further investigating the relationship between CQ and other concepts in those themes which, despite having demonstrated a high truth statement percentage, only incorporated a relatively small number of hypotheses. These themes pertain to psychological capital and collaborative dealings. The ‘not classified’ group offers an additional area of CQ truths that could be specifically examined.

3.9. CONCLUSION

The purpose of this analysis was to report on CQ truths. With this in mind, the CQ truth statements identified, through the systematic review performed, are representative of truth per the Correspondence theory and are typical of knowledge that is found in the second world of the three-world structure of Mouton (1996). Whilst the CQ truths appear to be mostly confined to a narrow band of themes, a further 18% of the truth statements locate within the ‘not classified’ group, evidencing the prevalence of a somewhat diverse array of CQ truths.

CQ truths reveal that cross-cultural training, experiential learning interventions, international experience (both work and leisure related) and trust building (amongst team members) act as levers that the business community may employ in order to promote staff member CQ development. Individual level CQ contributes to cross-cultural adjustment, job performance,
satisfaction, involvement and adaption, team knowledge sharing and team performance. Similarly, CQ instructs the potential of international leaders and is positively linked to cross-border leadership effectiveness.

This review has thus achieved its purpose in that the CQ truths have now been identified, organised and reported on. The results will assist scholars in directing future enquiry whilst at the same time facilitating an improved comprehension of CQ by business professionals.
CHAPTER 4: LEADERSHIP STYLES: THE ROLE OF CULTURAL INTELLIGENCE

In this chapter, empirical objective 1, that is, to assess whether leadership style (empowering and directive) is a function of leader CQ, is addressed.

4.1. INTRODUCTION

Despite the issue of leadership having held humankind’s attention for thousands of years (Blunt & Jones, 1997; Fry, Vitucci & Cedillo, 2005; Hassan, Asad & Hoshino, 2016a; Higgs, 2003; Vie & Vie, 2011) a measure of uncertainty still exists as to what it really is (Bolden, 2004; Iszatt-White, Graham, Kelly, Randall & Rouncefield, 2011). This is especially perturbing since leadership is accepted as central to the success of organisations (Hanges, Aiken, Park & Su, 2016; Landis, Hill & Harvey, 2014). The lack of certainty is compounded by phenomena such as globalisation that are increasingly exposing leaders to new challenges (Ababneh, 2016; Jogulu, 2010), not least of which is leading in a multicultural environment (Parham, Lewis, Fretwell, Irwin & Schrimscher, 2015). This is key as the composition of the workforce is becoming ever more culturally diverse (Groves & Feyerherm, 2011; Strydom & Eeden, 2013) and because an interdependent relationship exists between leadership and [personal] culture (Paulienė, 2012; Steers, Sanchez-Runde & Nardon, 2012; Snaebjornsson & Edvardsson, 2013). To this end, Dickson, Castaño, Magomaeva and Den Hartog (2012) declare that [personal] cultures are of the utmost importance in the leadership context. It is thus suggested that leadership styles should be modified so that they are congruent with these cultures (Alon & Higgins, 2005) as successful leadership styles vary across them (Ng, Van Dyne & Ang 2009a). Furthermore, [personal] culture is important as it affects how leaders are chosen, viewed and developed (Dickson et al., 2012). The obstacle facing leaders, however, is that they are often oblivious to their own cultural prism through which they perceive others (Offermann & Phan, 2008).

Caldwell (2015) argues that a tsunami of cultures is rapidly increasing the requirement for and criticality of having competent and capable leaders with those attributes that allow them to lead globally. Northouse (2013) submits that leaders must develop proficiencies in both cross-cultural cognisance and application; whereas Javidan and Dastmalchian (2009) remark that
leaders should be able to contrast their own cultures with those of others, the ability to efficaciously traverse the chasm that prevails between the aforesaid cultures requires a capability that extends beyond merely understanding them. Ang, Van Dyne and Rockstuhl (2015) point out that CQ, the capability to “grasp, reason and behave effectively in situations characterized by cultural diversity” (Ang, Van Dyne, Koh, Ng, Templer, Tay, & Chandrasekar, 2007, p. 337), assists in overcoming cultural dissimilarities. Advancing a leader’s CQ is therefore vital, specifically so since Robinson (2016) states that it is of paramount importance that leaders hone a multifaceted skills repertoire to deal with an ever-expanding array of complex problems. Since CQ is regarded as a malleable capability it can be developed and enhanced (Ng et al., 2009a; Ramsey & Lorenz, 2016).

As culture influences leadership styles (Bass & Bass, 2008; House, Javidan & Dorfman, 2001; Jogulu, 2010) it is reasonable to expect that culturally intelligent leaders will display the style(s) of leadership most compatible with the cultures of their subordinates. Klenke (2009) asserts that central to CQ is a leader’s ability to adapt. With this in mind, Livermore (2010) reports that adapting their leadership style is one of the key reasons leaders cite as to why CQ is required if they are to be successful in leading culturally diverse followers. Similarly, Du Plessis (2011), in her study of 353 South African managers, found that adaptive capability emerged as an important competency arising from managerial CQ.

The importance of culture within the leadership context and the role that CQ could occupy in assisting leaders to display appropriate (that is, culturally attractive) leadership styles has been highlighted in the above discussion. However, even though the volume of literature on CQ has been increasing steadily since its initial conceptualisation by Earley and Ang (2003), empirical examination of leader CQ remains scarce (Groves & Feyerherm, 2011; Vanderpal, 2014); especially so in the case of its relationship with leadership styles. Furthermore, the few studies that have investigated this relationship have mostly concentrated on the transformational leadership style (Elenkov & Manev, 2009; Ismail, Reza & Mahdi, 2012; Keung & Rockinson-Szapkiw, 2013; Lee, Veasna & Wu, 2013). Since Ensley, Hmileski and Pearce (2006) maintain that both empowering and directive leadership must be considered if leaders with a complete
range of behavioural capabilities are to be developed, it is evident that further research is necessary to better comprehend the relationship between leader CQ and empowering and directive leadership. This understanding should assist both line and human resource personnel in identifying those candidates best suited to lead in cross-cultural conditions. Likewise, the concomitant composition of CQ training programmes aimed at the growth of leaders could be enhanced.

4.2. RESEARCH PURPOSE AND OBJECTIVE

The purpose of this section of the research was to investigate the relationship between leader CQ and the empowering and directive leadership styles. As such, the objective was to determine whether leadership style (as represented by empowering and directive leadership) is a function of leader CQ.

4.3. LITERATURE REVIEW

The literature review sought to (1) provide an overview of CQ, empowering and directive leadership and (2) consider existing insights on the relationship between leader CQ and leadership styles.

4.3.1. Cultural intelligence

Initial research efforts into intelligence, given the application of a tapered perspective, tended to associate intelligence with solely academic settings (Ang, Van Dyne & Tan, 2011). A growing interest in intelligence, however, has resulted in its classification per a range of foci such as emotional, social and general mental ability (Zhang, 2012). These intelligences account for most of the variations between the achievement levels of persons in the personal, social and work domains within their own cultures (Viggiano, 2016).

To fully explain intelligence, however, Sternberg and Grigorenko (2006) submit that cultural context must be considered. It is against this background that the concept of CQ was originally conceptualised and has evolved accordingly. CQ is founded upon the Sternberg and Detterman (1986) multiple loci of intelligence framework (Ang et al., 2011; Eisenberg, Lee, Bruck, Brenner,
Claes, Mironski & Bell, 2013; Kurpis, 2012; Ng et al., 2009a; Peng, Van Dyne & Oh, 2015; Zhang, 2012). Although related to cognitive intellect as well as emotional and social intelligence (Ang et al., 2015), CQ situates discretely (Ang et al., 2007) largely due to the afore-mentioned intelligences being culture specific (Thomas, Elron, Stahl, Ekelund, Ravlin, Cerdin et al., 2008). Contrasting them, CQ depicts an etic perception of intelligence as it transfers across cultures (Klenke, 2009; Ng & Earley, 2006).

Culturally intelligent persons are competent and effectual in multiple intercultural interactions as opposed to just a single or a few such exchanges (Ang & Inkpen, 2008; Ang et al., 2015). Thomas (2006) notes that CQ depicts the capability to, not simply adjust to but actually influence the cross-cultural exchange. Accordingly, CQ helps to explain why some leaders easily adjust their perspectives and behaviours across cultures whilst others do not (Van Dyne, Ang & Livermore, 2010). Although various scholars, such as Fung and Lo (2017) as well as Thomas and Inkson (2005), have offered their own conceptualisation of CQ, that which was advanced by Earley and Ang (2003) has proven most popular in underpinning CQ research (Ott & Michailova, 2016). In terms of this last-mentioned model CQ is theorised as possessing cognitive, motivational and behavioural components. A fourth component, metacognition, was subsequently added by Ang and Van Dyne (2008). This research made use of the Earley and Ang (2003) / Ang and Van Dyne (2008) CQ conceptualisation.

The four components or dimensions of CQ reflect different competencies (Ng, Van Dyne & Ang, 2012). Metacognition refers to higher-order cognitive procedures (Charoensukmongkol, 2016), that is, the processes through which persons source and grasp knowledge (Ang & Inkpen, 2008) and, hence, reflects the ability of a leader to strategise when traversing cultures (Van Dyne et al., 2010). As such, metacognitive CQ stimulates the formation of novel heuristics for intercultural interfaces and promotes the questioning of one’s own cultural suppositions (Ang et al., 2011). Cognition, the second of the CQ dimensions, represents a person’s knowledge about other cultures, examples of which include customs, standards and values (Van Dyne, Ang, Ng, Rockstuhl, Tan & Koh, 2012). This dimension of CQ, thus, signifies the extent to which a leader comprehends how to engage with others cross-culturally (Van Dyne et al., 2010). Ang et
al. (2011), though, warn that unless the know-how emanating from cognitive CQ is assimilated into the other CQ dimensions, it is possible that such knowledge may not be of much value to leaders and could indeed be harmful. A leader, for example, with relevant cultural insights who lacks the desire (motivation) to display pertinent actions (behaviours) based on these might be viewed adversely by subordinates. The third dimension, motivational CQ, portrays the leader’s desire to acclimate interculturally (Van Dyne et al., 2010), that is, the energy expended in both acquiring knowledge about other cultures and immersing oneself in cross-cultural interfaces (Ng et al., 2012). Finally, behavioural CQ denotes the adoption and display of culture appropriate actions (Ang & Van Dyne, 2008) that may be both verbal and non-verbal (Van Dyne, Ang & Nielsen, 2008). Ang et al. (2007) indicate that the dimensions “may or may not correlate with each other” (p. 338) whilst Magnusson, Westjohn, Semenov, Randrianasolo and Zdravkovic (2013) argue that the dimensions are comparatively independent. In combination, the dimensions reflect the understanding that CQ concerns the integration of knowledge about cultural disparities with the impetus and competence to consider one’s own and other persons’ cultural programming, combined with the ability to display culturally apt behaviours (Schreier & Kainzbauer, 2016).

4.3.2. Empowering and directive leadership

Although an abundance of leadership theories and styles exists (Avolio, Walumbwa & Weber, 2009; Brauckmann & Pashiardis, 2011; Esen, 2015; Landis et al., 2014, Perkins, 2013), leadership is most often demarcated according to leader traits, qualities and behaviours (Horner, 1997). Concentrating on leader behaviours, Pearce, Sims, Cox, Ball, Schnell, Smith and Trevino (2003) defined a typology consisting of the transactional, transformational, empowering and directive leadership styles. Transactional leadership is considered by Golla and Johnson (2013) to be a style in which leaders promote employee self-interest through the promise of rewards in return for performance. Transformational leadership targets the attainment of organisational objectives by offering staff members a vision that eclipses their self-interest (Holten, Bøllingtoft & Wilms, 2015). Although the transactional / transformational leadership paradigm has attracted much scholarly attention (Clark & Waldron, 2016; Sims, Faraj & Yun, 2009), Hmieleski and Ensley (2007) insist that such leadership styles are often reflective
of ambiguous behaviours. In contrast, empowering and directive leadership, on which empirical insights remain scanty (Kalaluhi, 2013; Sharma & Kirkman, 2015; Tekleab, Sims, Yun, Tesluk & Cox, 2008), are distinct from one another (Yun, Cox & Sims, 2006) and are situated at opposing ends of an action-based spectrum (Faraj & Sambamurthy, 2006). This research focussed on these last-mentioned leadership styles primarily because empirical investigation of them is limited. Further, as noted above, the transformational leadership style has dominated attention in the domain of leader CQ and there is some uncertainty as to the distinction between transformational and transactional leadership behaviours in the literature.

In the light of heightened global economic rivalry and with a view to improving their agility, many organisations have adapted their structural composition to reflect a more empowered workforce as opposed to the hierarchical leadership arrangements of yesteryear (Arnold, Arad, Rhoades & Drasgow, 2000). Empowering leadership aims to grow the capacity of followers to lead themselves (Mohamed, 2016; Tekleab et al., 2008) and may be defined as behaviours that promote power equality with staff members (Amundsen & Martinsen, 2014) or as the assignment of authority and responsibilities to subordinates (Hakimi, van Knippenberg & Giessner, 2010).

Empowering leadership embraces divergent employee viewpoints (Doh & Quigley, 2014) whilst spotlighting employee self-control advancement (Galanou, 2009). Ahearne, Mathieu and Rapp (2005) note that leader empowering behaviours consist of (1) the enhancement of work meaningfulness, that is, the extent to which a leader sets stimulating goals for subordinates and clarifies their contributions to organisational success (Kwak & Jackson, 2015), (2) encouraging decision making involvement or the extent to which the leader facilitates decision-making by subordinates (Kwak & Jackson, 2015), (3) voicing sureness of high performance by, for example, attesting to subordinates’ capabilities (Kwak & Jackson, 2015) and (4) removing bureaucratic constraints or the degree to which a leader dissipates organisational factors that inhibit subordinates’ independence (Kwak & Jackson, 2015).

The empowering leadership style influences psychological empowerment positively (Amundsen
& Martinsen, 2015; Joo, Park & Lim, 2016; Raub & Robert, 2012). It prompts followers’ perceptions of increased work challenges (Esteves & Lopes, 2016) and stimulates their feelings of self-efficacy (Biemann, Kearney & Marggraf, 2015; Bobbio, Bellan & Manganelli, 2012; Kim & Beehr, 2017b). It demonstrates a positive relationship with employee creativity (Harris, Li, Boswell, Zhang & Xie, 2014; Zhang & Zhou, 2014) and innovative behaviour (Gkorezis, 2016). Empowering leadership also correlates with employees’ organisational job embeddedness (Erkutlu & Chafra, 2015) as well as with their work effort, performance and service delivery levels (Govender, 2016). It increases the extent of knowledge sharing between team members (Lee, Lee & Park, 2014) and change-orientated organisational citizenship behaviours (Li, Liu, Han & Zhang, 2016). The strengthening of relationships with managers and colleagues (Esteves & Lopes, 2016) as well as the advent of informal leadership (Adeel & Pengcheng, 2016) are also associated with this style of leadership.

Directive leadership, on the other hand, is based upon positional power (Lorinkova, Pearsall & Sims, 2013; Yun et al., 2006) and depicts behaviours that provide subordinates with precise direction concerning objectives, how such objectives must be realised and the outputs required (Martin, Liao & Campbell, 2013). As such, it embodies behaviours that are mostly aligned with task accomplishment (Dewettinck & van Ameijde, 2011). Accordingly, those leaders who adopt this style deliver leadership through the issuing of orders, commands and directives (Sims et al., 2009) based primarily upon their own judgements (Yun, Cox, Sims & Salam, 2007).

Directive leadership has been associated with some negative outcomes such as reduced team cohesiveness (Wendt, Euwema & van Emmerik, 2009) and slower product development (McDonough & Barczak, 1991). It does, however, influence employee role clarity positively (Dolatabadi & Safa, 2011). This style of leadership is also positively associated with a reduction in job demands that impede workers in the execution of their duties (Esteves & Lopes, 2016). Furthermore, it has a positive relationship with organisational commitment (Somech, 2005) and correlates with the quality of group results (Sagie, 1997) and processes (Peterson, 1997). Directive leadership is also an appropriate leadership style when subordinates lack requisite skills (Muczyk & Reimann, 1987), a major calamity is encountered (Maggitti, Slay & Clark, 2010).
or the work activities are structured and routine (Sauer, 2011).

4.3.3. Cultural intelligence and leadership styles

As pointed out in the introduction, transformational leadership appears to be the style that has attracted the most attention in the domain of CQ. Leader CQ, as an aggregate construct, cognitive CQ and behavioural CQ have all been confirmed as coinciding with transformational leadership (Ismail et al. 2012; Keung & Rockinson-Szapkiw, 2013). In addition, Ismail et al. (2012) found that transformational leadership coincided with both leader metacognitive and motivational CQ. Leader CQ also acted as a moderator of the transformational leadership relationship with both expatriate adjustment and performance (Lee et al., 2013) as well as organisational innovation (Elenkov & Manev, 2009). The relationship between the autocratic, democratic and laissez-faire leadership styles and the leader CQ dimensions was investigated by Eken, Özturgut and Craven (2014). Apart from reporting a positive relationship between leader motivational CQ and the democratic leadership style these researchers were unable to detect any other significant associations. The candidate is not aware of any empirical studies that have specifically concentrated on the relationship between leader CQ and both the empowering and directive leadership styles.

The following null hypotheses were thus set:

• $H_{10}$: There is no statistically significant relationship between the CQ (as a composite value) and the empowering leadership style of leaders at organisations operating in South Africa,

• $H_{20}$: There is no statistically significant relationship between the CQ (as a composite value) and the directive leadership style of leaders at organisations operating in South Africa,

• $H_{30}$: The relationship between leader CQ (as a composite value) and the empowering leadership style does not differ from that between leader CQ (as a composite value) and the directive leadership style,

• $H_{40}$: There is no statistically significant relationship between each of the CQ dimensions and the empowering leadership style of leaders at organisations operating in South Africa,

• $H_{50}$: There is no statistically significant relationship between each of the CQ dimensions and the directive leadership style of leaders at organisations operating in South Africa,
• H6\textsubscript{0}: All the leader CQ dimensions do not contribute uniquely and significantly in predicting the empowering leadership style of leaders at organisations operating in South Africa, and
• H7\textsubscript{0}: All the leader CQ dimensions do not contribute uniquely and significantly in predicting the directive leadership style of leaders at organisations operating in South Africa.

4.4. RESEARCH DESIGN

The research design elements are described below.

4.4.1. Research approach

This research, anchored within the positivist paradigm, followed a quantitative methodology. Specifically, a cross-sectional approach was adopted. Cross-sectional surveys are well-suited for descriptive research and those studies aimed at exploring relationships between variables (Shaughnessy, Zechmeister & Zechmeister, 2012).

4.4.2. Research method

Details of the research method follow.

4.4.2.1. Research participants

The population consisted of all leaders (that is, anyone to whom another staff member directly reports) at all organisations operating in South Africa. Conway (2000) and Kim and Yukl (1995) draw attention to the benefits of employing subordinate ratings as opposed to leaders self-reporting whilst Ang et al. (2015) highlight the advantages of using informant-based CQ measures. Hence, sample data on the leaders was sourced from their subordinates.

The sample respondents, being the subordinates of the leaders, were recruited by students pursuing a Master of Business Leadership (MBL) degree through the Graduate School of Business Leadership at the University of South Africa (GSBL). The students, by means of their respective employers, gained access to the respondents. The students then acted as fellow researchers collecting data from 18 different South African organisations. The candidate also collected data from the organisation in which he is employed. In aggregate, data were collected
from 1,140 respondents across the 19 organisations. Six of the organisations trade within the manufacturing industry whilst another three operate within the telecommunications industry. Three of the organisations represent the media industry and a further two fall within the public sector. The defence industry was represented by a single organisation as was the banking sector. The remaining organisations were from the services industry. Although the respondents were selected on a random basis, from the personnel records in the participating organisations, the sample was based upon convenience as the choice of organisations was not random.

4.4.2.2. Measuring instruments
The following instruments, with the permission of their respective authors, were used to measure the variables and were presented to the respondents in the form of a single consolidated questionnaire. Details of the instruments appear below and are arranged per variable.

Leader CQ was measured by the Cultural Intelligence Scale (CQS) devised by Van Dyne, Ang and Koh (2008) who note that both the self and observer report versions of the CQS are convergent, discriminant and criterion valid. Rockstuhl, Seiler, Ang, Van Dyne and Annen (2011) further point out that the CQS is reliable, based on Cronbach coefficient alphas (that ranged from 0.71 to 0.85) achieved by Ang et al. (2008), and may be generalised across samples, time and cultures. This research made use of the observer report version.

Empowering leadership was evaluated via the 10-item instrument of Ahearne et al. (2005). Yoon (2012) confirmed the reliability of this instrument (Cronbach coefficient alpha of 0.93) whilst Zhang and Bartol (2010) remark that it depicts the distinctiveness of empowering leadership.

Directive leadership was assessed through six items developed by Pearce and Sims (2002) and four from Hwang, Quast, Center, Chung, Hahn and Wohkittel (2015). Hinrichs (2011) states that the items of Pearce and Sims (2002) have delivered acceptable levels of reliability (Cronbach coefficient alpha of 0.88) whilst Hwang et al. (2015) note a similar result in respect of the items...
they developed (Cronbach coefficient alpha of 0.85).

4.4.2.3. Research procedure

Following receipt of permission from the GSBL Research Ethics Review Committee for the data to be collected, participating MBL students were fully briefed on the nature, purpose and importance of the research. The questionnaire as well as the respondent information sheet were explained to them. Each student first sourced the written approval of his / her employer’s chief executive officer, or other appropriate executive, on the basis that it would not be named. Thereafter, a list of potential respondents (that is, the persons employed by the organisation) was obtained from the human resource department. Each name on the list was allocated a number. Potential respondents were then selected randomly using a random number generator. Chosen persons were invited to a meeting at which the research was introduced to them. They were advised that participation was completely voluntary and anonymous. Those staff members who agreed to participate were handed a hard copy of the questionnaire and were requested to complete it at the meeting, after which they returned it to the respective student. The reason why a hard copy, rather than a soft copy, of the questionnaire was used is because it facilitated completion during the afore-mentioned meeting rather than having to follow up with respondents (potentially on numerous occasions) following the meeting. An Excel based template was then provided by the candidate to the students wherein each captured the details from the questionnaires they had collected. The populated templates were then consolidated. The candidate followed the same research procedure in collecting the data from his employer.

4.5. STATISTICAL ANALYSIS

IBM SPSS (version 24) (Field, 2012) was used to perform the data analysis. Frequencies were calculated to provide a descriptive view of respondent demographics. Measures of central tendency were also computed for the different variables included. Cronbach coefficient alphas were calculated to assess reliability. Reliability was accepted as satisfactory where the alpha scores exceeded 0.70, with scores above 0.80 being taken as desirable (Pallant, 2011).
Validity was examined through principal axis factor analysis with direct Oblimin rotation. The number of factors retained was based upon the rule of thumb that only those factors with eigenvalues larger than one would be included (Coovert & McNelis, 1988). Factor numbers were also confirmed through an examination of scree plots, as recommended by Costello and Osborne (2005). The process, as described by Courtney (2013), for such examination was followed; that is, the scree plot was scanned for a break or hinge (also referred to as an ‘elbow’). The number of factors was considered to be the number of eigenvalues appearing before the elbow. Factor acceptability was evaluated with reference to the guidelines of Hair, Black, Babin and Anderson (2010) and Osborne and Costello (2009) which indicate that item loadings of 0.30-0.40 are minimally acceptable whilst loadings of 0.50 and greater are favoured. Although factors that have at least four adequately loading items are generally noted to be acceptable (Osborne & Costello, 2009) there is little guidance in the literature as to the suitable number of items that should load when measurement scale length is considered. Hence, for a factor to be accepted in this research, it was decided that at least 80% of the respective items measuring it should load with a minimum weight of 0.50 each.

Pearson Product-moment correlation coefficients were calculated to gauge the relationships between the variables. Only statistically significant correlations were considered. Significance was taken at the 5% level as recommended by Lazaraton (1991). To assess the practical significance of the alphas the guidelines of Cohen (1988) were followed; that is, correlation coefficients above 0.10 were accepted as small, those exceeding 0.30 were appraised as medium and those greater than 0.50 were taken as large. The online calculator of Lee and Preacher (2013), which is based upon the Fisher r-to-z transformation and the asymptotic equations of Steiger (1980), was used to evaluate the difference between correlations.

The ability of the leader CQ dimensions to predict empowering and directive leadership was determined through stepwise regression analysis. Only those dimensions that contributed statistically significant predictions were considered. The $f^2$ statistic was used in judging the practical significance of the models: in this regard, the conclusions of Ellis and Steyn (2003) based on the guidelines of Cohen (1988) were followed. Per Ellis and Steyn (2003), where
f^2<0.15, the effect is small and R^2 is not practically significant, where 0.15<f^2<0.35, the effect is medium and R^2 is practically significant, and where f^2>0.35, the effect is large and thus R^2 is practically important. Emphasis was placed on those betas that contributed uniquely and independently to the variance in the dependent variable.

4.6. RESULTS
The results of the data analysis follow.

4.6.1. Respondent demographics
Descriptive statistics were calculated for respondents’ gender, race and age.

Table 4.1: Respondent gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>573</td>
<td>50.27</td>
<td>50.27</td>
</tr>
<tr>
<td>Female</td>
<td>567</td>
<td>49.73</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>1 140</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

The genders were approximately equally represented in the sample.

Table 4.2: Respondent race

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>762</td>
<td>66.84</td>
<td>66.84</td>
</tr>
<tr>
<td>White</td>
<td>206</td>
<td>18.07</td>
<td>84.91</td>
</tr>
<tr>
<td>Coloured</td>
<td>116</td>
<td>10.18</td>
<td>95.09</td>
</tr>
<tr>
<td>Asian</td>
<td>56</td>
<td>4.91</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>1 140</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

The sample race demographics were broadly in line with the Statistics South Africa (2016) Quarterly Labour Force Survey results. As expected, most respondents were Black, accounting for just over two-thirds of the sample. Blacks and Whites together made up almost 85% of the respondents.

Table 4.3: Respondent age (years)

<table>
<thead>
<tr>
<th>Youngest</th>
<th>Oldest</th>
<th>Mean</th>
<th>Median</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>64</td>
<td>38.62</td>
<td>37.00</td>
<td>9.36</td>
</tr>
</tbody>
</table>
The sample respondents ranged in age from 20 to 64 and were, on average, 38.62 years old.

### 4.6.2. Descriptive statistics

Basic measures of central tendency were calculated for the independent and dependent variables.

**Table 4.4: Measures of central tendency for leader CQ, empowering leadership and directive leadership.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader CQ (composite)</td>
<td>1.00</td>
<td>7.00</td>
<td>4.53</td>
<td>1.17</td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.96</td>
<td>1.45</td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.42</td>
<td>1.33</td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.57</td>
<td>1.34</td>
</tr>
<tr>
<td>Leader behavioural CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.15</td>
<td>1.40</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>1.00</td>
<td>7.00</td>
<td>5.12</td>
<td>1.37</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>1.00</td>
<td>5.00</td>
<td>3.52</td>
<td>0.81</td>
</tr>
</tbody>
</table>

For most of the items the range was from 1 to 7. The mean score for leader CQ was 4.53 with a standard deviation of 1.17. The leader CQ dimension mean scores varied from a high of 4.96 (metacognitive CQ) to a low of 4.15 (behavioural CQ). The mean score for empowering leadership was 5.12 with a standard deviation of 1.37 whilst the equivalent scores for directive leadership were 3.52 and 0.81, respectively. It should be noted that the rating scale for directive leadership was 1 to 5.

### 4.6.3. Reliability

The Cronbach coefficient alphas of all the factors exceeded 0.70 and, accordingly, satisfied the requirement set in the data analysis section. The actual scores are shown in Table 4.5.

### 4.6.4. Factorial validity

The validity of the instruments was tested through exploratory factorial analysis. The data on leader CQ, empowering leadership and directive leadership was found to be factorable. The Kaiser-Meyer-Olkin measure was 0.95 for leader CQ, 0.92 for empowering leadership and 0.84 for directive leadership. Categorisation of these scores, per the guidelines noted in Dziuban and Shirkey (1974), indicates that they are highly acceptable. The Bartlett’s Test of
Sphericity was significant for all of leader CQ, empowering leadership and directive leadership (p<0.001). Consequently, sampling adequacy was satisfactory.

Leader CQ was found to be composed of four factors, using the rule that the number of factors is predicted by eigenvalues greater than one. This structure matched that conceptualised by Earley and Ang (2003) / Ang and Van Dyne (2008). All the measurement items for leader metacognitive, motivational and behavioural CQ loaded onto their respective factors with weights exceeding 0.50. Although all the items used to measure leader cognitive CQ loaded onto it, only 83% had a weight greater than 0.50 each. This four-factor structure of leader CQ had a declared variance of 74.38%.

Empowering leadership was found to be unidimensional with all 10 measurement items loading onto it. The weight of the lowest loading item was 0.74. The declared variance was 62.15%. Although directive leadership exhibited a three-factor structure with all items having weights above 0.50, its alpha was not increased when each of the scale items were removed; that is, the items demonstrated high internal consistency and, consequently, directive leadership was taken, for purposes of this research, as being unidimensional too. The declared variance of the three-factor solution was 75.90%.

4.6.5. Correlations

Table 4.5 shows the correlations between the variables as well as their Cronbach coefficient alphas.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Empowering leadership</th>
<th>Directive leadership</th>
<th>Coefficient α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader CQ (composite)</td>
<td>0.64*</td>
<td>0.39*</td>
<td>0.95</td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>0.64*</td>
<td>0.32*</td>
<td>0.93</td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>0.49*</td>
<td>0.35*</td>
<td>0.91</td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.57*</td>
<td>0.36*</td>
<td>0.90</td>
</tr>
<tr>
<td>Leader behavioural CQ</td>
<td>0.45*</td>
<td>0.30*</td>
<td>0.91</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>-</td>
<td>0.45*</td>
<td>0.93</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>-</td>
<td>-</td>
<td>0.87</td>
</tr>
</tbody>
</table>

*p<0.05
All the correlations between the variables were significant at the 5% level. The empowering leadership relationship was strongest with leader CQ (as a composite value) and leader metacognitive CQ (both 0.64), followed by leader motivational CQ (0.57), leader cognitive CQ (0.49) and then leader behavioural CQ (0.45). The directive leadership relationship was greatest with leader CQ (as a composite value) (0.39), then leader motivational CQ (0.36), leader cognitive CQ (0.35), leader metacognitive CQ (0.32) and, lastly, leader behavioural CQ (0.30).

Based on the results, H1₀ and H2₀ were rejected, that is, a statistically significant relationship was found to exist between leader CQ (as a composite value) and both empowering and directive leadership. H3₀ was rejected because the statistical strength of the relationship between leader CQ (as a composite value) and empowering leadership was significantly greater than that between leader CQ (as a composite value) and directive leadership (z = 10.129, p<0.05). As statistically significant relationships existed between each of the four leader CQ dimensions with both empowering and directive leadership, H4₀ and H5₀ were also rejected.

4.6.6. Stepwise regression

To investigate the effects of the independent variables in unison on the dependent variables and with particular focus on the contribution of each, stepwise regression analysis was undertaken. The results are reflected in Tables 4.6 below and 4.7 on the following page.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>β</th>
<th>t</th>
<th>Sig</th>
<th>f²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.64</td>
<td>0.41</td>
<td></td>
<td></td>
<td></td>
<td>0.69</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>0.64</td>
<td>28.29</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>β</th>
<th>t</th>
<th>Sig</th>
<th>f²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.67</td>
<td>0.45</td>
<td>0.47</td>
<td>16.02</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.26</td>
<td>8.80</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Effect size (R²)/(1-R²)

The stepwise regression revealed that just two of the four subscales of leader CQ, metacognitive and motivational CQ, were statistically significant predictors of empowering leadership. It follows that H6₀ was not rejected because neither the cognitive nor behavioural
CQ dimensions played any role in this respect.

Table 4.7: Stepwise regression for directive leadership

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>β</th>
<th>t</th>
<th>Sig</th>
<th>f²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.36</td>
<td>0.13</td>
<td>31.76</td>
<td>0.00</td>
<td></td>
<td>0.15*</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.36</td>
<td>13.17</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.39</td>
<td>0.15</td>
<td>28.58</td>
<td>0.00</td>
<td></td>
<td>0.18*</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.23</td>
<td>5.75</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>0.19</td>
<td>4.89</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.39</td>
<td>0.15</td>
<td>26.46</td>
<td>0.00</td>
<td></td>
<td>0.18*</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.19</td>
<td>4.43</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>0.16</td>
<td>3.87</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>0.09</td>
<td>2.39</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Effect size (R²)/(1-R²)

Leader motivational, cognitive and metacognitive CQ predicted directive leadership. As leader behavioural CQ failed to occupy a position of statistical significance in predicting directive leadership, H7₀ was not rejected.

4.7. DISCUSSION

4.7.1. Outline of the results

Correlation coefficients illustrate associations between variables, that is, they provide information on the “strength and direction” of the relationship (Mukaka, 2012, p. 71). The significant associations that have been identified between leader CQ (as a composite value) and its dimensions with both empowering and directive leadership demonstrate that the respective variables have, at a statistical level, a recognised linear relationship. As all the correlation coefficients were positive, the implication is that when leader CQ or its dimensions increase or decrease, empowering and directive leadership levels would, similarly, record an escalation or reduction. However, statistical significance does not appraise whether the calculated associations between the variables are in fact important (Thompson, 2002).

Using the guidelines of Cohen (1988), leader CQ (as a composite value) and both its metacognitive and motivational dimensions were confirmed as having a large, that is, a strong practical association with empowering leadership. Leader cognitive and behavioural CQ, in turn,
demonstrated a medium or moderate practical association with empowering leadership. Leader CQ (and each of its dimensions) had less of a practical relationship with directive leadership, however, in that the respective correlation coefficients all tended towards the lower end of Cohen’s (1988) medium range. Empowering leaders are also considered to more culturally intelligent than directive leaders, as borne out by the statistically significant difference between the respective strengths of the empowering leadership and directive leadership relationships with leader CQ.

When applying all the leader CQ dimensions together, just metacognitive and motivational CQ were found to be statistically significant predictors of empowering leadership and, together, accounted for 45% of its variance. Individually, the metacognitive CQ dimension was the stronger of the two as evidenced by its higher $\beta$. Apart from behavioural CQ, all the leader CQ dimensions contributed to forecasting directive leadership at a statistically significant level despite only being able to explain 15% of the variance therein. The large practical significance of the stepwise regression result for empowering leadership was evidenced by its $f^2$ statistic of 0.82. In comparison, the result for directive leadership held only a medium practical significance given its $f^2$ statistic of 0.18.

Research efforts to understand the relationship between leader CQ and leadership styles have already been discussed in the literature review section of this chapter. As there is an apparent absence of empirical insights addressing the relationship between leader CQ and both empowering and directive leadership, it could be beneficial to identify other leadership styles that are similar to the afore-mentioned as a basis for contextualising the findings of this research. Hassan et al. (2016a), as an example, incorporate empowering leadership under the transformational leadership style in their typology. This, however, should be read in conjunction with Sharma and Kirkman (2015) who argue that empirical evidence supports the existence of empowering and transformational leadership as being distinct from one another. Likewise, although Kim and Beehr (2017b) state that empowering and transformational leadership might be conceptually comparable, they do remark that empowering leadership remains discrete in terms of its behaviours. Hence, it may not be appropriate to directly
compare the results of this research with others that have explored the relationship between leader CQ and transformational leadership. Concerning directive leadership, Yun, Faraj and Sims (2005) assert that it is theoretically similar to the autocratic style. As discussed earlier, Eken et al. (2014) found that no empirical relationship between leader CQ (and its dimensions) and autocratic leadership existed. This research, by contrast, revealed that leader composite CQ and each of its dimensions did have a moderate association with directive leadership.

4.7.2. Theoretical implications

This research results in three important theoretical implications. Firstly, evidence of the four-factor structure of CQ, per Earley and Ang (2003), has been provided. This finding is consistent with that of Mahembe and Engelbrecht (2014) who confirmed the construct validity of the CQS within the South African context. Secondly, the nature of the leader CQ relationships with empowering leadership and directive leadership has been determined. The leader CQ dimensions that associated the most with and best predicted empowering and directive leadership have also been identified. The CQ and leadership nomological networks have therefore been expanded. Finally, the outputs contribute to satisfying the recent calls by scholars, such as Brannen (2016) and Clark and Waldron (2016) for empirical insights on leader CQ and its relationship with leadership styles other than transformational, as well as that by Sharma and Kirkman (2015) for research into the antecedents of different leadership styles, particularly empowering leadership.

4.7.3. Practical implications

This research holds value for both the appointment and growth of leaders. Organisations recruiting for either international assignments or domestic operations in culturally diverse societies, such as South Africa, may use the results to better inform their selections. Where the cultural profiles of subordinates dictate a preference for empowerment, human resource practitioners should concentrate on selecting those leaders evidencing higher levels of CQ in general and, especially, metacognitive and motivational CQ. Similarly, because these two dimensions act as important antecedents of empowering leadership, they should form an integral component of leadership development programmes. To this end, efforts ought to be
centred on enhancing the ability of leaders to map out an optimal methodology by which to approach cross-cultural interactions and for how best to modify their assumptions, during such interfaces, should these conflict with reality. Likewise, stimulating leaders’ self-belief regarding their success in the cross-cultural engagement should be promoted.

Human resource professionals may use leaders’ levels of motivational, cognitive and, to a lesser extent, metacognitive CQ to gauge the probability leaders will display directive leadership. They are, however, reminded that these leader CQ dimensions explain just a limited amount (15%) of the variance in this leadership style. Hence, they may want to augment the use of leader CQ with other antecedents of directive leadership, such as leadership level (Oshagbemi, 2008).

4.8. LIMITATIONS AND RECOMMENDATIONS
The primary limitation of this research is that it was based on a convenience sample. The scope for generalisation of the results to the population could thus be limited. However, as the participating organisations reflect broad diversity, both in terms of their size and the industry type in which they operate, and the respondents, in each of them, were chosen randomly, these factors do, to some extent, mitigate this. Another limitation is that, being cross-sectional, it was not possible to produce any insights as to causality from the research outputs. Although a longitudinal or experimental design may have improved the results, it should be noted, as pointed out previously, that cross-sectional research is well suited for correlative studies such as this one. The exclusive use of observer-based perceptions may also have been restrictive. Hence additional data, such as that from self-reporting, and objective measures of behaviour, should be included in future studies. This may allow for triangulation of results. It would also be important to consider whether the results of this research may be replicated in countries whose citizens are culturally distinct from those of South Africa or even in jurisdictions where the culture of the population is homogeneous.

4.9. CONCLUSION
Leadership style is a function of leader CQ; however, the nature and magnitude of the role
played by leader CQ varies considerably between leadership styles in general and, particularly, in terms of both the statistical and practical significance thereof. Although leader composite CQ was associated with both empowering and directive leadership, the strength of the statistical relationship was not only greater in the case of empowering leadership but was also large in terms of practical relevance. The practical relevance of the relationship with directive leadership was merely moderate. In considering interventions, emphasis should be placed on the metacognitive and motivational aspects of leader CQ since they are the most important dimensions related to empowering leadership. On the other hand, the motivational, cognitive and metacognitive leader CQ dimensions should be concentrated on in the context of directive leadership. The question that this part of the research sought to address has therefore been answered.
CHAPTER 5: THE RELATIONSHIP BETWEEN SUBORDINATE CULTURAL IDENTITY, LEADER CULTURAL INTELLIGENCE AND EMPOWERING AND DIRECTIVE LEADERSHIP

In this chapter, empirical objective 2, that is, to investigate the part played by subordinate cultural identity in the display of leadership styles (empowering and directive) given leader CQ, is addressed.

5.1. INTRODUCTION

Many scholars note the challenge of defining leadership (Northouse, 2013; Penceliah, 2011). The leadership concept has been referred to as complex (Bennett, 2016) and complicated (Fisher, 2016). Despite the difficulties associated with elucidating exactly what it is, most of the definitions of leadership suggest that it concerns the process of influencing persons towards the attainment of shared goals (Algahtani, 2014; Esen, 2015; Maggitti, Slay & Clark, 2010; Yukl, 2013).

A central theme in leadership research has been the investigation as to whether leadership is a universal construct or a function of culture. To this end, two schools of thought exist (Mustafa & Lines, 2012). The realists assert that leadership is not influenced by culture whilst the relativist perspective argues that leadership is culturally bound (Mustafa & Lines, 2012). There have been various efforts to study the relationship between leadership and culture, with one of the largest research endeavours being that of the Global Leadership and Organizational Behavioral Effectiveness (GLOBE) project (House, Quigley & de Luque, 2010). Though the said project concluded that some behaviours demonstrated by leaders are universally effective (Dorfman, Javidan, Hanges, Dastmalchian & House, 2012), it found that societies differ both in terms of their evaluation of the varying facets of leadership and their accompanying effectiveness (Javidan & Dastmalchian, 2009). In this regard, culture emerges as a key variable in moulding leaders as well as their effectiveness (Hanges, Aiken, Park & Su, 2016). Apposite leader behaviours are also noted to differ considerably across cultures (Gehrke & Claes, 2017).
Researchers (such as, du Plessis, 2011; Kim & Van Dyne, 2012; Kumar, Anjum & Sinha, 2011; Ng, Van Dyne & Ang, 2009b) draw attention to the need for leaders to become proficient in cross-cultural leadership. Successfully influencing culturally diverse followers might, however, be fraught with problems as cultural tenets underpin values and behaviours (Fu & Yukl, 2000). Indeed, cultural identity is no less important than individual identity (Connerley & Pedersen, 2005). The influencing of followers, hence, necessitates not only a solid understanding of their cultures (that is, their cultural identities) but also requires leaders to comprehend how they are viewed in these cultures and their (the leaders’) attendant behaviours interpreted (Yukl, 2009). Accordingly, leaders need to consider subordinates’ biases towards different leadership styles (Hwang, Quast, Center, Chung, Hahn & Wohkittel, 2015). Research by Muna (2011) on the qualities of successful multicultural leaders established that a crucial competency is their ability to link cultures by means of exercising their cultural awareness.

As intelligence is a function of culture (Cocodia, 2014; Triandis, 2006), being culturally intelligent is important for the development of successful leaders in both cross- and multicultural contexts (Alon & Higgins, 2005). Cultural intelligence (CQ) portrays the ability to successfully acclimate in circumstances of cultural heterogeneity (Earley & Ang, 2003). It is a distinct intelligence type (Ang, Van Dyne, Koh, Ng, Templer, Tay & Chandrasekar, 2007) that is located at both the individual and organisational levels (Moon, 2010). As such, it allows for one to direct cultural knowledge in the pursuit of organisational objectives (Dutta & Dutta, 2013). To this end, culturally intelligent leaders are able to adjust their respective style of leadership to suit multicultural conditions (Klenke, 2009).

The foregoing discussion suggests that leaders, more than simply being guided by the cultural identities of their staff members, need to be culturally intelligent. The investigation of leadership and culture has covered areas such as global leadership, leadership across countries and in multicultural firms as well as multicultural settings (Alves, Lovelace, Manz, Matsypura, Toyasaki & Ke, 2006). However, considerably less effort has been devoted to examining leader CQ (Groves & Feyerherm, 2011; Vanderpal, 2014) and, in particular, to considering whether it is more instructive than subordinate cultural identity in explaining the display of a leadership
style. The candidate is not aware of any study that has specifically explored whether the display of empowering and directive leadership by culturally intelligent leaders is dependent upon the cultural identities of their subordinates. This is alarming since many leaders accept that their style of leadership should be altered in line with the cultures of their subordinates (Klenke, 2009). By conducting this research, the candidate aimed to resolve this knowledge gap.

5.2. LITERATURE REVIEW

5.2.1. Culture

Although a common definition of culture does not exist (Rahimić, 2013) most often culture is regarded in terms of bounds that distinguish human groupings from one another (House, Javidan, Hanges & Dorfman, 2002). It is reflective of components that guide a society’s behaviours (Targowski & Metwalli, 2003). Culture may also be viewed as the attributes peculiar to a social cluster (Lebrón, 2013). Whilst some commentators observe culture as a phenomenon common to persons who have matching ethnicities, nationalities or religions, others contend that it reflects the characteristic homogeneity that separates different human collectives (Hopkins & Scott, 2016). Culture, Jameson (2007) observes, has routinely been investigated at the country level (for example, Chaney & Martin, 2007; Hofstede, 1980). In this regard, 79% of the cross-cultural studies in the six years to 2001 equated culture with country (Schaffer & Riordan, 2003). The afore-mentioned equivalence of culture and country is, however, contested in that many nation states present robust internal cultural differences (Gurung & Prater, 2006). Hence, paralleling culture with geographical boundaries may restrict the comprehension of challenges facing the business community and the associated methodologies for resolving them (Jameson, 2007). Similarly, if one just emphasises national cultural differences the danger of giving birth to stereotypes increases (Poncini, 2002). The impact of culture on leadership could be incomplete where country differences are exclusively concentrated on (Lee, Scandura & Sharif, 2014). Equally, in studying culture, analysis at the national level may be less than optimal (Kuchinke, 1999). Hence, cultural identity is, in many respects, established at the individual level since persons embrace national cultural values with varying levels of gradation (Srite & Karahanna, 2006). With this in mind, cultural identity consists of one’s diverse convictions and related behaviours (Jensen, 2003).
The emphasis in the previous sentence might be placed on the individual, which represents a move away from the description of culture as a group specific phenomenon.

5.2.2. The dimensions of culture (cultural identity)

Cultural dimensions comprise the broad characteristics of cultures that can be quantified and which, therefore, allow for comparisons to be made between cultures (Hofstede, 2011). The Hofstede (1980) dimensions of culture are the most well-known (Kumar et al., 2011; Rienties & Tempelaar, 2013). A study by Taras, Rowney and Steel (2009) on 121 instruments used for measuring culture, found that 97.5% contained, in some part, dimensions that were conceptually congruent with those of Hofstede (1980).

Hofstede (1980) identified four cultural dimensions which were later expanded to six. These are: power distance, uncertainty avoidance, individualism, masculinity, long-term orientation and indulgence (Hofstede, 2011).

• Power distance: The manner in which power is shared between persons. Those cultures that are low in power distance accept that power usage should be genuine whilst in high power distance cultures the legitimacy of power is disregarded (Hofstede, 2011); that is, persons are accepting of uneven power allocation (Newman & Nollen, 1996). Cultures low in power distance believe leaders should be approachable and that decision-making must be distributed, whilst high power distance cultures accept the entitlement of leaders to privileges and that leaders take the decisions (Offermann & Phan, 2008).

• Uncertainty avoidance: The extent to which members of a culture avoid or embrace unstructured and abstruse circumstances. Persons who are weak in uncertainty avoidance take uncertainties in their stride whilst those strong in such avoidance pursue clearness and organisation (Hofstede, 2011). Leaders are more concerned with the details in those cultures having a high degree of uncertainty avoidance whereas leaders in low uncertainty avoidance cultures are more interested in strategic matters (Offermann & Phan, 2008).

• Collectivism: The level to which persons function collectively. Individualistic cultures promote the singular and, in work settings, autonomy (Newman & Nollen, 1996). In contrast, collectivist cultures incorporate persons into groups, for example, extended
families (Hofstede, 2011), and offer reduced support for subordinates’ creativity (Wendt, Euwema & van Emmerik, 2009).

- **Masculinity**: The degree to which a culture endorses assertiveness. Masculine cultures admire strength and much differentiation between the genders whereas feminine cultures encourage modesty, compassion and work-family life equilibrium (Hofstede, 2011).

- **Long-term orientation**: The way in which cultures position themselves for the future. Adaptation to changing conditions and believing the future is the time when key life happenings will occur are characteristic of cultures having a long-term orientation (Hofstede, 2011). Those cultures exhibiting a short-term positioning accept that the present is most important and traditions are inviolable.

- **Indulgence**: The amount of satisfaction which a culture accepts. Indulgent cultures promote sports participation, leisure and open communications whilst restrained cultures reflect the opposite (Hofstede, 2011).

The Hofstede (1980, 2011) cultural dimensions were conceptualised at the national level. Although some evidence suggests that national cultural values are associated with behaviours in the workplace (Kirkman, Lowe & Gibson, 2006), the application of these cultural dimensions at an individual cultural metrics level is flawed (Brewer & Venaik, 2012). To address this problem, Yoo, Donthu and Lenartowicz (2011) developed a scale that could specifically measure these dimensions at the level of the individual. Accordingly, this scale was used in this research.

### 5.2.3. Cultural intelligence

In seeking to comprehend why some persons are able to successfully navigate the many meanderings of inter- or cross-cultural interactions whilst others find it a challenge, Earley and Ang (2003) initially conceptualised CQ (Ang, Van Dyne & Rockstuhl, 2015). With this in mind, CQ is the chief variable in one’s success, given the globalised world of today, according to Livermore (2011). As an intelligence type, CQ is not central to any specific culture but is, rather, aligned to culturally varied situations (Ang, Van Dyne & Tan, 2011). Furthermore, it manifests as a set of skills rather than as personality characteristics or interests (Ang, Rockstuhl & Tan, 2015). Although CQ shares some commonality with other forms of intelligence, such as general
cognitive ability, and emotional and social intelligence (Ang et al., 2015), it is conceptually distinct in that these intelligences do not integrate capabilities of interacting with culturally dissimilar persons (Ng, Van Dyne & Ang, 2012).

CQ comprises four components (Crowne, 2009; Jonck & Swanepoel, 2015). Metacognitive CQ entails the “control of cognition”, that is, the mechanisms employed by persons both to source and to comprehend knowledge (Ng et al., 2012, p. 32). It includes conscious questioning of cultural assumptions, consideration of cross-cultural experience and amendment of reasoning structures during inter-cultural exchanges (Rosenblatt, Worthley & MacNab, 2013). The second component, cognitive CQ, acts as the content repository of CQ (Morrell, Ravlin, Ramsey & Ward, 2013). It reflects knowledge of cultures, both specific and in general (Ang et al., 2015). It may be developed through cross-cultural training and experiences (Ramsey, Barakat & Aad, 2014). As such, it incorporates information on what culture is and what it is not (Rosenblatt et al., 2013). Motivational CQ is the third of the components. It depicts the vigour exerted and attention displayed by individuals in learning about and operating in culturally heterogeneous conditions (Ang et al., 2011). It integrates both the inherent value persons ascribe to cross-cultural interfaces as well as the extent of their self-efficacy in functioning successfully in such interactions (Li, Mobley & Kelly, 2013). The final component, behavioural CQ, portrays the physical indication of thoughts, that is, explicit actions (Ng et al., 2012). It may be both verbal and non-verbal (Fischer, 2011). Motivational CQ is frequently viewed as the component that links metacognitive and cognitive CQ with the behavioural component (MacNab, 2012). The four components operate as a unit in those persons high in CQ (Crowne, 2008).

5.2.4. Leadership styles (empowering and directive)

Over time a number of separate leadership style theories have emerged (Tekleab, Sims, Yun, Tesluk & Cox, 2008). Hassan, Asad and Hoshino (2016b) identified no less than 39 styles and, through their work, arranged these into five theoretical groupings that depict a continuum ranging from centralised to distributed decision making. These groups are (1) autocratic (including the aversive, transactional and directive leadership styles), (2) participative (containing the democratic and supportive leadership styles), (3) transformational (including
visionary, charismatic and empowering leadership), (4) servant (referencing ethical and authentic leadership, amongst others) and (5) laissez-faire (Hassan et al., 2016b).

These groupings are mostly represented in a typology put forward by Pearce, Sims, Cox, Ball, Schnell, Smith and Trevino (2003). In this typology, the transactional / transformational paradigm is extended to include empowering and directive leadership. Whereas the split between transformational and transactional leadership is not as clear-cut as initially theorised (Yukl, 1999), it is argued that empowering and directive leadership are not only distinct but in fact are representative of contrasting elements (Hmieleski & Ensley, 2007). Likewise, directive behaviours are considered the antithesis of empowerment (Yun, Cox & Sims, 2006). Empirical examination of leader CQ and leadership styles has tended to mostly concentrate on the transformational style (for example, Elenkov & Manev, 2009; Ismail, Reza & Mahdi, 2012; Keung & Rockinson-Szapkiw, 2013; Lee, Veasna & Wu, 2013). Taking account of the extended focus on transformational leadership, and given the unique nature of empowering and directive leadership, this research focused exclusively on empowering and directive leadership.

Empowering leadership promotes subordinates’ self-stimulus rather than top-down control practices (Houghton & Yoho, 2005). Empowering leaders devolve much responsibility to subordinates whilst facilitating an enabling environment in which the latter may satisfy their need for autonomy and achieve growth (Tekleab et al., 2008). Such leadership draws subordinates’ attention to the importance of the work and underscores confidence in staff members’ performance and delivery whilst eradicating administrative impediments (Zhang & Gheibi, 2015). In adopting this leadership style, leaders aim to develop a committed workforce (Park, Kim, Yoon & Joo, 2017).

Empowering leadership is both related to yet distinct from each of participative leadership and delegation (Sharma & Kirkman, 2015). Although participative leadership often results in employees feeling a sense of empowerment (Huang, Lun, Liu & Gong, 2010) they do not, per se, make the decision – the leader does (Chen & Tjosvold, 2006). Conversely, the outcome of empowering leadership is that employees take their own decisions; thus, it is more expansive
than participative leadership (Sharma & Kirkman, 2015). Initial research studies theorised empowerment as comprising the delegation of decision making authority to subordinates (Spreitzer, De Janasz & Quinn, 1999). Similarly, in practice, delegation is often considered to be empowerment (Enz & Fulford, 1995). Although delegation and empowering leadership include awarding decision-making independence to employees (Sharma & Kirkman, 2015), they differ in that empowerment targets enablement as opposed to allocation (Conger & Kanungo, 1988). Whilst delegation inclines primarily towards power transfer (Martin, Liao & Campbell, 2013), empowering leadership exercises wider motivational stimuli such as promoting their own goal setting by employees (Sharma & Kirkman, 2015).

In directive leadership, the leader establishes employee direction by means of arranging and coordinating task accomplishment, allocating required activities, stipulating rules and procedures to be complied with, explicating expectations and appraising outputs (Mehta, Dubinsky & Anderson, 2003). Directive leaders subscribe to the notion that, to achieve outstanding delivery, goals must be unequivocal, stimulating and captivating (Fisher, 2016).

Directive leaders’ powers are sourced from their positional standing in the organisation (Yun et al., 2006) and are often employed to avoid organisational paralysis arising from excessive deliberation and enquiry (Fisher, 2016). Although this leadership style routinely lacks the mutual or complementary exchange characteristic of empowering leadership (Clark & Waldron, 2016), it is not disconnected nor disengaged leadership; that is, the leader maintains an active presence as opposed to inhabiting an uninvolved space (Fisher, 2016). It assists subordinates in eliminating both task and role uncertainty, and enables faster execution of decisions (Lorinkova, Pearsall & Sims, 2013).

### 5.2.5. Leadership styles and the dimensions of culture

The relationships of the empowering and directive leadership styles with the dimensions of culture have also evoked some discussion in the literature. Despite empowering leadership having been shown to positively influence workplace achievements, it should not be indiscriminately adopted across diverse cultures, given the varying predispositions of
individuals and collectives towards power distribution (Gibson & McDaniel, 2010). In particular, in those cultures which endorse hierarchical values, subordinates prefer a leadership style wherein directives are issued rather than a more empowering style (Mustafa & Lines, 2016). In countries, such as India and China, which are characterised by high power distance levels, empowering leadership may not be as successful as situations when such behaviours are displayed in countries such as the United States and Switzerland which are reflective of lower power distance levels (Raub & Robert, 2012). Notwithstanding these results, there is evidence to indicate that when exposed to empowering leadership, subordinates in high power distance cultures may in fact grasp the opportunity of autonomy (Martin et al., 2013). Also, it has been shown that empowering leadership actually increased the work engagement mediated by meaningfulness of staff members in the high-power distance society of Malaysia (Lee, Idris & Delfabbro, 2016).

Directive leadership is anticipated to be favoured in high power distance cultures (Mustafa & Lines, 2016) as well as those cultures that are collectivist in nature (Wendt et al., 2009). It is usually observed as being consistent with a typical masculine perspective (Arnold & Loughlin, 2013). It is also likely to be attractive in those cultures that have a long-term orientation outlook because short-term orientated cultures gravitate towards freedom and independence (Nikčević, 2014).

Given the preceding discussion it appears that empowering leadership would be best suited to those cultures that are individualistic, have a small propensity for power distance, a short-term orientation and embrace (that is, are weak in) uncertainty avoidance. It follows that collectivist cultures which endorse high power distance and exhibit a high uncertainty avoidance would tend towards directive leadership.

Despite the above observation by Arnold and Loughlin (2013), masculine cultures idealise independence whilst valuing output and development (Offermann & Phan, 2008). Hence, it is possible that empowering leadership could indeed be attractive in a masculine culture.
5.3. RESEARCH STATEMENT
The importance of leaders acquiring an understanding of culture (cultural identity) is well documented in the literature. In this respect, Schein (2004) points out that it is vital for leaders to comprehend culture. Dickson, Castañó, Magomaeva and Den Hartog (2012) emphasise that the leaders’ knowledge of culture must include the native culture within which they lead. However, in order to function optimally in culturally varied circumstances, it is crucial that leaders, in addition to such knowledge, possess the competence to effect connections between cultural dissimilarities (Ang et al., 2015). To this end, Livermore (2015) comments that leader CQ is imperative in the world of leadership.

It is apparent that a divide prevails in the literature in that some scholars accept a leader’s cultural knowledge or understanding of cultural identity as being sufficient to inform multicultural leadership whilst others contend that leader CQ is a requisite competence in this regard. With this in mind, there do not appear to be any studies that have examined whether the cultural identity of subordinates plays a role in guiding the empowering and directive styles of culturally intelligent leaders.

5.4. RESEARCH PURPOSE
The purpose of this section of the research was to investigate the part, if any, that subordinate cultural identity played in the display of empowering and directive leadership by leaders, given leader CQ.

5.5. RESEARCH HYPOTHESES
The research hypotheses investigated were:
• H10: Subordinate cultural identity does not play a part in the display of empowering leadership, given leader CQ, and
• H20: Subordinate cultural identity does not play a part in the display of directive leadership, given leader CQ
5.6. METHODOLOGY

5.6.1. Research paradigm and design

This research was conducted within the positivist paradigm. A paradigm is a general perspective on something (Taylor, Kermode & Roberts, 2006). The positivist paradigm is concerned with the discovery of a universal truth (O’Neil & Koekemoer, 2016). As such, it assumes that reality is organised and that the acquisition of knowledge may be obtained objectively (Ling, 2017).

A cross-sectional design was adopted in carrying out this research. Such a design may be defined as the gathering of quantitative or quantifiable data at one point in time that is then studied with a view to identifying relationships within the data (Bryman, 2012). These designs most often involve the use of a sample survey (Zheng, 2015).

5.6.2. Population and sampling

The population comprised all leaders at all organisations carrying on operations in South Africa. No restrictions as to leader level or organisation size and industry type were imposed. The use of observer-based ratings to measure leadership styles is superior to self-reports (Schaveling, Blaauw & van Montfort, 2017). Thus, the sample respondents were drawn from the subordinates of leaders and consisted of 1140 persons spread across 19 South African organisations. The organisations included both private and public entities representing, amongst others, the telecommunication, financial services, media, manufacturing and electronics industries. Eighteen of the 19 organisations were identified through each of them having an employee who was a registered master’s level student at the Graduate School of Business Leadership of the University of South Africa (GSBL). The 19th organisation was the employer of the candidate. Entrance to the 18 organisations, and thus access to the respondents, was achieved by leveraging the respective students as fellow researchers.

The perceptions of subordinates as to the CQ and leadership styles of their leaders comprised the first unit of analysis. The second unit of analysis covered the cultural identity of the respondents themselves (based upon the cultural dimensions).
5.6.3. Data collection

Data were collected through the use of a questionnaire incorporating various instruments selected on the basis of their ability to measure subordinate cultural identity, leader CQ and empowering and directive leadership. Approval to use the instruments was obtained from the respective authors. Applicable details are:

- The Cultural Values Scale (CVS) (Yoo et al., 2011) was used to assess subordinate cultural identity. This scale is reliable and valid (Mazanec, Crotts, Gursoy & Lu, 2015; Yoo et al., 2011) and consistent across sample types (Yoo et al., 2011). The CVS may be utilised to compare persons at the country level as well as cross-culturally (Jakubczak & Rakowska, 2014), but does not, as yet, include measures for indulgence.

The instrument consists of 26 statements. Five statements address power distance (for example, “People in higher positions should make most decisions without consulting people in lower positions”). Five statements cover uncertainty avoidance (for example, “Standardised work procedures are helpful”). Six statements deal with collectivism (for example, “Group success is more important than individual success”) while four measure masculinity (for example “It is more important for men to have a professional career than it is for women”) and six statements consider long-term orientation (for example, “Giving up today’s fun for success in the future”).

- The Cultural Intelligence Scale (CQS) (Van Dyne, Ang & Koh, 2008) was used to gauge leader CQ. The CQS is reliable and may be used across time, samples and cultures (Rockstuhl, Seiler, Ang, Van Dyne & Annen, 2011). The observer report version was used.

The CQS comprises four statements that measure metacognitive CQ (for example, “My leader is conscious of the cultural knowledge he / she applies to cross-cultural interactions”), six that cover cognitive CQ (for example, “My leader knows the arts and crafts of other cultures”), five on motivational CQ (for example, “My leader enjoys interacting with people from different cultures”) and five that assess behavioural CQ (for example, “My
leader changes his / her non-verbal behaviour when a cross-cultural situation requires it”). For the purposes of this research, CQ was measured at a composite level.

- Ten statements by Ahearne, Mathieu and Rapp (2005) were utilised to measure empowering leadership. Examples include “My leader allows me to do my job my way” and “My leader allows me to make important decisions quickly to satisfy customer needs”. The reliability of these items has been validated by Yoon (2012) and they have been observed to capture the uniqueness of empowering leadership (Zhang & Bartol, 2010).

- Ten statements, six of which were formulated by Pearce and Sims (2002) and four by Hwang et al. (2015), were employed to evaluate directive leadership. “My leader gives me instructions about how to do my work” and “My leader identifies specific action steps and accountabilities for me” are examples of these statements. Hinrichs (2011) confirmed the reliability of the items devised by Pearce and Sims (2002). The reliability of the Hwang et al. (2015) items was confirmed by Hwang et al. (2015).

The 18 students assisting with the data collection were briefed on the necessity of obtaining written consent from the chief executive officer of their employer for the research to be conducted therein and the manner in which potential respondents should be selected. Each student obtained a list of staff members’ names from his / her employer’s human resource department after the afore-mentioned permission was secured. The students allocated a number to each name and selected potential respondents using a random number generator. The potential respondents were then contacted and invited to a meeting at which background information on the research was provided. It was emphasised at the meeting that participation would be both voluntary and anonymous. Those persons who agreed to complete the questionnaire did so on a hard copy at the meeting without including any identifying details. The completed questionnaires were handed back to the student at the end of the meeting. The students subsequently captured the inputs on an Excel based template that had previously been provided to them by the candidate. The electronic data were then sent to the candidate. The candidate followed the same process in administering the questionnaire at his
5.6.4. Data analysis

Data analysis was conducted through IBM SPSS. Respondent demographic frequencies were generated as were descriptive statistics for each of the variables. Instruments with Cronbach coefficient alphas greater than 0.70 were considered reliable (Pallant, 2011). Principal axis factor analysis was run to assess factorial validity. Rotation was effected via the direct Oblimin technique. Only those factors with eigenvalues exceeding one were retained (Coovert & McNelis, 1988). Scree plots were examined to confirm these findings (Costello & Osborne, 2005) on the basis that the number of factors to retain would equal the number of eigenvalues appearing prior to the slope tending towards zero (Floyd & Widaman, 1995). It was decided that a factor would be accepted as valid where a minimum of 80% of the respective measurement items loaded onto it with a loading each of 0.50 or higher. This decision was informed by scholarly recommendations as well as pragmatism. In this regard, whilst loadings above 0.40 are acceptable, those above 0.50 are preferable (Hair, Black, Babin & Anderson, 2010). Further, a factor comprising less than three items is most often considered weak, whereas a factor with at least five items, each having a loading of 0.50 or greater, is best (Osborne & Costello, 2009). As there does not appear to be much guidance in the literature regarding the percentage of items that should load satisfactorily onto a factor given the length of the respective measurement scale, the requirement was set at no less than 80%.

Relationships between the variables were determined via Pearson product-moment correlation coefficients. Statistical significance was set at 5% (Lazaraton, 1991). To establish the practical significance of any statistically significant correlations, the recommendations of Cohen (1992) were followed, that is, correlations greater than 0.50 were taken as large, whereas those locating between 0.30 and 0.50 were assessed as medium in strength whilst anything below 0.10 was considered unimportant.

Stepwise regression was made use of to assess the ability of leader CQ and the dimensions of culture (cultural identity) to predict empowering and directive leadership. The focus was
directed at those variables with betas that indicated distinctive and autonomous contributions to the variance in the respective leadership styles (bearing in mind that the stepwise procedure in SPSS only adds those variables that contribute accordingly).

To assess the practical significance of the stepwise regression results, the $f^2$ statistic was calculated. In terms of the Cohen (1988) guidelines, $R^2$ is not significant where $f^2$ is less than 0.15 and the effect size may thus be taken as small, while it is significant where $f^2$ lies between 0.15 and 0.35, the effect size of which is moderate, and furthermore is significant, with a large effect size that is of practical importance, where $f^2$ exceeds 0.35 (Ellis & Steyn, 2003). These guidelines were followed in this research.

5.7. RESULTS

5.7.1. Respondent demographics

The genders were evenly represented in the sample with males comprising 50.27% (573) and females 49.73% (567) of the respondents. These results indicated a slight under-representation of males and a slight over-representation of females when compared against the labour force survey outcomes for quarter 1 2016 (Statistics South Africa, 2016). This survey reflected males as comprising 56.36% and females 43.64% of employed persons.

On average, the respondents were 38.62 years of age with the youngest being 20 and the oldest 64. The median age was 37. These averages compared favourably with the split of employed persons per age category in the labour force survey for quarter 1 2016 (Statistics South Africa, 2016) which showed that the age category with the second largest number of employed persons was 35 - 44 years.

Blacks made up 66.84% of the respondents (762). The second largest group, 18.07%, was composed of Whites (206) whilst 10.18% or 116 of the respondents were Coloureds. Members of the Asian community comprised 4.91% (56) of the sample. The racial composition of employed persons per the quarter 1 2016 labour force survey (Statistics South Africa 2016) revealed that Blacks comprised 73.82%, Whites 12.42%, Coloureds 10.56% and Asians 3.21% of...
such persons. It follows that the racial mix of the sample largely matched that of the quarter 1 2016 labour force survey (Statistics South Africa 2016) for Coloureds and Asians, but with a bias towards Whites when compared to Blacks.

5.7.2. Descriptive statistics

The descriptive statistics for subordinate cultural identity (as measured by the dimensions of culture), leader CQ and empowering and directive leadership are presented in Table 5.1 that follows on the next page.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power distance</td>
<td>1.00</td>
<td>5.00</td>
<td>1.98</td>
<td>0.78</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>1.00</td>
<td>5.00</td>
<td>4.08</td>
<td>0.67</td>
</tr>
<tr>
<td>Collectivism</td>
<td>1.00</td>
<td>5.00</td>
<td>3.38</td>
<td>0.82</td>
</tr>
<tr>
<td>Masculinity</td>
<td>1.00</td>
<td>5.00</td>
<td>2.26</td>
<td>0.90</td>
</tr>
<tr>
<td>Long-term orientation</td>
<td>1.00</td>
<td>5.00</td>
<td>4.35</td>
<td>0.59</td>
</tr>
<tr>
<td>Leader CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.53</td>
<td>1.17</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>1.00</td>
<td>7.00</td>
<td>5.12</td>
<td>1.37</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>1.00</td>
<td>5.00</td>
<td>3.52</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Long-term orientation was the highest scoring dimension of culture, followed by uncertainty avoidance, collectivism, masculinity and finally power distance. The average rating for leader CQ was 4.53. Empowering and directive leadership were rated at 5.12 and 3.52 respectively (bearing in mind that the scale used to measure directive leadership was 1-5).

The mean scores for subordinate cultural identity were taken as low if they were less than 2.00 and high if they exceeded 4.00. Scores ranging between 2.00 and 2.49 were considered to be moderately low whilst those between 2.50 and 3.99 were assessed as moderately high. Hence, the average cultural profile of respondents was one in which they reject unequal power distribution (low score of 1.98), seek certainty (high score of 4.08), have a long-term outlook (high score of 4.35), are reasonably collectivist (moderately high score of 3.38) and marginally tend to favour femininity (moderately low score of 2.26 for masculinity).
5.7.3. Reliability

Reliability coefficients are shown in Table 5.2 below.

Table 5.2: Reliabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power distance</td>
<td>0.78</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>0.80</td>
</tr>
<tr>
<td>Collectivism</td>
<td>0.84</td>
</tr>
<tr>
<td>Masculinity</td>
<td>0.75</td>
</tr>
<tr>
<td>Long-term orientation</td>
<td>0.81</td>
</tr>
<tr>
<td>Leader CQ</td>
<td>0.95</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.93</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.87</td>
</tr>
</tbody>
</table>

In accordance with the guidelines as per Pallant (2011), all of the reliability coefficients were accepted as satisfactory as they each exceeded 0.70. The respective measurement items thus demonstrated internal consistency (Tavakol & Dennick, 2011).

5.7.4. Factorial validity

As a precursor to examining factorial validity, sampling adequacy was considered. This was confirmed not only by acceptable Kaiser-Meyer-Olkin scores for each of the variables (cultural identity = 0.83, leader CQ = 0.95, empowering leadership = 0.92 and directive leadership = 0.84) (Dziuban & Shirkey, 1974) but also by significance being achieved for the corresponding Bartlett’s Tests of Sphericity (p<0.001).

Although Hofstede (2011) identified six dimensions of culture, the CVS only measures the first five factors (power distance, uncertainty avoidance, collectivism, masculinity and long-term orientation). This structure was revealed in this research, with 96% of the items loading with a value greater than 0.50 on the theorised factors. The declared variance of the five-factor solution was 56.49%.

CQ was conceptualised as having four factors (metacognitive CQ, cognitive CQ, motivational CQ and behavioural CQ) (Ang et al., 2015). Making use of both the eigenvalue and elbow rules, this research reflected the given structure, with 95% of the items loading with a value exceeding
0.50 on the factors as theorised. The four-factor solution declared 74.38% of the variance. Whereas CQ was used in this research as an aggregate score, the evidence regarding factorial validity contributes to the credibility of the CQS.

The declared variance for empowering leadership, as a unidimensional construct, was 62.15%. The percentage of items that loaded with a value exceeding 0.50 was 100. Whilst directive leadership was found to have three factors with a declared variance of 75.90% and 100% of items having loadings of 0.50 or greater, it was considered unidimensional for the purposes of this research.

5.7.5. Correlations

The correlations between the variables are presented in Table 5.3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Power distance</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Uncertainty avoidance</td>
<td>-0.01</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Collectivism</td>
<td>0.03</td>
<td>0.30*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Masculinity</td>
<td>0.35*</td>
<td>0.05</td>
<td>0.19*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Long-term orientation</td>
<td>-0.18*</td>
<td>0.22*</td>
<td>0.21*</td>
<td>-0.04</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Leader CQ</td>
<td>0.00</td>
<td>0.06*</td>
<td>0.09*</td>
<td>-0.04</td>
<td>0.12*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Empowering leadership</td>
<td>-0.05</td>
<td>0.06*</td>
<td>0.07*</td>
<td>-0.11*</td>
<td>0.07*</td>
<td>0.64*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8.Directive leadership</td>
<td>0.04</td>
<td>0.19*</td>
<td>0.19*</td>
<td>0.12*</td>
<td>0.17*</td>
<td>0.39*</td>
<td>0.45*</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: * p<0.05

With the exception of power distance, all of the cultural dimensions used to measure subordinate cultural identity demonstrated statistically significant relationships with empowering leadership (Lazaraton, 1991). The relationships between subordinate power distance and empowering leadership as well as that between subordinate masculinity and empowering leadership were negative in nature. None of the aforementioned relationships carried any practical significance (Cohen, 1992). The relationships between each of subordinate uncertainty avoidance, collectivism, masculinity and long-term orientation, with directive leadership, were also statistically significant (Lazaraton, 1991). The practical significance of these relationships was low (Cohen, 1992). As with empowering leadership, subordinate power
distance was unrelated to directive leadership.

Subordinate power distance and masculinity were not related to leader CQ. Although subordinate uncertainty avoidance, collectivism and long-term orientation were statistically associated with leader CQ (Lazaraton, 1991), just the relationship between subordinate long-term orientation and leader CQ demonstrated any practical significance and, in this respect, it was low (Cohen, 1992).

The relationship between leader CQ and empowering leadership was statistically significant (Lazaraton, 1991) as was that between leader CQ and directive leadership (Lazaraton, 1991). The practical significance of the leader CQ and empowering leadership relationship was large (Cohen, 1992) whilst it was medium for the leader CQ and directive leadership relationship (Cohen, 1992).

5.7.6. Stepwise regression

Stepwise regression was used to assess whether subordinate cultural identity predicted empowering and directive leadership, given leader CQ. Tables 5.4 and 5.5 present these results.

<table>
<thead>
<tr>
<th>TABLE 5.4: Stepwise regression for empowering leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Leader CQ</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Leader CQ</td>
</tr>
<tr>
<td>Masculinity</td>
</tr>
</tbody>
</table>

* Effect size (R²/(1-R²))

Leader CQ and, to a lesser extent, subordinate masculinity were found to be statistically important predictors of empowering leadership (Lazaraton, 1991). Model 1 accounted for 40.50% of the variance in empowering leadership whilst model 2, reflecting the addition of subordinate masculinity, resulted in an R² increase of 0.60%. The only dimension of subordinate cultural identity that improved the model was thus masculinity, and this was only by a very
small margin. Subordinate power distance, uncertainty avoidance, collectivism and long-term orientation did not make any distinctive and autonomous contributions to the model. The $f^2$ of model 1 was 0.681 which indicates that the model had a large practical significance as the observed $f^2$ was larger than 0.35 (Ellis & Steyn, 2003). The $f^2$ of model 2 was only marginally higher at 0.698. H10 was therefore not rejected.

**TABLE 5.5: Stepwise regression for directive leadership**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>$\beta$</th>
<th>t</th>
<th>Sig</th>
<th>$f^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.392</td>
<td>0.154</td>
<td>0.154</td>
<td></td>
<td></td>
<td></td>
<td>0.182*</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader CQ</td>
<td>0.392</td>
<td>14.372</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.427</td>
<td>0.182</td>
<td>0.029</td>
<td>0.381</td>
<td>14.187</td>
<td>0.00</td>
<td>0.222*</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader CQ</td>
<td>0.392</td>
<td>26.028</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>0.381</td>
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<td>0.199</td>
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<td>6.125</td>
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<td>0.136</td>
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<td>0.006</td>
<td>0.121</td>
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<tr>
<td>Leader CQ</td>
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<td>14.009</td>
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<td>Masculinity</td>
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<td>4.326</td>
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Note: * Effect size ($R^2$)/(1-$R^2$)

At the 5% significance level (Lazaraton, 1991), leader CQ was the most important predictor of directive leadership and accounted for 15.40% of the variance therein. The inclusion of subordinate uncertainty avoidance, masculinity, long-term orientation and collectivism in the model, although statistically significant, merely led to a cumulative increase of 6.10% in the amount of directive leadership explained. Subordinate power distance did not make a distinctive and autonomous contribution to the models. The effect size of model 1 was 0.182,
of model 2 was 0.222, of model 3 was 0.248, of model 4 was 0.264 and finally of model 5 was 0.274. As all of these effect sizes fall between 0.15 and 0.35, the practical significance of each model was moderate (Ellis & Steyn, 2003). The cumulative increase in effect size pursuant to the inclusion of subordinate cultural identity was 0.092 (that is, 0.274 – 0.182). This change was of no practical significance (Ellis & Steyn, 2003). H2o was, nevertheless, not rejected because power distance played no role.

5.8. DISCUSSION

This section of the research sought to establish the part played by the cultural identity of subordinates in the display of empowering and directive leadership by their leaders, if the latter possess CQ. As a first step, the relationships between subordinate cultural identity with empowering and directive leadership were considered. It was suggested in the literature review that empowering leadership might be preferred in masculine cultures. As pointed out previously, the actual score for subordinate masculinity (2.26) indicated a slight bias towards femininity; consequently, the negative association between empowering leadership and subordinate masculinity was expected. It was also argued that directive leadership would most likely be embraced by those staff members high in uncertainty avoidance, who are collectivist by nature and tend towards a long-term orientation. Hence, the observed relationships between subordinate uncertainty avoidance, collectivism and long-term orientation with directive leadership (see Table 5.3), given the scores presented in Table 5.1, relative to their observed relationships with empowering leadership, met expectations.

The absence of a relationship between subordinate power distance and empowering leadership, coupled with (1) the lack of practical significance in the relationships that subordinate uncertainty avoidance, collectivism and long-term orientation had with empowering leadership and (2) the low practical significance of the relationship between subordinate masculinity and empowering leadership, indicates that empowering leadership occurred mostly in isolation from subordinate cultural identity. In contrast though, directive leadership was displayed more often when subordinate cultural identity favoured uncertainty avoidance, collectivism and long-term orientation.
Secondly, the relationships between subordinate cultural identity and leader CQ were investigated. As cognitive CQ comprises cultural knowledge (Ang et al., 2015), it was anticipated that subordinate cultural identity and leader CQ would share relationships of practical importance. The non-existence of such relationships (apart from that between subordinate long-term orientation and leader CQ) might indicate that the leaders were more focused on other components of their CQ (for example, metacognitive CQ and motivational CQ).

Thirdly, the relationships of leader CQ with empowering and directive leadership were explored. In this respect, empowering leaders were considered to be more culturally intelligent than were directive leaders.

Lastly, the ability of subordinate cultural identity to predict empowering and directive leadership, given leader CQ, was examined. The results show that empowering leaders were guided by their CQ rather than the cultural identity of their staff members. Although directive leaders did consider subordinate cultural identity they relied more on their CQ. It is suggested that the reason directive leaders considered the cultural identity of their subordinates, in comparison to empowering leaders, could be that directive leaders have lower levels of CQ than their empowering colleagues. Overall, these findings are in line with that of Kuchinke (1999) who concluded from his study of employees, working at a single company operating in the United States and Germany, that the cultural dimensions only explained a minor amount of leadership style variance. Kuchinke (1999) continued to posit that, although the cultural dimensions impacted leadership somewhat, different variables would most likely carry more weight. In this research, leader CQ was the main driver of empowering and directive leadership.

5.9. MANAGERIAL IMPLICATIONS

This part of the research offers valuable insights into African leadership which are especially important since most leadership literature is based upon a white male US-centric perspective (Lawler, 2005). Accordingly, it contains a number of important managerial implications.

Firstly, it is essential that leaders be sensitised towards and be made cognisant of the cultural
profiles of their staff members. This is so because the preference for, and thus the desirability of different leadership styles, varies across cultures. Managers are, however, alerted to the fact that a mere understanding of culture or cultural identity (forming part of the cognitive dimension of CQ) is insufficient to guide leaders, operating in culturally diverse environments, as regards the adoption and display of empowering and directive leadership. Rather, it is the leader’s composite CQ that is the chief variable in this regard. This suggests that leaders must not only process (metacognitive CQ) and apply (behavioural CQ) such knowledge but should also embrace multicultural leadership (motivational CQ). To this end, it has been demonstrated that leaders with higher levels of CQ are associated with greater empowering behaviours and, to a lesser extent, directive actions.

As leadership coaching and development ought to be a key strategic organisational imperative (Koohang, Paliszkiewicz & Goluchowski, 2017), the enhancement of leader CQ should be pursued by all organisations. With this in mind, human resource managers are advised to work with training practitioners in order to ensure that leadership development programmes, specifically, upskill leaders beyond a comprehension of culture. The ultimate aim of these initiatives should be the stimulation and enhancement of leaders’ overall CQ.

Secondly, managers are advised that they may use the CQS to assess leader CQ within the South African context as this instrument has been shown to be both valid and reliable. This result aligns with that of Mahembe and Engelbrecht (2014) who studied the construct validity of CQ within the context of a South African university.

Finally, the CVS has been assessed as valid and reliable in its South African application; thus, South African managers may employ it to measure cultural identity. This supports the cross-national application of the CVS which has previously been used mostly in Brazil, Korea, Poland, Thailand and the USA (Prasongsukarn, 2009) and contributes to satisfying the call by Mazanec et al. (2015) for additional testing on the CVS using samples from countries other than the USA.
5.10. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The results of this research are subject to certain limitations. Despite the random selection of respondents within the participating organisations, it may not be possible to extend the insights derived from this research across the population as the choice of organisations was not random. Accordingly, it would be valuable for future researchers to replicate this research not solely in South Africa but also in other African and non-African countries. This would provide opportunities to contextualise the findings within the African milieu and across regions. Another limitation was that subordinate cultural identity was based exclusively upon the Hofstede (1980, 2011) cultural dimensions. Prospective researchers should consider an expanded view of subordinate cultural identity through the inclusion of other cultural dimensions, such as those used by GLOBE (for example, performance and humane orientation).

5.11. CONCLUSION

This research was conducted with a view to establishing the part played by subordinates’ cultural identity in the display of empowering and directive leadership by their leaders, assuming leader CQ. Leader CQ was found to be a more important predictor of both empowering and directive leadership than was cultural identity of subordinates. Despite the observed relationships between (1) masculinity and empowering leadership and (2) uncertainty avoidance, masculinity, long-term orientation and collectivism with directive leadership, subordinate cultural identity explained very little of the variance in empowering and directive leadership. Hence, whilst culturally attuned leaders may be displaying empowering and directive leadership in line with subordinates’ expectations (based on their cultural identities), it is more probable that the display of these styles is guided by leader CQ. This research has, through the provision of empirical evidence, satisfied the purpose for which it was undertaken and thereby has contributed significantly to the body of knowledge.
CHAPTER 6: LEADERSHIP STYLE AND LEADERSHIP EFFECTIVENESS: DOES CULTURAL INTELLIGENCE MODERATE THE RELATIONSHIP?

In this chapter, empirical objective 3, that is, to determine whether leader CQ affects the relationship between leadership style (empowering and directive) and leadership effectiveness, is addressed.

6.1. INTRODUCTION

Leaders are central to organisational achievement (Araujo-Cabrera, Suarez-Acosta & Aguiar-Quintana, 2016; Muchiri et al., 2011; Murschetz, 2005); consequently, it is vital that they be effective. However, a lack of certainty prevails as to what is necessary for one to be an effective leader (Rosete & Ciarrochi, 2005). This situation is exacerbated in that there is “neither a universally accepted approach to nor definition of” leadership effectiveness (Mesterova et al., 2015, p. 109). Accordingly, leadership effectiveness is manifested as a relative judgement predicated upon both description and evaluated characteristics (Oyinlade, 2006).

A particular challenge in the domain of leadership effectiveness has been the assessment thereof. Specifically, there exists little agreement as to how to measure such effectiveness (Harris & Kuhnert, 2008; Shalhoop & Sanger, 2012). Lowe, Kroeck and Sivasubramaniam (1996) suggest two types of measures: (1) subordinate perceptions and (2) organisational measures. Whilst some authors (for example, Hansbrough, Lord & Schyns, 2015) highlight concerns, such as common method bias, in using follower ratings, others (including Hogan & Hogan, 2001; Kang & Jin, 2015) argue that employee assessments are the best manner through which a leader can be evaluated. This research addresses subordinate perceptions of leadership effectiveness.

Perceptions of this type of effectiveness are influenced by leadership styles (Weaver, 2015). These may be defined as “the relatively consistent pattern of behavior that characterizes a leader” (DuBrin 2016:518). Although a myriad of such styles exist (Widder, Kolthoff & Brindley 2016), Pearce et al. (2003), by means of an analysis of the leadership literature, offered a
leadership typology comprising of “four theoretical behavioral types”, being transactional, transformational, empowering and directive leadership (p. 273). Both Houghton and Yoho (2005) and Ramthun and Matkin (2012) draw attention to the value of this typology by pointing out that it has been employed by a number of scholars as a foundation upon which to conceptualise various leadership models. Whilst the transactional and transformational styles occupy prominence in current leadership literature (Clark & Waldron, 2016; Sims, Faraj & Yun, 2009), empowering and directive leadership have attracted considerably less focus (Kalaluhi, 2013; Sharma & Kirkman, 2015). There has also been some criticism in the literature as to the distinction between those behaviours that load onto transactional and transformational leadership as a result of factor analyses (Yukl, 1999). This research therefore concentrated exclusively on empowering and directive leadership.

Leadership styles are culturally contingent (Bass & Bass, 2008; House et al., 2002; Paulienë, 2012; Rockstuhl et al., 2011) as are perceptions of their respective effectiveness (Eckert et al., 2010; Holt, Bjorklund & Green, 2009; Jogulu, 2010; Yan & Hunt, 2005). Based on their work, Martin, Liao and Campbell (2013) draw attention to the necessity of leaders modifying their behaviours, given subordinates’ perceptions thereof. Hendrickson (2016) asserts that leaders who disregard culture, particularly during intercultural interactions, will adversely impact the effectiveness of their leadership. Conversely, leaders who are culturally cognisant and behave in accordance therewith are likely to be increasingly effective (du Plessis, 2011; Mustafa & Lines, 2012). With this in mind, Paulienë (2012) indicates that effective leadership in individualistic cultures is generally regarded as the action of producing superior financial results. The focus is on the outcomes flowing from the behaviour of the leader as opposed to any specific behaviour type per se (Paulienë 2012). Collectivist societies, on the other hand, consider effective leadership as a durable objective germinating from subordinate dependability, which stems from leaders affording them security and direction (Paulienë, 2012).

Cultural differences are, accordingly, a central situational influence in leadership effectiveness (Avery, 2004; Deng & Gibson, 2008; Ersoy, 2014). The inference is that leaders, in the adoption and display of leadership styles, need to be informed by the cultural predilections of their
subordinates. This is especially relevant given the extent to which the workforce is now multicultural in nature (Balter, Chow & Jin, 2014; Kapur & Janakiram, 2015; Kodwani, 2012; Raguž, Filipović & Matijević, 2014; Strydom & van Eeden, 2013) as well as the shortage of effective multicultural leaders (Grubb, 2014).

Whilst Jogulu (2010) argues that being amenable towards cultural sensitivities that could be profoundly dissimilar from one’s own values and dogmas is essential for leadership effectiveness and Egel and Fry (2016) maintain that leaders must grasp varied cultural perspectives, Ayman and Korabik (2010) go a step further in submitting that to be effective, leaders must cultivate a multicultural mind-set. Hence, ethnocentrism, defined as “the view of things in which one’s own group is the center of everything, and all others are scaled and rated with reference to it” (Sumner, 1906, p. 13), may inhibit the effectiveness of leadership (Kumar, Anjum & Sinha, 2011; Northouse, 2013); that is, leader actions which are incongruent with essential follower values arouse adverse sentiments (Mustafa & Lines, 2012). Specifically, leaders’ ethnocentric tendencies may have a toxic effect on their relationship with subordinates (Caligiuri & Tarique, 2012).

The need for leadership that is able to navigate effectively across diverse cultures is therefore both exigent and extensive (Groves & Feyerherm, 2011; Ko, 2015; Lovvorn & Chen, 2011; Manning, 2003). Alon et al. (2016) point out that effective leadership is founded upon multiple intelligence types, one of which is cultural intelligence (CQ) - or “a person’s capacity to adapt to new cultural settings” (Earley, 2002, p. 271). It has been suggested that CQ may contribute to overcoming ethnocentrism (Caldwell, 2015; Triandis, 2006) and, to this end, Harrison (2012) found a negative correlation between ethnocentrism and CQ. Livermore and Ang (2016) argue that CQ is a trustworthy forecaster of one’s effectiveness, whilst Oliverio-Olivieri (2016) maintains that leaders who are effective exhibit CQ. Ng, Van Dyne and Ang (2012) refer to the role that CQ plays in improving leadership effectiveness. It is reasonable then to expect that CQ will assist leaders to fare better; that is, to be increasingly effective when operating within culturally heterogeneous situations.
Empirical evidence of the relationship between leader CQ and leadership effectiveness is sparse in that just a handful of studies have specifically examined the association between these two concepts. Deng and Gibson (2008) as well as Ersoy (2014) found, in their respective qualitative studies, that leader CQ positively impacted the effectiveness of leaders. Research by Groves and Feyerherm (2011), based on data obtained from 99 leaders and 321 of their subordinates, indicated that leader CQ predicted leadership effectiveness. The study by Rockstuhl et al. (2011) of 126 Swiss military officers established that leader CQ was positively related to the effectiveness of cross-border leadership, yet demonstrated no relationship with general leadership effectiveness. Musamali and Martin (2016) investigated the association between five separate effective leadership practices and the dimensions of CQ in higher education institutions in Kenya and the United States. They found that, at the 5% significance level, cognitive CQ correlated significantly with three of the practices, whilst metacognitive CQ and motivational CQ each displayed a significant correlation with one of the practices. Behavioural CQ did not correlate with any of the practices.

The above-mentioned dearth of empirical insights is exacerbated when leadership style is introduced as a variable. As Presbitero (2016a) observes, CQ can play the role of moderator in the relationship between two variables and, since the candidate is not aware of efforts to specifically examine leader CQ as the moderator between leadership style and leadership effectiveness, he, through this research, aimed to address such paucity in the knowledge base.

6.2. RESEARCH PURPOSE
The purpose of this section of the research was to determine whether leader CQ affected the relationship between leadership style (empowering and directive) and leadership effectiveness.

6.3. RESEARCH QUESTION
The question that directed this part of the research was: Is the relationship between leadership style (empowering and directive) and leadership effectiveness moderated by leader CQ?


6.4. LITERATURE REVIEW

The aim of the literature review was to describe the concepts forming part of the research.

6.4.1. Cultural intelligence

CQ is “an individual’s capability to adapt effectively to situations of cultural diversity” (Earley & Ang, 2003, p. 3) and, hence, depicts the capacity to seamlessly make the transition across multiple cultures as opposed to just a single or few cultures (Ng et al., 2012). CQ thus allows for the alleviation of stresses that emerge as a result of heightened exchanges between those persons possessing divergent cultural identities (Jonck & Swanepoel, 2015).

CQ persists as a discrete form of intelligence (Du Plessis, 2011) in that it may be distinguished from general cognitive intellect as well as emotional intelligence (Ang, Van Dyne & Rockstuhl, 2015). Whereas general cognitive intellect reflects the cognitive placement of intellectual aptitude (Bovornusvakool, Ardichvili & Rana, 2015) and emotional intelligence depicts the capacity to recognise and control emotions, neither includes the capability to interact with persons representative of cultural diversity (Ng et al., 2012).

CQ is multi-dimensional in nature (Ang et al., 2007). The dimensions comprise (1) metacognition, which refers to “thought processes” (Racicot & Ferry, 2016, p. 116), that is, the ability of leaders to prepare optimally for cross-cultural interaction, to assess progress during the exchange and to effect any modifications to their mental framework regarding the other culture (Van Dyne, Ang & Livermore, 2010); (2) cognition, which refers to cultural knowledge, as reflected by standards and practices (Ang et al., 2007) relating to linguistics, religious views, social behaviours as well as monetary and legal processes (Van Dyne, Ang & Nielsen, 2008) and, as such, represents the extent to which a leader grasps the concept of culture and the part it plays in directing cross-cultural interactions (Van Dyne et al., 2010); (3) motivation, which concerns the desire to participate in intercultural exchanges (Ang et al., 2015) or the efforts leaders expend in adapting cross-culturally (Van Dyne et al., 2010) and which evidences their intrinsic belief that they can operate fruitfully in intercultural conditions (Van Dyne et al., 2008) and (4) behaviour, which refers to overt actions (Ng, Van Dyne & Ang,
that are culturally pertinent (Sutherland, Edgar & Duncan, 2015) and may be verbal or non-verbal (Ang et al., 2015). Metacognitive and cognitive CQ represent the intellectual component of CQ and, hence, assist in developing the perspectives that flow from varied cultural experiences, whilst the action imperative is embodied in motivational and behavioural CQ (Mannor, 2008).

6.4.2. Empowering and directive leadership

Empowering and directive leadership represent distinct and dissimilar leadership behaviours (Hmieleski & Ensley, 2007) and are, thus, situated at the opposite ends of a range based on the extent to which subordinates are able to exert control (Clark, Hartline & Jones, 2009). Fong and Snape (2015) point out that organisations are evolving from a penchant for hierarchical leadership to one in which leaders encourage employee empowerment and support. Empowering leadership promotes “self-leadership, participative goal-setting, and opportunity thinking by followers” (Ling et al., 2015, p. 1067). As such, empowering leadership consists of employees perceiving that their leader’s actions facilitate their involvement in decision-making through the provision of opportunities for thinking innovatively, and thereby taking measured risks (Bester, Stander & van Zyl, 2015). Accordingly, empowering leadership stimulates responsibility taking as opposed to the issuing of instructions (Maggitti, Slay & Clark, 2010) and is, in the main, distinguishable from other styles of leadership in that it eliminates subordinates’ feelings of powerlessness (Li et al., 2016). Clark and Waldron (2016) observe that this style of leadership also promotes sharing and cooperation.

Empowering leadership has been demonstrated to be an “effective leadership style for many employees and organizational settings” (Sharma & Kirkman, 2015, p. 199). With this in mind, Sharma and Kirkman (2015) note that empowering leadership has been positively linked with both (1) organisational and team outcomes (incorporating: performance, behaviours, efficacy and knowledge creation) and (2) individual level results (such as positive employee attitudes, engagement, satisfaction, creativity, employee in and extra-role behaviours, knowledge sharing and follower commitment). Indeed, Praszkier (2015) considers that empowering leadership “is becoming critical in the growing world of multiplicity and unpredictability” (p. 34).
However, several scholars (including, Cheong et al., 2016; Yun, Cox & Sims, 2006; Wong & Giessner, 2016) have established that where subordinate expectations of empowerment are not aligned with leader empowering behaviours, empowerment can have adverse consequences. Lee et al. (2016) found that a curvilinear relationship (an inverted U shape) exists between empowering leadership and employee task performance. This suggests that a point is reached where additional empowerment actually begins to detract from an employee’s performance despite him or her being inclined to such a leadership style. It is not irrational to expect the effectiveness of this leadership style to diminish following poor staff member performance.

Directive leadership entails providing subordinates with precise guidance on what needs to be achieved, how it should be done and the necessary quality level (Martin et al., 2013), and appears to be more prevalent amongst lower level leaders as opposed to their more senior counterparts (Oshagbemi, 2008). Directive leaders observe performance and provide comment thereon (Martin et al., 2013) whilst making use of chastisement when goals are not achieved (Clark & Waldron, 2016). This leadership style is optimal when a leader exercises legitimate power and the work activities of subordinates are organised, logical and do not involve complexity (Sauer, 2011).

Directive leadership has been associated with poor decision-making (Cruz, Henningsen & Smith, 1999) and has been deemed less attractive than empowering leadership (Lorinkova, Pearsall & Sims, 2013). Nonetheless, directive leadership is noted as assisting in the evolution of a vision shared by non-homogeneous senior management teams (Hmieleski & Ensley, 2007). It promotes proactive employee behaviours when employees are satisfied with their leader (Martin et al., 2013). This leadership style has also been found to enhance the relationship between transformational leadership and organisational commitment (Mesu, Sanders & van Riemsdijk, 2015). It delivers initial team performance faster than that achieved in teams with empowering leaders (Lorinkova et al., 2013) and is the appropriate leadership style when staff members have an external locus of control (Mittal, 2015) or a major crisis is faced (Maggitti et al., 2010).
Despite the absence of empirical outputs on the relationship between CQ and each of empowering and directive leadership, Livermore (2015) contends that culturally intelligent leaders are able to discern the requirement for an empowering style rather than one based upon providing direction. This is vital as Martin et al. (2013) found in their study that empowering and directive leadership could be “equifinal” (that is, achieve the same end result) in delivering core task proficiency (p. 1386).

6.4.3. Leadership effectiveness

Leadership effectiveness represents the ability of a leader “to mobilize and influence followers” (Cicero, Pierro & van Knippenberg, 2010, p. 411) and is crucial in that it drives the proclivity of the workforce towards the attainment of shared goals (De Cremer & van Knippenberg, 2004). In this respect, Manamela, Cassim and Karodia (2016) point out that effective leaders are adept at recognising and positively utilising both the competencies and limitations of their subordinates in the achievement of organisational objectives. Weaver (2015), likewise, affirms the constructive impact that effective leaders have on the results of their subordinates.

Dorfman et al. (2012) comment that leaders who act in accordance with expectations are the most effective, whilst Bjurstedt (2007) insists that effective leaders are those who favour personal over positional power and are also able to adjust their style as required. Manning (2003) notes that leaders effective in cross-cultural leadership possess “relationship competence” (p. 21); that is, they are able to emotionally connect with diverse individuals and establish mutually attractive relationships. It appears then that effective leaders are those who exemplify interpersonal aptitudes that allow them to form solid connections with an array of individuals through which they add value to the latter in accordance with expectations which, in turn, leads to goal accomplishment.

Leadership effectiveness may be evaluated in a variety of ways and at different levels (Kang & Jin, 2015). Kaiser, Hogan and Craig (2008), through an examination of 10 meta-analyses, identified two primary measurement types for leadership: (1) individual perceptions and (2) group performance (these two measurement groupings are similar to those noted by Lowe
et al., 1996, and mentioned earlier in this chapter). Individual perceptions may be split between (1) leadership emergence (being perceived as a leader by, for example, colleagues) and (2) perceived effectiveness [as a leader] (Kaiser et al., 2008). Group performance comprises (1) group process (results achieved in terms of team member motivation, behaviour levels and team dynamics) and (2) group achievements such as productivity and financial outcomes (Kaiser et al. 2008). The effectiveness of leaders exhibits a greater alignment with subordinates’ perspectives of leader actions, as opposed to leaders’ self-reported views (Kim & Yukl, 1995). Likewise, Conway (2000) notes that subordinates’ ratings may offer an enhanced reflection of the aptness of leader behaviours.

Leadership effectiveness has been linked with leader intelligence (Mesterova et al., 2015) and is associated with leader self-awareness (Butler, Kwantes & Boglarsky, 2014). It may be predicted by leader prototypicality (especially where subordinates are subject to role ambiguity) (Cicero et al., 2010). Alabi (2012) notes that it is also influenced by the quality of the exchange relationships between leaders and each of their subordinates (see Kim, Liu & Diefendorff, 2015, for a discussion of Leader-Member Exchange) and is positively related to organisational cultures that endorse employee satisfaction (Kwantes & Boglarsky, 2007). In terms of leadership styles, perceptions of leadership effectiveness correlate with transformational and transactional (Deluga, 1991) as well as empowering and ethical leadership (Hassan et al., 2013).

6.5. HYPOTHESES
The hypotheses investigated were as follows:

• H10: The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness,

• H20: The CQ dimensions of leaders do not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness,

• H30: The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership
effectiveness, and

• H4o: The CQ dimensions of leaders do not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness.

6.6. RESEARCH METHOD

This section sets out applicable methodological details as a basis for contextualising the research that was undertaken.

6.6.1. Research design

A cross-sectional survey design was employed. This design is useful when the intention is to examine a population in terms of particular outcomes (Levin, 2006).

6.6.1.1. Population

The population was defined as all leaders, irrespective of their level of seniority or particular function, at all organisations operating in South Africa. A leader was considered to be any employee to whom another staff member directly reports.

6.6.1.2. Sample

Without an entrée into an organisation, it is frequently difficult to obtain permission to approach employees with a view to undertaking research. Hence, a convenience sample was drawn from 19 South African organisations. Access to the organisations was achieved by recruiting 18 Master’s degree level students (the students), from the Graduate School of Business Leadership at the University of South Africa (GSBL), to act as fellow researchers; they were employed by the respective organisations. The 19th organisation that participated was the employer of the candidate.

Most CQ research to date has been based upon self-report methodologies; as a result, the application of observer originated measures could enhance the strength of CQ research findings (Ang et al., 2015). Similarly, as noted earlier, Conway (2000) and Kim and Yukl (1995) highlight
the benefits of using subordinates to evaluate leaders. Sample respondents thus consisted of the subordinates of leaders. In total, 1,140 completed responses to the survey were received.

6.6.1.3. **Unit of analysis**

Staff members’ perceptions of their leaders’ CQ, leadership style and leadership effectiveness comprised the individual unit of analysis.

6.6.1.4. **Survey questionnaire**

A number of instruments, which are described below, were included in the survey questionnaire in order to measure the variables.

Leader CQ was assessed via the observer report version of the Cultural Intelligence Scale (CQS) (Van Dyne, Ang & Koh, 2008). The CQS has demonstrated all types of validity: convergent, criterion and discriminant (Van Dyne et al., 2008) and has been shown to be reliable (Rockstuhl et al., 2011). Empowering leadership was measured by the 10-item instrument of Ahearne, Mathieu and Rapp (2005). Zhang and Bartol (2010) indicate that it captures the essence of empowering leadership, whilst Yoon (2012) confirmed the validity of this instrument. Directive leadership was evaluated by a combination of the six and four item instruments of Pearce and Sims (2002) and Hwang et al. (2015), respectively. The reliability of the instruments’ items has been confirmed by Hinrichs (2011) and Hwang et al. (2015), respectively. Leadership effectiveness was measured through four items constructed by Cicero et al. (2010). These items have delivered a high level of reliability (Cicero et al., 2010).

Permission to use the instruments was obtained from the respective authors.

6.6.2. **Research process**

The research process commenced with an application for ethical clearance from the Research Ethics Review Committee of the GSBL. Once such approval had been secured (under no: 2016_SBL_003_CA), the students attended a session at which further details of the research were discussed. In particular, they were exposed to the survey questionnaire and the
respondent information sheet, concepts were explained and timelines agreed. The students were provided with a template that they were required to have completed by their respective employer’s chief executive in terms of which permission was granted, on the basis of the organisation’s anonymity, for the research to be conducted therein.

After consent had been obtained from the chief executive of their respective employer, the students sourced a list of employees from the human resource division of their organisation and allocated a number to each name. Potential respondents were identified randomly through the application of a random number generator. The students then invited the identified persons to a meeting at which the research was explained. They were also advised that participation would be on a purely voluntary basis. It was pointed out that neither they nor the organisation would be required to disclose any identifying particulars.

Attendees were subsequently provided with a research information sheet. Those staff members who indicated their willingness to participate were handed a hard copy of the questionnaire and were requested to complete it at the meeting. The data from the completed questionnaires were then entered into a template based spreadsheet by the students and submitted to the candidate. The candidate followed the same process in administering the questionnaire to respondents from his employer.

6.6.3. Data analysis

Data analysis was conducted through IBM SPSS. Respondent demographics were established by calculating frequencies and certain central statistics. Central statistics were also computed for the independent and dependent variables. These included minimum and maximum values, mean scores as well as standard deviations.

Relationships between variables were evaluated through the calculation of Pearson’s product-moment correlation coefficients. Statistical significance was evaluated at the 5% level, as recommended by Lazaraton (1991). The practical significance of correlation was determined with respect to the guidelines devised by Cohen (1988), which indicate that correlations are
small when they fall between 0.10 and 0.30, medium when they lie between 0.30 and 0.50 and are large when they exceed 0.50.

Principal axis factor analysis with direct Oblimin rotation was employed to assess instrument validity. The guidelines suggested by Coover and McNelis (1988) and Costello and Osborne (2005) were followed in determining the number of factors to retain; that is, factors with eigenvalues exceeding 1 and scree plot examination, respectively. In examining the scree plots, the number of factors to keep was taken to be the number of eigenvalues that preceded the final main drop in extent (DeCoster, 1998) or “the point at which the slope approaches zero” (Floyd & Widaman, 1995, p. 292). The recommendation by Osborne and Costello (2009) that a “solid factor” is one which has “5 or more strongly loading items (0.50 or better)” was followed in assessing factor desirability (p. 138). Osborne and Costello (2009) also suggest that a weak factor is one that has less than three items loading on it. Thus, a factor was accepted where it had no fewer than four items, or at least 80% of the number of items from the respective measurement scale, that loaded onto it with a minimum weight of 0.50 (Hair et al., 2010). Reliability was assessed as acceptable where Cronbach’s coefficient alphas were greater than 0.70 (see Pallant, 2011).

To test for moderation, a two-step approach, as suggested by Garnett, Marlowe and Pandey (2008), was adopted. These steps entail (1) confirmation that both the independent and moderator variables relate at a statistically significant level to the dependent variable and (2) calculation of the relationships again together with the inclusion of an interaction term (representing a combination of the independent and moderator variables). Where the results of the second calculation show evidence of a statistically significant relationship between the interaction term and the dependent variable, then the variation between the effect of the independent variable in the first and second calculations may be attributed to the presence of the moderator variable (Garnett et al., 2008).

The practical significance of the regression models’ moderation was appraised through the calculation of the $f^2$ statistic. This statistic, note Ellis and Steyn (2003), acts as a measure of the
effect size in multiple regressions and is calculated as $R^2/(1-R^2)$. Where $R^2<0.13$, $f^2$ will be $<0.15$. In such instances, it may be accepted that $R^2$ does not, practically, differ from zero and the size of the regression coefficient is therefore not significant at a practical level (Ellis & Steyn, 2003). On the other hand, Ellis and Steyn (2003) conclude, from the guidelines by Cohen (1988), that where $f^2$ exceeds 0.35, the effect of $R^2$ is of practical importance. For this research, an $f^2<0.15$ was deemed as not significant, as medium when it was situated between 0.15 and 0.35 and as large when it exceeded 0.35.

6.7. RESULTS

The data analysis results follow, starting with respondent demographics and descriptive statistics of the variables. The psychometric properties of the measures follow. In turn, correlation and moderation statistics are subsequently presented.

6.7.1. Respondent demographics

Table 6.1: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>573</td>
<td>50.27</td>
<td>50.27</td>
</tr>
<tr>
<td>Female</td>
<td>567</td>
<td>49.73</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>1140</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

The genders were evenly spread. This compares favourably with South African workforce gender statistics (see Statistics South Africa, 2016) which reflect males as comprising 56.25% and females as 43.75% of this force.

Table 6.2: Age (years)

<table>
<thead>
<tr>
<th>Youngest</th>
<th>Oldest</th>
<th>Mean</th>
<th>Median</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>64</td>
<td>38.62</td>
<td>37.00</td>
<td>9.36</td>
</tr>
</tbody>
</table>

The oldest respondent was 64 whereas the youngest was 20. The median age was 37.

Table 6.3: Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>762</td>
<td>66.84</td>
<td>66.84</td>
</tr>
<tr>
<td>White</td>
<td>206</td>
<td>18.07</td>
<td>84.91</td>
</tr>
</tbody>
</table>
Blacks and whites dominated race group representation. This is largely reflective of the South African working population profile estimates (see Statistics South Africa, 2016) where Blacks made up 73.38%, Whites 12.71%, Coloureds 10.67% and Asians 3.24% of employed persons.

### 6.7.2. Descriptive statistics

The calculated descriptive statistics appear below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader CQ aggregate</td>
<td>1.00</td>
<td>7.00</td>
<td>4.53</td>
<td>1.17</td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.96</td>
<td>1.45</td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.42</td>
<td>1.33</td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.57</td>
<td>1.34</td>
</tr>
<tr>
<td>Leader behavioural CQ</td>
<td>1.00</td>
<td>7.00</td>
<td>4.15</td>
<td>1.40</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>1.00</td>
<td>7.00</td>
<td>5.12</td>
<td>1.37</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>1.00</td>
<td>5.00</td>
<td>3.52</td>
<td>0.81</td>
</tr>
<tr>
<td>Leadership effectiveness</td>
<td>1.00</td>
<td>7.00</td>
<td>5.08</td>
<td>1.69</td>
</tr>
</tbody>
</table>

It can be perceived from Table 6.4 that leader CQ (aggregate) achieved a mean score of 4.53. At a dimensional level, leader metacognitive CQ scored the highest (4.96) whilst leader behavioural CQ was rated the lowest (4.15). The mean score for empowering leadership was 5.12 whilst it was 3.52 for directive leadership. The lower mean score for directive leadership could be due to the respective rating scale ranging from 1-5. Leadership effectiveness was rated at 5.08.

### 6.7.3. Psychometric properties of the measures

#### 6.7.3.1. Reliability

Reliabilities were assessed as satisfactory because all the alphas exceeded 0.70 (see Table 6.5). In fact, all the alphas, apart from that for directive leadership, were 0.90 or greater. Leader CQ in aggregate as well as leadership effectiveness achieved the highest alphas (0.95). The lowest alpha was 0.87 (for directive leadership).
6.7.3.2. Factorial validity

Table 6.5: Factor analysis and reliability information

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kaiser-Meyer-Olkin scores</th>
<th>Bartlett’s Test of Sphericity</th>
<th>No of factors</th>
<th>Percent of variance declared</th>
<th>Reliability coefficient α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader CQ aggregate</td>
<td>0.95</td>
<td>17 980.20*</td>
<td>4</td>
<td>74.38%</td>
<td>0.95</td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.93</td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.91</td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.90</td>
</tr>
<tr>
<td>Leader behavioural CQ</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.91</td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.92</td>
<td>8 325.82*</td>
<td>1</td>
<td>62.16%</td>
<td>0.93</td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.84</td>
<td>6 434.06*</td>
<td>3</td>
<td>75.90%</td>
<td>0.87</td>
</tr>
<tr>
<td>Leadership effectiveness</td>
<td>0.86</td>
<td>4 723.18*</td>
<td>1</td>
<td>87.13%</td>
<td>0.95</td>
</tr>
</tbody>
</table>

*p<0.05

All the variables were found to be factorable, whilst sampling adequacy was acceptable based on Kaiser-Meyer-Olkin scores (see Dziuban & Shirkey, 1974, for guidelines) and the significance of the Bartlett’s Tests of Sphericity. Applying the eigenvalue rule of greater than 1 and confirming this with the number of eigenvalues that were located prior to the final drop in magnitude per scree plots, leader CQ was assessed as having four factors with a declared variance of 74.38%. Directive leadership was found to have three factors with a declared variance of 75.90%. These factors exhibited high internal consistency in that the alpha did not rise when scale items were purged. Thus, for purposes of this research, directive leadership was accepted as unidimensional. Empowering leadership and leadership effectiveness had one factor each. The declared variance for empowering leadership was 62.16% whilst it was 87.13% for leadership effectiveness. The number of items and their individual loadings for all the factors satisfied the guidelines as per Hair et al. (2010) and Osborne and Costello (2009) (discussed as part of the data analysis section).

6.7.4. Correlations

Table 6.6: Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leader CQ aggregate</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Leader metacognitive CQ</td>
<td>0.85*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Leader cognitive CQ</td>
<td>0.86*</td>
<td>0.64*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Leader motivational CQ</td>
<td>0.88*</td>
<td>0.66*</td>
<td>0.72*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Leader behavioural CQ</td>
<td>0.81*</td>
<td>0.56*</td>
<td>0.58*</td>
<td>0.62*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The correlation coefficients between leader CQ and each of its dimensions with leadership effectiveness ranged from a high of 0.61 in the case of metacognitive CQ to a low of 0.41 for behavioural CQ. Empowering leadership demonstrated a higher correlation with leadership effectiveness than did directive leadership (0.77 versus 0.47). All the correlations were statistically significant at the 5% level.

### 6.7.5. Moderated multiple regressions

Tables 6.7 and 6.8 present the results of the moderated multiple regressions that were performed to establish whether leader CQ and its dimensions influenced the relationship between empowering leadership and leadership effectiveness as well as that between directive leadership and leadership effectiveness.

**Table 6.7: Moderated multiple regression for empowering leadership and leadership effectiveness**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R^2</th>
<th>R^2 change</th>
<th>Coeff.</th>
<th>Std. error</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0.780</td>
<td>0.609</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.08</td>
<td>0.04</td>
<td>131.98</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader CQ aggregate</td>
<td>0.25</td>
<td>0.04</td>
<td>6.63</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.81</td>
<td>0.03</td>
<td>23.69</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.19</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>0.782</td>
<td>0.612</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.09</td>
<td>0.04</td>
<td>130.98</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>0.22</td>
<td>0.03</td>
<td>7.20</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.79</td>
<td>0.04</td>
<td>22.51</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>0.00</td>
<td>-0.01</td>
<td>0.02</td>
<td>-0.51</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>0.777</td>
<td>0.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.08</td>
<td>0.04</td>
<td>145.34</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>0.17</td>
<td>0.03</td>
<td>6.10</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.87</td>
<td>0.03</td>
<td>30.64</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
<td>0.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 4</td>
<td>0.774</td>
<td>0.600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.08</td>
<td>0.04</td>
<td>135.10</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader motivational CQ</td>
<td>0.15</td>
<td>0.03</td>
<td>4.68</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowering leadership</td>
<td>0.87</td>
<td>0.03</td>
<td>27.05</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
<td>-0.03</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 5</td>
<td>0.772</td>
<td>0.595</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.07</td>
<td>0.04</td>
<td>142.15</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As can be observed from the above table, the failure of the interaction terms to achieve statistical significance indicated that neither leader CQ, as an aggregate value, nor any of its individual dimensions displayed a moderator effect on the relationship between empowering leadership and leadership effectiveness. Thus, $H_1$ and $H_2$ were not rejected.

Table 6.8: Moderated multiple regression for directive leadership and leadership effectiveness

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>Coeff.</th>
<th>Std. error</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0.654</td>
<td>0.428</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.13</td>
<td>0.04</td>
<td>121.65</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader CQ aggregate</td>
<td>0.68</td>
<td>0.04</td>
<td>16.08</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.54</td>
<td>0.06</td>
<td>9.06</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>-0.009</td>
<td>-0.15</td>
<td>-4.34</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>0.675</td>
<td>0.456</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.11</td>
<td>0.04</td>
<td>124.69</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader metacognitive CQ</td>
<td>0.58</td>
<td>0.03</td>
<td>17.69</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.62</td>
<td>0.06</td>
<td>10.54</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>-0.004</td>
<td>-0.08</td>
<td>-2.57</td>
<td>0.01*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>0.582</td>
<td>0.339</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.12</td>
<td>0.04</td>
<td>114.48</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader cognitive CQ</td>
<td>0.44</td>
<td>0.04</td>
<td>12.21</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.69</td>
<td>0.06</td>
<td>10.78</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction term</td>
<td>-0.008</td>
<td>-0.12</td>
<td>-3.34</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 4</td>
<td>0.610</td>
<td>0.372</td>
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<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.14</td>
<td>0.04</td>
<td>117.25</td>
<td>0.00*</td>
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<tr>
<td>Leader motivational CQ</td>
<td>0.49</td>
<td>0.04</td>
<td>12.99</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive leadership</td>
<td>0.63</td>
<td>0.06</td>
<td>10.33</td>
<td>0.00*</td>
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<tr>
<td>Interaction term</td>
<td>-0.012</td>
<td>-0.15</td>
<td>-4.77</td>
<td>0.00*</td>
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<td></td>
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<tr>
<td>Model 5</td>
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<tr>
<td>Constant</td>
<td>5.11</td>
<td>0.04</td>
<td>115.98</td>
<td>0.00*</td>
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<td></td>
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<tr>
<td>Leader behavioural CQ</td>
<td>0.36</td>
<td>0.03</td>
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<td>0.00*</td>
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</tr>
<tr>
<td>Directive leadership</td>
<td>0.77</td>
<td>0.06</td>
<td>12.35</td>
<td>0.00*</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Interaction term</td>
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<td>-0.10</td>
<td>-3.05</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p<0.05$

Table 6.8 demonstrates that leader CQ as well as its four dimensions did exhibit a statistically significant moderation effect on the relationship between directive leadership and leadership effectiveness. Hence, both $H_3$ and $H_4$ were rejected.
Figure 6.1 displays the absence of moderation by aggregate leader CQ on the relationship between empowering leadership and leadership effectiveness. Figure 6.2 indicates that aggregate leader CQ moderated the relationship between directive leadership and leadership effectiveness. The influencing effects of the leader CQ dimensions were almost exactly the same as the afore-mentioned patterns and are therefore not presented here.

Figure 6.1: Leader CQ (aggregate) moderation on the relationship between empowering leadership and leadership effectiveness

Figure 6.2: Leader CQ (aggregate) moderation on the relationship between directive leadership and leadership effectiveness
Figure 6.1 reveals that the intercepts for the three levels of leader CQ are close to one another and that the slopes of the lines are essentially parallel. In this case, it can be seen that moderation did not take place. Figure 6.2 reflects, in contrast, that moderation did occur as the intercepts are further apart and the lines have non-parallel slopes. The slope of the line where leader CQ is low is steeper than that of the line where leader CQ is high. This suggests that the moderation effect is greater at lower, rather than higher, levels of leader CQ.

6.8. DISCUSSION
The positive relationship that was found to exist between leader CQ and leadership effectiveness (given the different cultures of the respondents) is in line with the findings of Rockstuhl et al. (2011) that leader CQ was positively related to the effectiveness of cross-border leadership. The further finding that leader CQ acted as an important predictor of leadership effectiveness complements the results of Groves and Feyerherm (2011).

On a sub-scale level, the result that leader metacognitive, cognitive and motivational CQ shared statistically significant relationships with leadership effectiveness offers support for the results of Musamali and Martin (2016). The result that leader behavioural CQ also had a relationship of statistical significance with leadership effectiveness, nevertheless, contradicts what Musamali and Martin (2016) established with regard to leader behavioural CQ and leadership effectiveness.

This research also provides evidence that both empowering and directive leadership had a relationship with leadership effectiveness that carried statistical significance. The strength of these relationships was, however, much greater for empowering leadership than it was for directive leadership. Although there may be various explanations for this difference in strength, it is possible that it may have been a function of the cultural profiles or identities of the respondents being of such a nature that they were more inclined towards empowering, as opposed to directive, leadership.

It is important to note that of the relationships identified, just those between leader CQ in
aggregate, metacognitive CQ, motivational CQ and empowering leadership with leadership effectiveness are significant at a practical level. Being moderate in nature, all the other relationships carried less real-world relevance.

Employing the methodology of Garnett et al. (2008) revealed that, whilst empowering leadership (as the independent variable) and leader CQ and its dimensions (as the respective moderator variables) did have, as noted previously, statistically significant relationships with leadership effectiveness (as the dependent variable), none of the interaction terms (that is, empowering leadership multiplied by leader CQ and empowering leadership multiplied by the CQ dimensions) attracted statistical significance. As pointed out above, directive leadership (as the second independent variable), too, achieved a relationship of statistical significance with leadership effectiveness. In this case the effects of all the interaction terms (that is, directive leadership multiplied by leader CQ and directive leadership multiplied by the CQ dimensions) were statistically significant, implying moderation. The corresponding t-statistics were negative in all instances, indicating that a leader’s CQ, and its dimensions, in fact served to reduce the strength of the relationship between directive leadership and leadership effectiveness.

As the respective changes in $R^2$ attributed to all the interaction terms were below 0.13, it follows that none of the calculated $f^2$ statistics exceeded 0.15. Thus, the moderator effects of leader CQ and its dimensions on the relationship between directive leadership and leadership effectiveness were not significant from a practical perspective. [Note that practical significance was not considered in the case of empowering leadership and leadership effectiveness, as none of the observed effects for the interaction terms carried statistical importance.]

A possible reason why leader CQ and its dimensions did not moderate the relationship between empowering leadership and leadership effectiveness could be that those leaders who practice this style of leadership do so because they are culturally intelligent (as evidenced by the high correlation between leader CQ and empowering leadership). Similarly, it is conceivable that leader CQ, both in aggregate and dimensionally, at a statistical level, moderated the directive leadership and leadership effectiveness relationship because such leaders are viewed as being
less culturally intelligent than their empowering counterparts (see Table 6.6). The negative
direction of this moderation might be a signal that as directive leaders become increasingly
culturally intelligent, they ought to realise a different leadership style would be more
appropriate.

6.8.1. Theoretical implications
This research provides evidence for the four-factor theoretical structure of CQ as
conceptualised by Earley and Ang (2003). This result supports the findings of Mahembe and
Engelbrecht (2014) who established the validity of the four CQ dimensions in their study of 229
full time students at a South African university.

The CQ and leadership nomological networks have also been increased as it has been shown
that leader CQ, including each of its dimensions, as well as empowering and directive
leadership, all exhibited statistically significant associations with leadership effectiveness.
Further, it was established that leader CQ and its dimensions did not influence the relationship
between empowering leadership and leadership effectiveness and also that, whilst at a
statistical level they did, act as negative moderators of the relationship between directive
leadership and leadership effectiveness, such moderation was actually of no practical
consequence.

6.8.2. Practical implications
Taking account of the relative strength of the relationships between each of the leader CQ
dimensions with leadership effectiveness, leaders are advised to direct attention to the
development of their metacognitive CQ in particular. It would also be important for them to
enhance their levels of motivational CQ as this was the CQ dimension that recorded the second
strongest relationship with leadership effectiveness.

As subordinates perceived empowering leadership, rather than directive leadership, to be more
strongly associated with leadership effectiveness, leaders, in general, should pursue an
empowering style. However, leaders are advised to exercise caution in indiscriminately
empowering subordinates in that some of them, given their particular cultures, may not embrace this approach (see Cheong et al., 2016; Wong & Giessner, 2016; Yun, Cox & Sims, 2006). Leaders should further note that neither their CQ, nor any of its individual dimensions, are important influencers of the relationships that the leadership styles (in this case empowering and directive leadership) had with leadership effectiveness. It is suggested that culturally intelligent leaders could be using their CQ to guide themselves in selecting a suitable style of leadership; that is, leader CQ (including its dimensions) may affect the choice of leadership style.

6.9. LIMITATIONS AND RECOMMENDATIONS
The first limitation of this research relates to the use of a convenience sample. The scope for generalisation of the findings to the target population as a whole may therefore be restricted. This limitation, however, was somewhat allayed by the fact that (1) the participating organisations represent numerous industry types and are of varying sizes and (2) respondents within each of the organisations were chosen randomly. A second limitation concerns the richness of the insights in that these could have been amplified had a mixed methods approach been used. Finally, collecting leader CQ and leadership style data from leaders themselves, together with actual effectiveness information, might have delivered different results.

It is recommended that future research efforts endeavour to optimise sample randomisation. Attempts to triangulate the results through qualitative approaches as well as leader sourced views and financial data to support leadership effectiveness, would also be beneficial. As this research specifically concentrated on just two leadership styles, it would be valuable to include other leadership styles (such as authentic, ethical and servant) in future research. Lastly, the addition of extra predictor variables (for example, the leader’s age and tenure) could allow for the predictive role of leadership style to be placed in context.

6.10. CONCLUSION
Leader CQ and its dimensions neither strengthened nor weakened the relationship between empowering leadership and leadership effectiveness. Notwithstanding statistical evidence
indicating that leader CQ and its dimensions did reduce the strength of the relationship between directive leadership and leadership effectiveness, especially at lower levels of leader CQ and its dimensions, the respective impacts were too benign to suggest that such influence had any practical effect.
CHAPTER 7: SUMMATION, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter provides a summary of the reviewed literature as well as the research findings as presented in chapters 2 to 6. Thereafter, the conclusions that may be drawn are covered, including the overall scientific contribution that has been made to knowledge. The limitations are then discussed. The chapter ends with an integration of the recommendations for both the academic and business communities.

7.1. SUMMATION

This section provides a summary of what has been presented in this report. As Chapter 1 was primarily concerned with orientating the research, it is not considered here.

7.1.1. Chapter 2

The literature review covered in this chapter focussed on two main topics. In the first, an overview of systematic literature reviews was provided. The reason why such reviews have increased in popularity was addressed, as was the logic underlying the clarification of the search methodology. The four essentials of systematic literature reviews, as suggested by Cronin et al. (2008) and Nightingale (2009), were explained. In the second, the manner in which knowledge could be systematised was discussed. It was pointed out, as per Rocco and Plakhotnik (2009), that without anchoring the findings of a systematic literature review in an accepted framework the potential exists for the review to be devoid of direction. With this in mind, the framework of the general body of scientific knowledge was recognised as a suitable structure. In accordance with this framework, the building blocks of science were identified as concepts, statements (definitions, hypotheses and propositions), conceptual frameworks (typologies, models and theories) and paradigms.

The literature examined as part of this chapter therefore provided the methodology for the systematic literature review that was performed as well as the framework for the arrangement
of the CQ knowledge base. Against this background, a systematic review of the CQ literature was undertaken to (1) distil the concepts associated with CQ and (2) determine how it is described.

With respect to point (1) above, 515 key words were identified across the CQ literature, with 439 of these appearing just once. The majority of the key words that appeared once or twice only were mostly identified as being related variations of those observed multiple times. These last mentioned key words were condensed into logical spheres which enabled the concepts associated with CQ to be distilled. Despite the prevalence of numerous key words, just a limited number of concepts were found to exist. These concepts were termed (i) accomplishment, (ii) culture, (iii) expatriates, (iv) experience, (v) fit, (vi) intelligence, (vii) motivation, (viii) supervision and (ix) training. The concepts were then situated within an ascending typology so as to uncover a process by which CQ may be developed in individuals operating in a culturally diverse work space.

This process suggested that the cultivation of CQ triggers with an individual’s motivation to pursue intercultural interactions. In preparation for this, participation in cross-cultural training takes place. The individual then enters a foreign culture as an expatriate with his / her CQ further progressing through accretion of experience. A successful fit within such culture follows. Fit then contributes to skillful supervision followed by accomplishment (that is, fruitful performance delivery). This typology was schematically presented in Figure 1.1.

With respect to point (2) above, 24 different CQ definitions were discovered in the literature. Despite various definitions being offered by scholars as the CQ research programme has evolved, it was established that much of the literature continues to reference those CQ definitions as articulated by Earley and Ang (2003). An inspection of the definitions allowed for the following key elements to be identified: (i) CQ dimensions, (ii) cross-cultural interaction type, (iii) levels of culture, (iv) volume of cultures, (v) ability, (vi) person type and (vii) function. An integrated definition of CQ was proposed through a blending of these elements. This definition is presented as part of the conclusions in the next section.
The results as they relate to the first and second propositions, described in Chapter 1, covering CQ concepts and definitions, respectively, are credible and confirmable (see Brink, 1993).

7.1.2. Chapter 3

The literature discussed in this chapter explored the concept of truth and the application of science in the pursuit thereof, as a basis for the consideration of CQ truths or truth statements (that is, validated CQ hypotheses). In addition, two conceptualisations of CQ were explicated to facilitate an improved understanding of the hypotheses that have been investigated as part of the CQ research literature.

Truth was contextualised through examining a number of theories of it. It was explained that (1) the Correspondence theory holds that truth “corresponds” with a worldly fact, (2) the Coherence theory asserts that the truth of a proposition is a function of its association with other propositions and (3) the Deflationary theory contends that truth adds no value to a statement since truth is only expressive in nature. The literature indicated that the scientific production of knowledge is a key mechanism through which truth may be established. In this regard, the literature referred to the three-worlds model of Mouton (1996) which offers a platform for the conceptualisation of research problems and the veracity of the research process. This model depicts world one as lay or everyday knowledge, world two as scientific rigour, whilst world three is that of meta-science.

Finally, the alternative conceptualisations of CQ by Earley and Ang (2003) and Thomas (2006) were examined and contrasted. CQ was noted to be a non-academic intelligence that differs from emotional and social intelligence in that it is etic by nature, whereas the latter are emic.

Taking account of the literature review insights on truth, 590 CQ hypotheses were identified through the systematic review that was carried out. In sum, 60% (352) of these hypotheses were observed as having been validated in terms of the respective studies of which they formed part; that is, they gave rise to truth statements. These truth statements are reflective of the Correspondence theory and are located within world two of the three worlds model of

Subsequently, the 590 hypotheses were thematically classified. It was possible to arrange them into 13 themes plus a “not classified” category. To this end, over half of the hypotheses and their associated truth statements could be classified into the first four themes, whilst nearly two-thirds were located within the first six themes. These six themes were assessed as follows: (1) CQ and cross-cultural adjustment relate positively, (2) cross-cultural training and experiential learning stimulate CQ, (3) CQ improves job performance, satisfaction, involvement and adaptation, (4) international experience and exposure foster CQ, (5) CQ advances team knowledge sharing, performance and development of shared values whilst team trust enhances CQ and (6) CQ predicts leadership potential and styles and advances leadership effectiveness.

The results in terms of the third proposition advanced in Chapter 1, dealing with CQ truths, are credible and confirmable (see Brink, 1993).

7.1.3. Chapter 4

The literature reviewed in this chapter uncovered the prevailing association between leader CQ (including its dimensions) and particular styles of leadership. It also provided support for the selection of empowerment and direction as the leadership styles on which the research concentrated. This facilitated the positioning of the research in terms of the first empirical objective.

The concept of leadership was explained, as was its interrelationship with culture. The imperative for leaders to be proficient in cross-cultural interactions, given the globalisation of the workforce, was discussed. The literature provided auxiliary insights on both empowering and directive leadership. Empowering leadership was observed as being positively associated with a variety of outcomes including employee creativity, self-efficacy and knowledge sharing amongst team members. Although directive leadership was observed to be associated with some negative outcomes, it was recorded that it does, for example, assist in clarifying employee roles.
The handful of studies on leader CQ and leadership styles were considered. It was pointed out that the transformational style has attracted most of the attention in these studies. In contrast, it was noted that no literature could be found on the possible relationship between leader CQ and each of empowering and directive leadership. The research focused on the calls by several scholars for further studies into both leader CQ and leadership styles as well as the relationship between them.

Following the literature review, the results of the research pertaining to the first empirical objective were reported. It was confirmed that leader CQ and each of its dimensions did share statistically significant relationships with both empowering and directive leadership; these were all positive. Leader behavioural CQ was the dimension that had the weakest association with both of these leadership styles. The leader CQ relationships were stronger with empowering leadership than they were with directive leadership. Whilst all the relationships were of practical importance, it was only those that existed between aggregate leader CQ, metacognitive CQ and motivational CQ with empowering leadership that were revealed to be strong in nature. The relationships between leader cognitive CQ and behavioural CQ with empowering leadership carried moderate levels of practical significance, as did those between aggregate leader CQ and each of the leader CQ dimensions with directive leadership.

Both leader metacognitive CQ and motivational CQ were found to predict empowering leadership (with leader metacognitive CQ being the stronger of the two) and, in this regard, were able to explain 45% of its variance. This predictive capability resulted in a large effect. Despite leader motivational CQ, cognitive CQ and metacognitive CQ, together accounting for 15% of the variance in directive leadership, their ability to predict this leadership style carried just a medium effect.

The results of the hypotheses’ testing, in respect of empirical objective 1, appear in Table 7.1. on the following page.
### Table 7.1: Hypotheses testing results for empirical objective 1

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
</table>
| **H1**<sub>0</sub> There is no statistically significant relationship between the CQ (as a composite value) and the empowering leadership style of leaders at organisations operating in South Africa | Rejected | • r = 0.64  
• Statistically significant  
• Effect size: large |
| **H2**<sub>0</sub> There is no statistically significant relationship between the CQ (as a composite value) and the directive leadership style of leaders at organisations operating in South Africa | Rejected | • r = 0.39  
• Statistically significant  
• Effect size: medium |
| **H3**<sub>0</sub> The relationship between leader CQ (as a composite value) and the empowering leadership style does not differ from that between leader CQ (as a composite value) and the directive leadership style | Rejected | • z = 10.129 (p<0.05) |
| **H4**<sub>0</sub> There is no statistically significant relationship between each of the CQ dimensions and the empowering leadership style of leaders at organisations operating in South Africa | Rejected | Leader metacognitive CQ  
• r = 0.64  
• Statistically significant  
• Effect size: large  
Leader motivational CQ  
• r = 0.57  
• Statistically significant  
• Effect size: large  
Leader cognitive CQ  
• r = 0.49  
• Statistically significant  
• Effect size: medium  
Leader behavioural CQ  
• r = 0.45  
• Statistically significant  
• Effect size: medium |
| **H5**<sub>0</sub> There is no statistically significant relationship between each of the CQ dimensions and the directive leadership style of leaders at organisations operating in South Africa | Rejected | Leader motivational CQ  
• r = 0.36  
• Statistically significant  
• Effect size: medium  
Leader cognitive CQ  
• r = 0.35  
• Statistically significant  
• Effect size: medium  
Leader metacognitive CQ  
• r = 0.32  
• Statistically significant  
• Effect size: medium |
7.1.4. Chapter 5

The literature discussed in this chapter provided the classification basis for the cultural identity of respondents who participated in this research and further underscored the imperative for leaders to be culturally intelligent rather than merely being aware of cultural differences. This allowed for the positioning of the research in terms of the second empirical objective.

The literature review specifically explored the concept of culture as well as its dimensions (cultural identity). It was noted that the cultural dimensions identified by Hofstede (1980, 2011), whilst the most popular in cultural research, were determined at the country level and that their application in framing individual cultural identity could thus be inaccurate. The CVS of Yoo et al. (2011) was recognised as a tool that reduces these dimensions to the individual level. The literature suggested those cultural identities that would be predisposed to empowering and directive leadership, respectively. Culturally intelligent leaders were identified as being adept at modifying their styles to suit diverse cultural circumstances.

After the literature review, the research outcomes relating to the second empirical objective were discussed. In addition to leader CQ, only the cultural dimension of masculinity was found to be a statistically significant predictor of empowering leadership. Together these two variables accounted for 41.1% of the variance in empowering leadership, with leader CQ contributing 40.5% and masculinity 0.06%, respectively. The role of masculinity was, hence,
In respect of directive leadership, leader CQ as well as uncertainty avoidance, collectivism, masculinity and long-term orientation were found to be statistically significant predictors. The practical significance of this predictive capability was assessed as moderate. The model accounted for 21.5% of the variance in directive leadership with leader CQ contributing 15.4%, uncertainty avoidance 2.9%, masculinity 1.7%, long-term orientation 0.9% and collectivism 0.6%. The combined predictive capability of subordinate cultural identity (6.1%) was less than half of that of leader CQ (15.4%). It followed on that leader CQ was a better predictor of empowering and directive leadership than was subordinate cultural identity.

The results of the hypotheses’ testing as regards empirical objective 2, are shown in Table 7.2.

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10 Subordinate cultural identity does not play a part in the display of</td>
<td>Failed to reject</td>
<td>• Only masculinity statistically significantly predicted empowering</td>
</tr>
<tr>
<td>empowering leadership, given leader CQ</td>
<td></td>
<td>leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Leader CQ accounted for 40.5% of variance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Masculinity accounted for 0.6% of variance</td>
</tr>
<tr>
<td>H20 Subordinate cultural identity does not play a part in the display of</td>
<td>Failed to reject</td>
<td>• Power distance did not statistically significantly predict directive</td>
</tr>
<tr>
<td>directive leadership, given leader CQ</td>
<td></td>
<td>leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Leader CQ accounted for 15.4% of variance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Uncertainty avoidance, masculinity, long-term orientation and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>collectivism collectively only accounted for 6.1% of variance</td>
</tr>
</tbody>
</table>

7.1.5. Chapter 6
The literature reviewed in this chapter addressed the third empirical objective of this research by contextualising the association between leader CQ and leadership effectiveness whilst revealing the scarcity of empirical insights on the relationship between leader CQ, leadership
styles and leadership effectiveness.

The challenge associated with both defining and measuring the effectiveness of leadership was noted. It was observed that whilst some scholars promote organisational measures of leadership effectiveness, others favour staff members’ acuities. The literature pointed out that perceptions of leadership effectiveness are a function of leadership styles which, in turn, are culturally contingent. Similarly, those leaders who are culturally adept are likely to be viewed as more effective by their respective followers.

The part that CQ could play in (1) dissipating the possible ethnocentric inclinations of leaders and (2) the consequent contribution of CQ to promoting leadership effectiveness were illuminated by the literature. To this end, the sources indicated that CQ predicted leadership potential, cross-border leadership effectiveness, boosted the effectiveness of cross-cultural leadership and the effectiveness of leaders of teams whose members are culturally diverse. It was also recorded that CQ could moderate the relationship between variables.

Taking cognisance of the literature review, the results of the research concerning the third empirical objective were reported. Although leader CQ and its four dimensions shared a statistically significant relationship with leadership effectiveness (and, together with empowering leadership, explained approximately 60% of the variance therein), none of them affected the strength of the relationship between empowering leadership and leadership effectiveness.

In contrast, leader CQ and its dimensions did exert statistically significant effects on the relationship between directive leadership and leadership effectiveness. These effects were negative, that is, they served to curtail the relationship shared by directive leadership and leadership effectiveness, and were more pronounced at lower, rather than higher, levels of leader CQ and its dimensions. The combination of leader metacognitive CQ and directive leadership was, in this case, the strongest predictor of leadership effectiveness, accounting for 46% of its variance, whilst the combination of leader behavioural CQ and directive leadership
could only explain 31% of the same variance. In gauging the practical significance of these effects, however, all were shown to be of no relevance. In other words, whilst negative moderation was discovered at a statistical level, the extent of its practical influence was assessed as unimportant.

The results of the hypotheses’ testing in respect of empirical objective 3 are presented in Table 7.3 below.

### Table 7.3: Hypotheses testing results for empirical objective 3

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
</table>
| **H1**<sub>0</sub>  
The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness | Failed to reject | Interaction term was not statistically significant |
| **H2**<sub>0</sub>  
The CQ dimensions of leaders do not moderate the relationship between leaders’ application of empowering leadership and employee perceptions of their leadership effectiveness | Failed to reject | None of the interaction terms were statistically significant |
| **H3**<sub>0</sub>  
The CQ of leaders (as a composite value) does not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness | Rejected | Interaction term was statistically significant |
| **H4**<sub>0</sub>  
The CQ dimensions of leaders do not moderate the relationship between leaders’ application of directive leadership and employee perceptions of their leadership effectiveness | Rejected | • All the interaction terms were statistically significant  
• All t statistics were negative, that is, all the leader CQ dimensions reduced the effectiveness of directive leadership |

### 7.1.6. Schematic summary

Figures 7.1, 7.2 and 7.3, which appear on the following pages, provide schematic representations of the statistically significant relationships identified in this research.
Figure 7.1: Schema of statistically significant relationships between leader CQ and its dimensions

Figure 7.2: Schema of statistically significant relationships between leader CQ and its dimensions

Note: The legend for Figures 7.1, 7.2 and 7.3 is shown next to Figure 7.3 on the next page.
Figure 7.3: Schema of statistically significant relationships between the central concepts (incl cultural identity)

- CQ denotes leader CQ
- Values depict correlation coefficients
- LT denotes long-term
- Effect size
  - Large
  - Medium
  - Small
  - Non-significant
7.2. CONCLUSIONS

The problem statement, research goal and objectives were deductively presented in Chapter 1. The conclusions that may be drawn from this research are stated below and are split between the research question and sub-questions. The section ends with a discussion of the scientific contribution made by this research.

7.2.1. The research question

The research question was: What is the relationship between CQ, leadership styles (as represented by empowering and directive leadership) and leadership effectiveness?

Given the theories on CQ, leadership styles and complex adaptive systems, as discussed in the preceding chapters, and in accordance with expectations arising therefrom, it can be concluded that distinct relationships do exist between leader CQ and both empowering and directive leadership. In line with the expectations flowing from cognitive dissonance theory, where congruence is ideal, these relationships were all positive. Further, leader CQ, rather than the cultural identities of subordinates, was the main predictor of the empowering and directive leadership styles. This matches the expectations arising out of cognitive dissonance theory and is also accommodated within complex adaptive systems in that not all elements in the system influenced each other equally. Finally, the relationships of empowering and directive leadership with leadership effectiveness were not affected by leader CQ. This contrasts with what had been expected in terms of CQ and complex adaptive systems theory. These findings reveal the intricacy that prevails in relationships between leader CQ, leadership styles (empowering and directive) and leadership effectiveness.

7.2.2. The research sub-questions

The conclusions as they pertain to the research sub-questions follow.

7.2.2.1. What concepts are associated with CQ?

The concepts associated with CQ are: accomplishment, culture, expatriates, experience, fit, intelligence, motivation, supervision and training.
7.2.2.2. **How could CQ be described?**

CQ can be described as a discrete intelligence type, that embraces the ability (which may be enhanced, learned and developed) of individuals to adjust to and thus function effectively across all types and levels of culture and culturally diverse settings, that they may or may not have previously been exposed to, and which sprouts from the desire to acquire and embodying the capacity to process culture-specific knowledge and is demonstrated through culture appropriate behaviours.

7.2.2.3. **What do the CQ truths reveal?**

CQ truths reveal that staff members’ CQ can be stimulated and developed through cross-cultural training, experiential learning, international experience and trust building. CQ also contributes positively to cross-cultural adjustment, job performance, satisfaction, involvement and team knowledge. Lastly, CQ predicts both leadership potential and cross-border leadership effectiveness.

7.2.2.4. **Is leadership style (empowering and directive) a function of leader CQ?**

In the affirmative, leadership style (empowering and directive) is a function of leader CQ. The nature and size thereof, however, varies significantly between empowering and directive leadership.

7.2.2.5. **Do culturally intelligent leaders display leadership styles (empowering and directive) dependent on the cultural identities of their subordinates?**

This question was answered in the negative: leaders with CQ do not necessarily display leadership styles (empowering and directive) dependent on the cultural identities of their subordinates. Rather, leader CQ is the more important informant of the empowering and directive leadership styles.

7.2.2.6. **Is the relationship between leadership style (empowering and directive) and leadership effectiveness moderated by leader CQ?**

This question was also negatively answered: leader CQ does not affect the relationship that
empowering leadership has with leadership effectiveness, nor that which prevails between directive leadership and leadership effectiveness.

### 7.2.3. Scientific contribution

This research makes a significant contribution to the body of knowledge on CQ in that it has both articulated the concept and systematically summarised the present knowledge concerning it, in a manner that has not previously been done. It has quantified the extent to which leader CQ, the empowering and directive styles of leadership as well as leadership effectiveness are related. As such, it has enunciated the role of lesser known leadership styles in leadership effectiveness.

Furthermore, subordinate cultural identity has been positioned as non-significant in the display of empowering and directive leadership by culturally intelligent leaders. Although some of the outcomes were those anticipated, others were not. An understanding of the multifaceted and complex relationships between the central concepts has thus been provided and the body of knowledge thereby expanded.

### 7.3. LIMITATIONS

The primary limitation associated with the attainment of the literary grounded objective was that all the relevant CQ material might not have been identified. Despite the candidate’s best efforts to detect all the scholarly published research outputs on CQ, the possibility exists that some reports may have been missed. This prospect was lessened because a broad range of data bases was scrutinised. A further limitation was that attention was directed exclusively at the connotative meaning of CQ; that is, the analysis did not delve into its denotative meaning.

The limitations associated with the achievement of the empirical objectives, in the main, centred on the research design, sample and the questionnaire. The cross-sectional design did not allow any cause and effect conclusions to be drawn. Furthermore, the exclusive use of a quantitative methodology might have restricted the results in that had a complementary qualitative approach also been followed, richer and more comprehensive insights might have
been collected.

As a convenience sample was used, the degree to which the findings could be generalised with respect to the population was reduced. This limitation was, however, partially mitigated since (1) the participant organisations were varied in terms of their size, focus and industry type and (2) the selection of sample respondents, in each of the organisations, was carried out randomly.

Bias could have been introduced as only observer-based perceptions were used. It is also conceivable that more one subordinate evaluated the same leader. Hence, self-report metrics might have provided different perspectives and, consequently, dissimilar results. In addition, accurate demographics of the leaders (such as their ages) could not be sourced.

Only exploratory factor analysis was carried out on the instruments used to measure the concepts studied. The application of confirmatory factor analysis may have resulted in different outcomes.

Although the research was both voluntary and anonymous, the use of hard copy questionnaires might have affected the respondents’ answers in that they were required to hand their completed questionnaires to the candidate or students assisting with the research. To this end, an electronic version of the questionnaire may have lent greater weight to the anonymity of the research. In addition, the length of the questionnaire itself could have prompted respondents to arbitrarily select answers in order to speed up progress as opposed to reading and processing each question / statement before answering it honestly.

The instruments used in the consolidated questionnaire were presented in English only. It is plausible that some misunderstandings may have occurred amongst those respondents whose home language is not English. This limitation was addressed somewhat by having the candidate or assisting students available at the time the respective employer organisation respondents completed the questionnaire to assist, where required, with necessary explanations.
7.4. RECOMMENDATIONS

A number of recommendations are provided. These are split between those aimed at researchers and those suggested for the business community.

7.4.1. For researchers

It is recommended that attention be devoted to understanding the denotative meaning of CQ. This could be achieved through an investigation of the various instruments that have been composed to test CQ. It would also be valuable to construct a conceptual model of the concept based process suggested for the growth of CQ (as discussed in Chapter 2). The validity of this model could then be empirically tested.

The understanding of CQ truths may be enhanced by investigating those themes (1) identified as having a low hypothesis - truth statement ratio since these are the areas in which the interactions between CQ and the specific variables have not followed predictions as well as those (2) characterised by a high hypothesis - truth statement ratio but which were based upon a relatively small number of hypotheses. As 18% of the identified truth statements could not be classified into any particular theme, they could be the subject of dedicated exploration.

In terms of the empirical study, efforts should be directed at increasing sample randomisation as well as establishing possible causality through the employment of a longitudinal design. It would also be important to investigate whether the findings (1) could be reproduced in other jurisdictions and (2) might be triangulated through the application of a qualitative methodology. Additional value could be generated by contrasting the results with those based upon leader self-reporting whilst the incorporation of supplementary predictor variables, such as leader tenure, age and gender, would allow for greater granularity in the results to be achieved. A final avenue for future research would be to investigate the flexibility of culturally intelligent leaders to modify their leadership styles especially since the same leader could be characterised as demonstrating both empowering and directive behaviours.
7.4.2. For the business community

To maximise the utility of CQ, leaders, human resource practitioners, and indeed the business community at large, need to successfully navigate the extensive volume of material, both conceptual and empirical, that is available on it. The benefit of being armed with a thorough understanding of CQ, both in terms of the associated concepts and definitions, together with a knowledge of key facts should not be underestimated. Leaders and business representatives are encouraged to familiarise themselves with the content of chapters 2 and 3 as this will provide them with a solid foundation upon which to commence their respective journeys.

Where staff members favour an empowering leadership style, human resource practitioners should target the selection of those leaders who evidence high levels of CQ, particularly metacognitive and motivational CQ. Further, because these two CQ dimensions act as important antecedents of empowering leadership their development should be a key focus of leadership development programmes. In those circumstances where directive leadership is called for, attention should be turned to those candidates who have greater levels of motivational and cognitive CQ, followed by metacognitive CQ, since these concepts are correlated.

Although organisations should expose leaders to the concept of culture and its dimensions so as to sensitise them towards the varying cultural identities of their staff members, a mere understanding of culture and cultural identities (cognitive CQ) is, on its own, limited in comprehending the display of the empowering and directive leadership styles. Leader CQ as a whole, and particularly metacognitive and motivational CQ, needs to be developed to augment such knowledge. Hence, as recommended above, the roll-out of leader CQ development initiatives ought to be a high priority.

Leaders wishing to optimise their effectiveness should concentrate specifically on elevating their metacognitive CQ. Thereafter they should pursue the enhancement of their motivational CQ followed by their cognitive CQ. Leaders are also advised, in general, to display empowering, as opposed to directive, leadership because the former enjoys a stronger relationship with
leadership effectiveness. However, they are cautioned not to do so blindly as the cultural identities of some staff members may be of such a nature they that are not inclined towards the empowering leadership style.
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APPENDIX 1: PERMISSION TO USE INSTRUMENTS

From: Van Dyne, Linn <vandyne@broad.msu.edu>
Date: 19 November 2015 at 17:39
Subject: RE: Permission to use the Cultural Intelligence Scale
To: Anthony Wilfred Solomon <78799139@mylife.unisa.ac.za>
Cc: Keyla Waslawski <keyla.waslawski@culturalq.com>

Dear Anthony,

Thanks for your quick response and thank you for your interest in using CQ in your academic research. You have my permission to use the 20 item CQS in your research aimed at publication in scholarly journals. There are two easy ways you can do this.

1) We offer on-line assessments that provide personal feedback reports to participants. This provides them with an incentive to participate in your research because the reports allow people to compare their scores for four factors of CQ and the subdimensions of the four factors with the world-wide norms. The feedback reports also include questions to guide interpretation of results and creation of personal development plans. The highly discounted cost for academic researchers is $12-$18 per participant depending on the type of program. We also can provide you with an xls file with individual participant responses to the 20 items in the CQS that you can use in your research (cost = $100). Keyla (copied on this email can give you more information on these programs if you are interested).

2) You can create your own survey using the items in the attached file. If you do this, be sure to include the following copyright information on all electronic and paper copies of the survey: © Cultural Intelligence Center 2005. Used by permission of Cultural Intelligence Center.

Note. Use of this scale granted to academic researchers for research purposes only. For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to info@culturalq.com

Please remember this is a copyrighted scale and I am making it available to you ONLY for
scholarly research aimed at publication in academic journals. Should you decide you want to use the scale for consulting or program evaluation in the future, please contact me to make the necessary arrangements. In addition, please remember that you should use 1-7 Likert scale responses in research and research papers/presentations because the world-wide norms and the 1-100 scores are proprietary.

We wish you the best with your research. Please share your results with us so that we can learn from you.
Sincerely,
Linn

From: **Michael Ahearne** <mahearne.uh@gmail.com>
Date: 18 November 2015 at 23:11
Subject: Re: Permission to use the 12 item Empowering Leadership scale
To: Anthony Solomon <awsolly@gmail.com>

Here is the scale you are requesting. My guess is that you are referring to a 12 item version since you are not working from our original article but using the AMJ that adapts our scale. They incorrectly cite that our scale is 12 items.

Best,
Mike

From: **Louis Quast** <louquast@umn.edu>
Date: 25 November 2015 at 01:08
Subject: Re: Permission to scale to measure directive leadership
To: Anthony Solomon <awsolly@gmail.com>

Dear Mr. Solomon,

Yes, you have our permission to use this scale. Kindly send along a copy of your study once it is
Thank you,
Louis Quast

From: **Hank Sims** <hsims@rhsmith.umd.edu>
Date: 19 November 2015 at 16:16
Subject: Re: Permission to use leader behavior questionnaire
To: Anthony Solomon <awsolly@gmail.com>
Cc: craig.pearce@cgu.edu

you have my permission....

best wishes
Hank Sims

From: **Boonghee Yoo** <Boonghee.Yoo@hofstra.edu>
Date: 19 November 2015 at 11:32
Subject: RE: Permission to use the CVSCALE
To: Anthony Solomon <awsolly@gmail.com>

Dear Mr. Solomon, I permit you to use CVSCALE for your research. Dr. Boonghee Yoo

From: **Daan van Knippenberg** <dknippenberg@rsm.nl>
Date: 19 November 2015 at 12:37
Subject: RE: Permission to use the 4 item scale on leadership effectiveness
To: Anthony Solomon <awsolly@gmail.com>, "antonio.pierro@uniroma1.it"
<antonio.pierro@uniroma1.it>

Dear Anthony,
Absolutely! Our work is pure academic research and measures are freely available to others.

Warm regards,

Daan van Knippenberg, PhD
Professor of Organizational Behavior
Editor, Organizational Psychology Review
Associate Editor, Academy of Management Journal
Rotterdam School of Management
Erasmus University Rotterdam
PO Box 1738, 3000 DR Rotterdam, The Netherlands
APPENDIX 2: ETHICS CLEARANCE

SCHOOL OF BUSINESS LEADERSHIP
RESEARCH ETHICS REVIEW COMMITTEE (GSBL CRERC)

22 September 2016

Dear Mr. Solomon

Decision: Ethics Approval

Ref #: 2016_SBL/DBL_015_5D
Name of applicant: Mr. A Solomon
Student #: 78790139

Student: Mr. A Solomon, awsoolly@gmail.com, 084 777 1421
Supervisor: Prof. R Steyn, steyrn@unisa.ac.za 011 652 0254

Project Title: Towards ethnorelativism: An understanding of cultural intelligence and its role in the leadership style and leadership effectiveness domain: Subordinate perspectives
Qualification: Doctorate in Business Leadership (DBL)

Thank you for applying for research ethics clearance, SBL Research Ethics Review Committee reviewed your application in compliance with the Unisa Policy on Research Ethics.

Outcome of the SBL Research Committee:
Approval is granted for the duration of the Project

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the SBL Research Ethics Review Committee on the 19/09/2016.

The proposed research may now commence with the proviso that:
1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the SBL Research Ethics Review Committee.
3) An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.

4) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

Kind regards,

Prof R Ramphele

Chairperson: SBL Research Ethics Committee
011 - 652 0363 or ramphele@unisa.ac.za

Dr R Mokete

CEO and Executive Director: Graduate School of Business Leadership
011- 652 0256/moketr@unisa.ac.za
RESEARCH PERMISSION SUB-COMMITTEE OF THE SENATE RESEARCH, INNOVATION, POSTGRADUATE DEGREES AND COMMERCIALISATION COMMITTEE (SRIPCC)

10 October 2016
Dear Mr. Anthony Solomon,

Decision: Research Permission Approval from October 2016 until 31 October 2017.

Ref #: 2016_RPSC_064
Mr. Anthony Solomon
Student #: 78799139
Staff #: N/A

Principal Investigator:
Mr. Anthony Solomon
Graduate School of Business Leadership
College of Economic and Management Sciences
awsolly@gmail.com, 084 777 1421

Supervisor: Prof Renier Steyn
steynr@unisa.ac.za, 079 227 3984

A study titled: Towards ethno-relativism – An understanding of cultural intelligence and its role in the leadership style and leadership effectiveness domain: Subordinate perspectives.

Your application regarding permission to conduct research involving UNISA data in respect of the above study has been received and was considered by the Research Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC) on 5 October 2016.

It is my pleasure to inform you that permission has been granted for the study. You may gain access to the data that was previously collected by the MBL students and use it with their consent in your research.
You are requested to submit a report of the study to the Research Permission Subcommittee (RPSC@unisa.ac.za) within 12 months of completion of the study.

The personal information made available to the researcher(s)/gatekeeper(s) will only be used for the advancement of this research project as indicated and for the purpose as described in this permission letter. The researcher(s)/gatekeeper(s) must take all appropriate precautionary measures to protect the personal information given to him/her/them in good faith and it must not be passed on to third parties.

Note:
The reference number 2016_RPSC_064 should be clearly indicated on all forms of communication with the intended research participants and the Research Permission Subcommittee.

We would like to wish you well in your research undertaking.

Kind regards,

pp. Dr R. Visagie – Deputy Chairperson: RPSC

Prof L Labuschagne – Chairperson: RPSC

Email: llabus@unisa.ac.za, Tel: (012) 4294368
APPENDIX 3: QUESTIONNAIRE

Research questionnaire – culture and leadership

For official use: Batch: ____________ (a) ID __________ (b)

This questionnaire consists of 125 statements/questions – it is very important that you respond to/answer EVERY statement/question (it should take approximately 30 – 40 minutes to complete).

This questionnaire deals with your leader, you and your workplace.

Your leader is the person to whom YOU directly report to in your current job (in most cases this will be YOUR immediate supervisor or manager).

If you have reported to your leader for less than 6 months then use your leader in your previous job.

Section A – Demographics

Please place a tick (√) over the correct answer

Yourself

<table>
<thead>
<tr>
<th>1</th>
<th>My gender is</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>My age is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My race is</td>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>4</td>
<td>My citizenship is</td>
<td>South African</td>
<td>Other</td>
</tr>
</tbody>
</table>

Your leader

<table>
<thead>
<tr>
<th>5</th>
<th>My leader’s gender is</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>My leader’s approximate age is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>My leader’s race is</td>
<td>Black</td>
<td>White</td>
</tr>
<tr>
<td>8</td>
<td>My leader’s citizenship is</td>
<td>South African</td>
<td>Other</td>
</tr>
</tbody>
</table>

You and your leader

| 9 | Do you and your leader share the same home language? | Yes | No |

Gender, race and nationality diversity

| 10| Do you think the different genders are well represented in your company, that is do you think there is appropriate gender diversity in your company? | Yes | No |
| 11| Do you think the different race groups of South Africa are well represented in your company? | Yes | No |
| 12| What percentage (approximately) of the workforce in your company are foreign nationals (not South African citizens)? We are not referring to your company as a whole; we are referring to the department of the company you work? | % |

Continued on next page
Section B – The cultural intelligence of YOUR leader

Please indicate the extent to which you agree or disagree with EACH of the following statements as regards YOUR leader (insert the corresponding number from 1 – 7)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Moderately disagree</th>
<th>Slightly disagree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Moderately agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**Example**

<table>
<thead>
<tr>
<th>Statement / question</th>
<th>Your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>My leader arrives at meetings on time</td>
<td>5</td>
</tr>
</tbody>
</table>

In this example the employee slightly agrees with the statement that his / her leader arrives at meetings on time because he / she has marked 5 as the answer.

<table>
<thead>
<tr>
<th>Statement / question</th>
<th>Your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>My leader is conscious of the cultural knowledge he / she uses when interacting with people from different cultural backgrounds</td>
<td>5</td>
</tr>
<tr>
<td>My leader adjusts his / her cultural knowledge as he / she interacts with people from a culture that is unfamiliar</td>
<td>5</td>
</tr>
<tr>
<td>My leader is conscious of the cultural knowledge he / she applies to cross-cultural interactions</td>
<td>5</td>
</tr>
<tr>
<td>My leader checks the accuracy of his / her cultural knowledge as he / she interacts with people from different cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the legal and economic systems of other cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the rules (e.g. vocabulary, grammar) of other languages</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the cultural values and religious beliefs of other cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the marriage systems of other cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the arts and crafts of other cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader knows the rules for expressing non-verbal behaviours in other cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader enjoys interacting with people from different cultures</td>
<td>5</td>
</tr>
<tr>
<td>My leader is confident that he / she can socialise with locals in a culture that is unfamiliar</td>
<td>5</td>
</tr>
<tr>
<td>My leader is sure he / she can deal with the stresses of adjusting to a culture that is new</td>
<td>5</td>
</tr>
<tr>
<td>My leader enjoys living in cultures that are unfamiliar</td>
<td>5</td>
</tr>
<tr>
<td>My leader is confident that he / she can get accustomed to the shopping conditions in a different culture</td>
<td>5</td>
</tr>
<tr>
<td>My leader changes his / her verbal behaviour (e.g. accent, tone) when a cross-cultural interaction requires it</td>
<td>5</td>
</tr>
<tr>
<td>My leader uses pause and silence differently to suit different cross-cultural situations</td>
<td>5</td>
</tr>
<tr>
<td>My leader varies the rate of his / her speaking when a cross-cultural situation requires it</td>
<td>5</td>
</tr>
<tr>
<td>My leader changes his / her non-verbal behaviour when a cross-cultural situation requires it</td>
<td>5</td>
</tr>
<tr>
<td>My leader alters his / her facial expressions when a cross-cultural interaction requires it</td>
<td>5</td>
</tr>
</tbody>
</table>

© Cultural Intelligence Center 2006. Used by permission of Cultural Intelligence Center. Note. Use of this scale granted to academic researchers for research purposes only. For information on using the scale for purposes other than academic research (e.g., consultants and non-academic organizations), please send an email to info@culturaiq.com

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Section C – The leadership style of YOUR leader

Please indicate the extent to which you agree or disagree with EACH of the following statements as regards YOUR leader (insert the corresponding number from 1 – 7)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Moderately disagree</th>
<th>Slightly disagree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Moderately agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Statement / question | Your answer

33 My leader helps me understand how my objectives and goals relate to that of the company
34 My leader helps me understand the importance of my work to the overall effectiveness of the company
35 My leader helps me understand how my job fits into the bigger picture
36 My leader makes many decisions together with me
37 My leader often consults me on strategic decisions
38 My leader believes that I can handle demanding tasks
39 My leader believes in my ability to improve even when I make mistakes
40 My leader allows me to do my job my way
41 My leader makes it more efficient for me to do my job by keeping rules and regulations simple
42 My leader allows me to make important decisions quickly to satisfy customer needs

Please indicate the extent to which EACH of the following statements is true or untrue as regards YOUR leader (insert the corresponding number from 1 – 5)

<table>
<thead>
<tr>
<th>Definitely not true</th>
<th>Not true</th>
<th>Neither true nor untrue</th>
<th>True</th>
<th>Definitely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Statement / question | Your answer

43 My leader establishes my performance goals
44 My leader sets the goals for my performance
45 My leader establishes the goals for my work
46 When it comes to my work, my leader gives me instructions on how to carry it out
47 My leader gives me instructions about how to do my work
48 My leader provides commands in regard to my work
49 My leader conveys clear expectations for my job
50 My leader clarifies my roles and responsibilities
51 My leader provides clear direction and defines my priorities
52 My leader identifies specific action steps and accountabilities for me

Continued on next page
Section D – The Leadership style of YOUR leader (continued)

Please indicate the extent to which EACH of the following statements is true or untrue as regards YOUR leader (insert the corresponding number from 1 – 5)

<table>
<thead>
<tr>
<th>Statement / question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Your answer</th>
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<tbody>
<tr>
<td>53 My leader will recommend that I am compensated well if I perform well</td>
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<tr>
<td>54 My leader will recommend that I am compensated more if I perform well</td>
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<tr>
<td>55 If I perform well, my leader will recommend more compensation</td>
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<tr>
<td>56 My leader gives me positive feedback when I perform well</td>
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<td>57 My leader commends me when I do a better-than-average job</td>
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<td>58 My leader gives me special recognition when my work performance is especially good</td>
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<td>59 My leader focuses attention on mistakes, exceptions and deviations from standard</td>
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<td>60 My leader closely monitors my performance for errors</td>
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<td>61 My leader spends time “putting out fires”</td>
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<tr>
<td>62 My leader tracks mistakes</td>
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<tr>
<td>63 My leader directs attention towards failure to meet standards</td>
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<td>64 My leader allows performance to fall below minimum standards before trying to make improvements</td>
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<tr>
<td>65 My leader delays taking action until problems become serious</td>
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<tr>
<td>66 My leader tells me what I’ve done wrong rather than what I’ve done right</td>
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<tr>
<td>67 My leader waits until things have gone wrong before taking action</td>
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<td>68 My leader shows firm belief in “if it ain’t broke don’t fix it”</td>
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<td>69 My leader expects me to perform at my highest level</td>
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<tr>
<td>70 My leader encourages me to go above and beyond what is normally expected of one (e.g. extra effort)</td>
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<tr>
<td>71 My leader expects me to give 100% all the time</td>
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<tr>
<td>72 My leader isn’t afraid to challenge the system if he / she thinks it is necessary</td>
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<tr>
<td>73 My leader is a non-traditional type who shakes up the system when necessary</td>
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<td>74 My leader isn’t afraid to “break the mould” to find different ways of doing things</td>
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<tr>
<td>75 My leader provides a clear vision of who and what our company is</td>
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<td>76 My leader provides a clear vision of where our company is going</td>
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<tr>
<td>77 Because of my leader I have a clear vision of our company’s purpose</td>
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<tr>
<td>78 My leader is driven by higher purposes or ideals</td>
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<tr>
<td>79 My leader has a strong personal dedication to higher purposes or ideals</td>
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<tr>
<td>80 My leader strives towards higher purposes or ideals</td>
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<tr>
<td>81 My leader shows enthusiasm for my efforts</td>
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<tr>
<td>82 My leader approaches a new project or task in an enthusiastic way</td>
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<tr>
<td>83 My leader stresses the importance of our team to the company</td>
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<tr>
<td>84 My leader emphasises the value of questioning staff members</td>
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<tr>
<td>85 My leader encourages me to rethink ideas which had never been questioned before</td>
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<tr>
<td>86 My leader questions the traditional way of doing things</td>
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<tr>
<td>87 My leader seeks a broad range of perspectives when solving problems</td>
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<tr>
<td>88 My leader looks at problems from many different angles</td>
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</tbody>
</table>

Continued on next page

The reader should note that sections D and F were included for the exclusive benefit of the MBL students.
Section E – The effectiveness of YOUR leader

Please indicate the extent to which you agree or disagree with EACH of the following statements as regards YOUR leader (insert the corresponding number from 1 - 7)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Moderately disagree</th>
<th>Slightly disagree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Moderately agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Statement / question | Your answer
--- | ---
89 | My leader is very effective as a leader
90 | My leader is a good leader
91 | My leader influences my level of commitment effectively
92 | Overall I feel a good level of agreement with my leader

Section F – Your relationship with your leader

Please indicate how you feel as regards YOUR leader for EACH of the following questions (insert the corresponding number from 1 - 5)

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Occasionally</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

Statement / question | Your answer
--- | ---
93 | Do you know where you stand with your leader ...... Do you usually know how satisfied your leader is with what you do?

94 | How well does your leader understand your job problems and needs?

95 | How well does your leader recognise your potential?

96 | Regardless of how much authority he / she has built into his / her position, what are the chances your leader would use his / her power to help you solve problems in your work?

97 | Again, regardless of the amount of formal authority your leader has, what are the chances that he / she would “bail you out” at his / her expense?

Continued on next page
<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Your answer</th>
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<tbody>
<tr>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Statement / question</td>
<td>I have enough confidence in my leader that I would defend and justify his / her decision if he / she were not present to do so?</td>
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<table>
<thead>
<tr>
<th>Extremely ineffective</th>
<th>Worse than average</th>
<th>Average</th>
<th>Better than average</th>
<th>Extremely effective</th>
<th>Your answer</th>
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<tbody>
<tr>
<td>99</td>
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<tr>
<td>Statement / question</td>
<td>How would you characterise your working relationship with your leader?</td>
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</table>

**Section G – YOUR culture (personal or ethnic)**

Please indicate the extent to which you agree or disagree with EACH of the following statements as regards YOUR culture (personal or ethnic) (insert the corresponding number from 1 - 5).

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Your answer</th>
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<tbody>
<tr>
<td>100</td>
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<tr>
<td>Statement / question</td>
<td>People in higher positions should make most decisions without consulting people in lower positions</td>
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<td>101</td>
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<tr>
<td>Statement / question</td>
<td>People in higher positions should not ask the opinions of people in lower positions too frequently</td>
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<td>102</td>
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<tr>
<td>Statement / question</td>
<td>People in higher positions should avoid social interaction with people in lower positions</td>
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<td>103</td>
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</tr>
<tr>
<td>Statement / question</td>
<td>People in lower positions should not disagree with decisions by people in higher positions</td>
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<td>104</td>
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<tr>
<td>Statement / question</td>
<td>People in higher positions should not delegate important tasks to people in lower positions</td>
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<td>105</td>
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<tr>
<td>Statement / question</td>
<td>It is important to have instructions spelled out in detail so that I always know what I’m expected to do</td>
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<tr>
<td>Statement / question</td>
<td>It is important to closely follow instructions and procedures</td>
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<tr>
<td>Statement / question</td>
<td>Rules and regulations are important because they inform me of what is expected of me</td>
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<tr>
<td>Statement / question</td>
<td>Standardised work procedures are helpful</td>
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<tr>
<td>Statement / question</td>
<td>Instructions for operations are important</td>
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<tr>
<td>Statement / question</td>
<td>Individuals should sacrifice self-interest for the group (either at school or the workplace)</td>
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<tr>
<td>Statement / question</td>
<td>Individuals should stick with the group even through difficulties</td>
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<tr>
<td>Statement / question</td>
<td>Group welfare is more important than individual rewards</td>
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<tr>
<td>Statement / question</td>
<td>Group success is more important than individual success</td>
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<td>Statement / question</td>
<td>Individuals should only pursue their goals after considering the welfare of the group</td>
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<tr>
<td>Statement / question</td>
<td>Group loyalty should be encouraged even if individual goals suffer</td>
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<td>116</td>
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<tr>
<td>Statement / question</td>
<td>It is more important for men to have a professional career than it is for women</td>
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<tr>
<td>Statement / question</td>
<td>Men usually solve problems with logical analysis; women usually solve problems with intuition</td>
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<tr>
<td>Statement / question</td>
<td>Solving difficult problems usually requires an active, forcible approach, which is typical of men</td>
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<tr>
<td>Statement / question</td>
<td>There are some jobs that a man can always do better than a women</td>
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Continued on next page
Please indicate the extent to which EACH of the following statements is important or unimportant in your culture (personal or ethnic) (Insert the corresponding number from 1 – 5)

<table>
<thead>
<tr>
<th>Very unimportant</th>
<th>Unimportant</th>
<th>Neither important nor unimportant</th>
<th>Important</th>
<th>Very important</th>
<th>Your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</table>

Statement / question

120 Careful management of money
121 Going on resolutely in spite of opposition (persistence)
122 Personal steadiness and stability
123 Long-term planning
124 Giving up today's fun for success in the future
125 Working hard for success in the future

The end

Thank you for completing this questionnaire – your participation is very much appreciated
Information sheet and consent to participate in research

Culture and leadership

Introduction
My name is Anthony Solomon and I invite you, as an employee of [company name] to participate in an anonymous research study being undertaken towards my Doctor of Business Leadership (DBL) studies at the Graduate School of Business Leadership at the University of South Africa (GSBL).

[Employee Name] has given permission for this questionnaire to be administered.

Please read the following information with a view to deciding whether you are interested in participating in the research. You will only be included in the study if you are willing to partake therein voluntarily.

Research study purpose
This research study broadly investigates whether cultural intelligence (defined as the capacity of an individual to adapt effectively to situations of cultural diversity) influences the adoption of different leadership styles and the relationship between such leadership styles and leadership effectiveness. The research is situated within the context of the cultural differences that exist amongst persons.

Importance of the research
This research will assist both the academic and business communities in better understanding cultural intelligence, culture, and how best to leverage them in improving leadership. Accordingly your participation in this research will be most appreciated.

Sample selection
You have been selected to participate in this study as your name was randomly drawn from a list of all employees. In sum, 60+ employees from the organisation will be approached to participate.

Anonymity and data access and storage
You will not be required to include your name or any other personal details that may result in you being identified. Only Professor Renier Steyn, the promoter of this research, and I will have access to the completed hard copy questionnaires. I will capture the data and forward it to Professor Renier Steyn. He will store the data on a password protected computer. He will remove all identifiers from the data which will make it impossible to identify the organisations that participated in this research. Only the data which is clear of all identifiers may be viewed by statisticians involved with this study as well as other researchers. The original hard copy questionnaires will be destroyed by Professor Renier Steyn once quality checks have been done. The electronic data may be retained for a period of five years.

Procedures
Your role entails the completion of a single questionnaire. The questionnaire contains 125 questions / statements covering demographics, the cultural intelligence of your leader, his / her leadership style, his / her effectiveness as a leader and your culture.

This questionnaire should take about 30 – 40 minutes to complete.

You may decide not to respond to any statement and you may withdraw from the research at any time during which you are responding to the statements.
There will be no repercussions whatsoever and you do not need to provide a reason for withdrawal.

It will not be possible, though, to withdraw once you have completed and submitted the questionnaire as, being anonymous, it will not be possible to identify your answers from all the other participants’ answers.

Approval to conduct this research

The Research Ethics Review Committee of the GSBL has given its approval for this study. The approval number is 2016_SBL_003_CA.

Publication

The research findings will be used in the preparation of the dissertation for the completion of my DBL degree as well as for the drawing up of journal articles for publication and papers for presentation at conferences. No individual participant data, or data that identifies any participating organisations, will be published.

Possible risks and discomforts

There are no likely or anticipated physical or psychological risks or consequences arising from your participation in this research.

Remuneration for and benefits of participation

No payment, compensation nor reimbursement is offered for your participation. Thus, you will not benefit directly. However, as noted earlier, the results will be of much scientific and practical value. You may request a copy of the research findings by sending a request to Professor Renier Steyn (see end of this page for his contact details).

Your rights as a research participant

By participating in this research you are not giving up any of your legal rights.

Consent to participate

You will not be requested to sign any form evidencing your consent to participate in this research. However, by submitting your responses you will be deemed to (a) have read this information sheet in its entirety and (b) indicated your consent to participate herein.

Further information and feedback

Please contact Professor Renier Steyn (079 227 3984 / steynr@unisa.ac.za).
APPENDIX 5: FACTOR ANALYSIS

CQ

KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin measure of sampling adequacy | .954 |
| Bartlett’s Test of Sphericity | Approx. Chi-square | 17980.202 |
| Df | 190 |
| Sig. | .000 |

Total variance explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial eigenvalues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
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<td>1</td>
<td>10.671</td>
</tr>
<tr>
<td>2</td>
<td>1.744</td>
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Pattern matrix

<p>| | Factor |
| --- | --- | --- | --- | --- |
| Cognitive CQ 4 | 1 | .875 | | |
| Cognitive CQ 5 | 2 | .842 | | |
| Cognitive CQ 6 | 3 | .685 | | |
| Cognitive CQ 3 | 4 | .669 | | |
| Cognitive CQ 2 | | | | |
| Cognitive CQ 1 | | | | |
| Behavioural CQ 4 | | | | .860 |
| Behavioural CQ 3 | | | | .824 |
| Behavioural CQ 5 | | | | .823 |
| Behavioural CQ 2 | | | | .777 |</p>
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<th>Cumulative %</th>
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**Rotation converged in 8 iterations**

**Scree plot**

![Scree Plot](Scree_Plot.png)

**Empowering leadership**

**KMO and Bartlett's Test**

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin measure of sampling adequacy.</th>
<th>Bartlett's Test of Sphericity</th>
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**Total variance explained**

The scree plot shows the eigenvalues for each component. The total variance explained for the first component is 62.152%.
Scree plot

Directive leadership

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin measure of sampling adequacy. | .836 |
| Bartlett's Test of Sphericity | Approx. Chi-square | 6434.063 |
| Df | 45 |
| Sig. | .000 |

Total variance explained

| Component | Initial eigenvalues |
| --- | --- | --- | --- |
| | Total | % of variance | Cumulative % |
| 1 | 4.727 | 47.265 | 47.265 |
| 2 | 1.576 | 15.764 | 63.030 |
| 3 | 1.287 | 12.865 | 75.895 |
| 4 | .586 | 5.863 | 81.758 |
| 5 | .474 | 4.736 | 86.495 |
| 6 | .353 | 3.531 | 90.026 |
| 7 | .306 | 3.057 | 93.083 |
| 8 | .276 | 2.757 | 95.839 |
| 9 | .228 | 2.276 | 98.115 |
| 10 | .188 | 1.885 | 100.000 |

Pattern matrix

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Directive leadership 10 | .640 |  
Rotation converged in 5 iterations

Scree plot

Cultural identity

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin measure of sampling adequacy. | .832 |
| Bartlett's Test of Sphericity | Approx. Chi-square | 10359.163 |
| Df | 325 |
| Sig. | .000 |

Total variance explained

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Rotation converged in 7 iterations.

Scree plot
Leadership effectiveness

KMO and Bartlett's Test

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Total variance explained

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Scree plot