

FOLLOWER'S PERCEPTIONS OF AUTHENTIC
LEADERSHIP AND THEIR JOB SATISFACTION:
IMPACT OF ETHNICITY

ANDREI A. LUX

2012

FOLLOWER'S PERCEPTIONS OF AUTHENTIC
LEADERSHIP AND THEIR JOB SATISFACTION:
IMPACT OF ETHNICITY

ANDREI A. LUX

A dissertation submitted to Auckland University
of Technology in partial fulfilment of the
requirements for the degree of
Master of Business (MBus)

2012

School of Business

TABLE OF CONTENTS

	Page
List of Figures	III
List of Tables	III
Attestation of Authorship	1
Acknowledgements	2
Abstract	3
Introduction	4
Literature Review	5
Authenticity	5
Self-Awareness	6
Authentic Leadership	7
Authentic Motivation	9
Authentic Followership	10
Ethics, Morality, Values & Beliefs	12
Emotions and Trust	13
Perceptions and Façades	14
Self-Deception	15
Culture	16
Hypotheses	18
Research Design	19
Epistemology	19
Sampling	19
Initial Consultations	19
Recruitment	20
Questionnaire	20
Coding	21

Analysis	22
Findings	22
Descriptive Statistics	22
Scale Reliability - Leader's Authenticity	23
Scale Reliability - Job Satisfaction	24
Initial Correlation Analyses	25
Linear Regression - Model One	27
Linear Regression - Model Two	28
Analysis of Variance – Ethnicity Match Test One	30
Analysis of Variance – Ethnicity Match Test Two	30
Analysis of Variance – Gender Tests One & Two	31
Mean Analysis - Ethnicity Match	33
Mean Analysis - Gender	35
Discussion	36
Scale Reliability	36
Leader's Authenticity & Job Satisfaction	38
Ethnicity Match	38
Limitations	39
Conclusion	40
References	40
Appendix A	53
Appendix B	55
Appendix C	57
Appendix D	59
Appendix E	65

LIST OF FIGURES

	Page
1.0 Moderating Effect of Ethnicity Match	18
2.0 Leader's Authenticity Mean Distribution by Ethnicity Match	34
2.1 Job Satisfaction Mean Distribution by Ethnicity Match	35
3.0 Leader's Authenticity Mean Distribution by Gender	36
3.1 Job Satisfaction Mean Distribution by Gender	36

LIST OF TABLES

1.0 Descriptive Statistics - Age & Length of Employment	23
2.0 Frequency - Gender	23
3.0 Frequency - Ethnicity Match	23
4.0 Scale Reliability - Leader's Authenticity Alpha	24
4.1 Scale Reliability - Itemised Breakdown of Leader's Authenticity	24
5.0 Scale Reliability - Job Satisfaction Alpha	25
5.1 Scale Reliability - Itemised Breakdown of Job Satisfaction	25
6.0 Initial Correlation Analysis	26
7.0 Partial Correlation Analysis	27
8.0 Leader's Authenticity & Job Satisfaction – Variables Entered/Removed	27
8.1 Leader's Authenticity & Job Satisfaction - Model Summary	28

	Page
8.2 Leader's Authenticity & Job Satisfaction - ANOVA	28
8.3 Leader's Authenticity & Job Satisfaction - Coefficients	28
9.0 Demographics & Job Satisfaction – Variables	
Entered/Removed	29
9.1 Demographics & Job Satisfaction - Model Summary	29
9.2 Demographics & Job Satisfaction - ANOVA	29
9.3 Demographics & Job Satisfaction – Coefficients	29
10.0 Ethnicity Match & Leader's Authenticity – Group Statistics	30
10.1 Ethnicity Match & Leader's Authenticity – Independent	
Samples t-test	30
11.0 Ethnicity Match & Job Satisfaction – Group Statistics	31
11.1 Ethnicity Match & Job Satisfaction – Independent	
Samples t-test	31
12.0 Gender & Leader's Authenticity – Group Statistics	32
12.1 Gender & Leader's Authenticity – Independent	
Samples t-test	32
13.0 Gender & Job Satisfaction – Group Statistics	32
13.1 Gender & Job Satisfaction – Independent Samples t-test	33
14.0 Mean Analysis Estimates – Ethnicity Match	34
15.0 Mean Analysis Estimates – Gender	35

ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Andrei A. Lux



ACKNOWLEDGEMENTS

Four people without whom...

Dr. Romie Littrell, without whom I wouldn't have finished

Asia Nepia, without whom I wouldn't have started

Alexander Kaledin, whose name was first for a copy

Bellatrix Lestrangle, who kept me warm while I wrote it

And also...

Auckland University of Technology Ethics Committee,
who approved this research on the 14th of September, 2011.

AUTEC Reference Number: 11/207

ABSTRACT

The purpose of this dissertation project is to test the effects of ethnicity as a moderating variable for the relationship between a follower's perceptions of a leader's authentic leadership behaviours and the employee's job satisfaction. Two new measures were constructed from parts of the Authentic Leadership Questionnaire and the Abridged Job Descriptive Index. These were administered as a survey to an opportunistic, though representative, sample of New Zealand adults working in small to medium-sized businesses. The results confirm that followers' perceptions of authentic leadership are significantly and positively correlated with their job satisfaction. Ethnicity did not demonstrate a moderating effect on this relationship. Both of the scales developed for this study proved to be reliable measures of a follower's perceptions of authentic leadership and their job satisfaction respectively.

Keywords: Authentic leadership; job satisfaction; ethnicity; New Zealand.

INTRODUCTION

A motivated workforce is always an integral part of a successful business; it becomes increasingly critical in today's fierce global competition (Hamel, 2000; O'Reilly & Pfeffer, 2000). The traditional managerial leadership paradigm that proliferated coercion, dominance, manipulation and dependence has been openly deplored and criticised as less effective than more ethical, charismatic and humane practices (Greenleaf, 1997; Block, 1993). George (2003) stresses the necessity for leaders with strong values and integrity, able to effectively motivate employees to achieve superior performance that builds enduring organisations and shareholder value.

While the positive relationship between followers' perceptions of authentic leadership and their job satisfaction has been well established, few studies thus far have factored in the impact of culture on this relationship. However, because culture itself is complex and debatable construct, authentic leader's and followers' ethnicity is isolated and how it moderates this relationship is investigated using a quantitative questionnaire and statistical analysis techniques. A similar study has been recently attempted by Whitehead and Brown (2011), but failed to produce conclusive results regarding ethnicity as a moderating variable.

First, a selection of the existing literature on authentic leadership is reviewed and the concept is deconstructed for theoretical analysis. A crucial knowledge gap is identified and hypotheses are presented. The method used to test these theoretical hypotheses is outlined and the findings from the statistical analysis are expounded. Their implications are subsequently discussed and a conclusion is drawn. Lastly, limitations and areas for further research are identified.

LITERATURE REVIEW

AUTHENTICITY

As a concept, the roots of authenticity can be traced back to Greek philosophy (Avolio & Garner, 2005) and is often depicted as an extract from Shakespeare's *Hamlet*: "to thine own self be true" (Act 1, Scene 3). Although authenticity has generated little interest from the academic community until recently, the concept is re-emerging as scholars from multiple disciplines have brought to light the first world phenomenon of increased fervour in individuals' pursuits of authenticity (Liedtka, 2008).

The recently emerging literature on positive psychology fuels contemporary conceptions regarding authenticity (Cameron, Dutton & Quinn, 2003; Seligman, 2002; Snyder & Lopez, 2002). Simply put, authenticity is concerned with the extent of truth in one's relationship with oneself (Erickson, 1995). In his seminal work, Kernis (2003) posits that authenticity is the "free and natural expression of core feelings, motive and inclinations", rather than a compulsion to attain one's true self. This view is similar to that of Harter (2002) who describes an owning of one's experiences, such as emotions, beliefs, thoughts or needs, as acquired on the way to 'knowing oneself'. Harter (2002) also goes on to expressly include that to be authentic, one must not only be, but also act according to one's own true self. Implicitly, it follows that one's authenticity is determined by actual choices (Jackson, 2005). However, while authenticity is not concerned with any 'other' person, the concept must not be confused with sincerity, which is defined by the degree with which one's reality as experienced by the self is aligned with their outward expressions (Trilling, 1972; Avolio & Gardner, 2005).

Authenticity is thus inherently concerned with one's self-awareness, whereby an individual is cognizant of their own existence and what it constitutes across time and context (Silvia & Duval, 2001). Such self-awareness is a process of understanding, said to be attained through introspective self-reflecting on one's core values, identity, motives and

emotions (Gardner, Avolio, Luthans, May & Walumbwa, 2005). This view is supported by current self-determination theory that promotes a similar internally driven regulatory process as the path to authenticity (Deci & Ryan, 1995; 2000). Discussions of self-awareness are also markedly similar to the psychology literature around one's self-concept clarity, which is concerned with how clearly an individual perceives their personal attributes and whether their views are stable and internally consistent (Campbell, Trapnell, Heine, Katz, Lavalley & Lehman, 1996).

Classical theorists such as Rogers (1959; 1963) and Maslow (1968; 1971) tackled the concept of authenticity under the pretences of 'self-actualisation', 'self-transcendence', and 'fully functioning' persons, while essentially expounding comparable rhetoric about one being 'in tune' with one's own basic nature and seeing oneself clearly and accurately in their lives. Sartre (1956) and Heidegger (1962) reached further to posit that authenticity is essentially developmental. Their view is supported in contemporary writing that authenticity is not a destination, but rather a developmental process whereby one is continually expanding their understanding of self (Erickson, 1995; Day, 2000; London, 2002; George, 2003). As such, one's authenticity is entirely subjective and therefore impossible to calibrate in an objective way (Liedtka, 2008).

SELF-AWARENESS

Goldman and Kernis (2002) have shown that self-awareness, as a part of one's authenticity, has a positive and significant relationship with self-esteem. Furthermore, such self-esteem was later categorised as 'optimal' in that it is genuine and stable as opposed to high self-esteem which is often contingent, fragile and defensive (Kernis, 2003). These findings are consistent with earlier work that established a positive relation between high self-concept clarity and self-esteem (Campbell, Trapnell, Heine, Katz, Lavalley, & Lehman, 1996).

Both classic (Rogers, 1959) and contemporary (Erickson, 1995) research in human psychology has long established and solidified the value

of authenticity for individuals' well-being and the creation of lasting relationships. Those living their daily lives authentically are seen to enjoy Aristotelian eudaemonic happiness (Haybron, 2000), and subsequently gain further self-realisation (Ilies, Morgeson & Nahrgang, 2005).

AUTHENTIC LEADERSHIP

The concept of authentic leadership signals a return to the basics, cleansing leadership of embellishment and empty promises and rebuilding its foundation on honourable and dignified behaviour (Peterlin, Penger & Dimovski, 2009). Authentic leadership was construed as the archetypal positive approach to leadership (Luthans & Avolio, 2003; May, Chan, Hodges & Avolio, 2003) and is essentially about being "real" in leadership in these changing times (Vella-Brodrick & Page, 2009). George (2003) and Luthans and Avolio (2003) popularised authentic leadership in the practitioner and academic communities respectively.

Gardner *et al.* (2005) succinctly state that:

"with today's pressure to promote style over substance, dress for success, embrace flavour-of-the-month fads and fashions, and compromise one's values to satisfy Wall Street's unquenchable thirst for quarterly profits, the challenge of knowing, showing, and remaining true to one's real self at work has never been greater".

This view is supported by both leadership practitioners (George, 2003) and academic scholars (Seligman, 2002; Luthans & Avolio, 2003) who both stress the need for further development of the authentic leadership theory and practice. Subsequently, the concept has more recently been promoted as the preferred leadership style in the critical healthcare (Shirey, 2006) and entrepreneurship (Jensen & Luthans, 2006a) industries.

In his seminal work on authenticity, Kernis (2003) posits four core elements as: self-awareness, unbiased processing, relational authenticity, and authentic behaviour. Although this framework was wholly adopted by

Ilies *et al.* (2005), the 'unbiased processing' dimension was challenged by contentions that people are inherently biased in their information processing (Fiske & Taylor, 1991; Tice & Wallace, 2003). Subsequently, and after several further terminological adjustments, the academic community seems in agreement that authentic leadership comprises of: balanced processing, internalised moral perspective, relational transparency, and self-awareness (Avolio, Walumbwa & Weber, 2009). Furthermore, these elements were tested across a multicultural sample and shown to be a unique and reliable scale (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008).

Balanced processing is the manner in which authentic leaders practice self-regulation through the unbiased collection and interpretation of both positive and negative self-related information (Gardner *et al.* 2005), which is used to align their values and intentions (Stajkovic & Luthans, 1998). Complementary to this process is a constant sequence of self-assessments at the unconscious and subconscious level that evaluate and control their behaviour to ensure compliance with their perceived self (Carver & Scheier, 1981; Stets & Burke, 2000; Weick, 1979). Therefore, the authentic behaviour referred to earlier is that which is based on one's core values, thoughts and beliefs rather than external influences (Gardner *et al.* 2005; Ilies *et al.* 2005). This assertion implies that the behaviour is intrinsically motivated, which Ryan and Deci (2000; 2001) state to be inherently authentic.

Both 'authentic relational orientation' (Ilies *et al.* 2005) and 'relational transparency' (Gardner *et al.* 2005) effectively refer to an authentic leader's desire for open, truthful, self-disclosing and trusting relationships, which include admissions of both positive and negative aspects of self. As such, authentic leaders are much more focused on the content of messages in their leadership, rather than the symbolic action and persuasive language promoted in transformational leadership (Bass, 1998; Bono & Judge, 2004). This allows the authentic leader to present a genuine self and create intimate and trusting relationships (Gardner *et al.* 2005).

Avolio, Luthans and Walumbwa (2004) define authentic leader as “those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others’ values/moral perspective, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character”. This initial conceptualisation is clearly multi-level and multi-dimensional, which has caused concerns about subsequent measurement issues (Cooper, Scandura & Schreisheim, 2005). Due to the all-encompassing nature of this definition, prominent factors will be further discussed in the appropriate subsections.

The development of authentic leadership under this broad definition can only be described as a lifetime pursuit, whereby leaders practice the aforementioned reflective and regulating processes to continually gain self-awareness and establish genuine relationships (Avolio, 2005). Ricoeur (1992) describes this process as the “narrative project” of the emergent self who constructs their own unified life story. Similarly, Roche (2010) posits that authentic leadership is developed via these processes because as one strives towards a future self, their actual self grows and adapts until one develops their self-actualised authenticity.

AUTHENTIC MOTIVATION

There is a general consensus that positive modelling is the primary method through which authentic leaders motivate their followers to achieve superior performance and organisational goals (Gardner *et al.* 2005). The concept of positive modelling consists of a basic method where the authentic leader enacts their positive values, motives, goals, emotions and behaviours for their followers to emulate (Luthans & Avolio, 2003); essentially they are leading by example (Avolio & Gardner, 2005). This method is supported by the observations that followers are empowered by the exemplary behaviours displayed by their leaders to behave similarly themselves (Conger & Kanungo, 1998). Furthermore, Weiss (1977) documented a congruent phenomenon where followers assimilated their leader’s characteristics through social learning mechanisms.

This positive modelling is critical for the establishment and sustainment of authentic relationships (Luthans & Avolio, 2003), which are characterised by transparency, trust and an emphasis on follower development (Gardner *et al.* 2005). Moreover, it is posited that not only do followers embrace their leader's behaviours and characteristics, but the leader's demonstrated self-awareness also inspires followers to embark on their own journey of self-discovery; all of which ultimately yields desirable follower outcomes (Gardner *et al.* 2005).

Such authentic leader-follower relationships are posited to produce increased follower engagement, self-esteem, trust in leader, confidence, well-being, hope, and veritable performance (Gardner *et al.* 2005). Essentially, the authentic leader is seen to promote and facilitate the development of followers until the whole workforce is effectively comprised of leaders (Gardner *et al.* 2005), which is seen as an incredibly desirable organisational position (Isaac, Zerbe & Pitt, 2001).

There are empirical grounds to believe that authenticity and self-awareness in leaders creates more positive affective states (Goldman & Kernis, 2002), and it is theorised that by working together on a daily basis with their followers, they too will experience more positive affective states through the operation of emotional and social contagion theory that dictates the spread and reverberation of such positive affective states (Ilies *et al.* 2005; Hatfield, Cacioppo & Rapson, 1994; Kernis, 2003). Furthermore, the increased experience of these positive affective states will assist with the emotional and cognitive development of other organisational members (Ilies *et al.* 2005).

AUTHENTIC FOLLOWERSHIP

The authentic followership construct introduced by both Shamir and Eilam (2005) and Gardner *et al.* (2005) is characterised by followers that have an authentic relationship with their leader, as discussed previously, and are also seen to follow for authentic reasons of their own. Gardner *et al.* further argue that authentic followership comes to mirror the

aforementioned authentic developmental processes and self-regulations of authentic leaders. There is general agreement that through the authentic relationship with their leader, authentic followers identify with their leader and attain self-awareness and “self-regulate their behaviour to achieve goals that are, in part, derived from and congruent with those of the leader” (Gardner *et al.* 2005; Avolio, Gardner, Walumbwa, Luthans & May, 2004; Avolio, Luthans & Walumbwa, 2004).

While Ilies *et al.* (2005) maintain that authentic leadership positively influences followers' identification with the organisation and leader, they regress that this effect is only especially prominent when there is a high level of value-congruence between the leader and their followers. This point is highlighted by Eagly (2005) who observed cases wherein leaders behaved authentically and engaged in transparent relationships with followers, but still failed to achieve the true relational authenticity discussed previously; and ultimately failed to successfully motivate their followers. She posited that perhaps the leaders, although behaving authentically, articulated values that were not congruent with those of their followers, or were not accorded the requisite legitimacy to promote any such values on the followers behalf (Eagly, 2005). Howell and Shamir (2005) theorised that one's decision to follow is actually a much more active process than previously surmised; largely based on the perceived level of congruence between the leader's and followers' values and identity. This perspective is supported by a more recent study that concluded that authentic leadership is much more effective at motivating followers if they identify with their leader (Peterlin, Penger & Dimovski, 2009).

Although there are well documented desirable follower outcomes from authentic leadership and followership such as increased engagement, job satisfaction, well-being and enthusiasm (Kahneman, Diener & Schwartz, 1999; Ryan & Deci, 2000; Harter, Schmidt & Keyes, 2003), “it only requires the good follower to do nothing for leadership to fail” (Grint, 2005).

ETHICS, MORALITY, VALUES & BELIEFS

An individual's actions relating to demonstration of ethics and morality can have a significant impact on others' attitudes, beliefs, opinions, and behaviour (Zhu, May & Avolio, 2004). Various authentic leadership authors agree that the construct inherently encompasses and is in fact centrally concerned with one's ethics and morality (Luthans & Avolio, 2003; Duignan & Bhindi, 1997). Even the classic theories posited by Maslow (1971) incorporate a strong ethical component in what he called the 'self-actualising' person. However, there is evidence that many of today's leaders actually lack an ethical dimension in their leadership behaviour, which is to say that they act in a neutral manner without making a stand one way or the other (Treviño, Brown & Hartman, 2003).

Furthermore, Bandura (1986) asserts that even individuals with high moral standards can become overwhelmed by their own power or fall to corruption due to prevailing corporate norms, remuneration systems or out of fears over their future job security. This study is validated, in part, by a more recent review by Aquino and Reed (2002), who found an inherent disposition within all people towards either morally responsible or irresponsible behaviour that is now commonly referred to as one's 'moral identity'.

Ethical beliefs are values; Rokeach (1979) defines values as one's enduring beliefs regarding certain conduct or states that distinguish between those more or less desirable. Bennis (2003) and George (2003) believe an individual's self-awareness of their own values is a prerequisite for his/her authenticity and authentic leadership. However, Simons (1999) posits that oftentimes a leader may indicate values through their behaviour that are actually mismatched with those they espouse; their rhetoric and behaviour are inconsistent with their intent. Such internal inconsistency with regard to an individual's values undermines their integrity as a leader (Howell & Avolio, 1992).

On the other hand, Spitzmuller and Illies (2010) argue that “the introspective nature of authentic leadership ensures moral integrity and reduces individual corruptibility” through internal regulatory processes. This opinion assumes an inherent predisposition toward ethical behaviour and I am unable to find published empirical evidence on which such a statement can be based.

EMOTIONS AND TRUST

Contemporary academic literature suggests that self-knowledge, and therefore authenticity, include a fundamental awareness of one's own emotions or ‘emotional intelligence’ (Goleman, 1995; Goleman, Boyatzis & McKee, 2002; Salovey & Mayer, 1990; Salovey, Mayer & Caruso, 2002). According to George (2000), and Salovey and Mayer (1990), emotional intelligence requires individuals to not only be cognizant of their own emotions, but also know their causes, effects on decision-making, cognitive processes, and their developmental nature over time. If such emotional intelligence is an innate part of authenticity, then it logically follows that it is also a prerequisite for authentic leadership; which is supported by the emerging empirical evidence regarding the importance of emotions to the leadership process (Ashkanasy & Daus, 2002; Ashkanasy & Tse, 2000; George, 2000).

Michie and Gooty (2005) delineate positive ‘other-directed’ emotions, such as appreciation and gratitude, and further hypothesise that their experience by authentic leaders will motivate them to display self-transcendent values. However, it is only when leaders are able to act on these self-transcendent values without experiencing internal emotional conflict, can they claim to truly and authentically identify with their values (Oakley, 1992). This can, however, prove to be problematic for any leader because of the inherent conflicts that exist within and between their work-related responsibilities (Novicevic, Harvey, Buckley, Brown & Evans, 2006). A leader's inability to juggle these tensions alongside those that may exist within their personal lives may result in inauthentic or pseudo-authentic responses (Novicevic, Davis, Dorn, Buckley & Brown 2005).

Nyham and Marlowe (1997) define interpersonal trust as “the level of confidence that one individual has in another’s competence and his or her willingness to act in a fair, ethical and predictable manner”. It has been observed that such interpersonal trust between followers and their leader has a significant and positive relationship with the authentic leadership style (Ceri-Booms, 2010; Dirks & Ferrin, 2002; Jones & George, 1998). The main antecedent for creating trust in leader is the follower’s perception of the leader’s level of honesty (Dirks & Ferrin, 2002), and the sustainment of that trust once established depends largely on the leader’s consistency and congruency of rhetoric and action (Joseph & Winston, 2005; Mayer, Davis & Schoorman, 1995). Furthermore, Dirks and Ferrin (2002) advanced that a follower’s trust in leader is positively and significantly related to their organisational commitment, and subsequently; positive organisational outcomes.

PERCEPTIONS AND FAÇADES

Although genuine authenticity is promoted as the core of the authentic leadership construct, Jensen and Luthans (2006b) find that employees’ *perception* of authentic leadership is the single strongest and positive influence on employee job satisfaction, work attitudes, organisational commitment, happiness and also trust in their leaders (see also Zhu, May & Avolio, 2004).

Furthermore, followers’ perceptions of their leader are not solely based on the leader’s observable behaviour, but also those values, beliefs and goals attributed to the leader by those followers (Gardner *et al.* 2005). For example, Allocentrics define their identity relative to the in-groups that they belong to and will subsequently view a leader’s actions as more favourable if they benefit their group rather than any one’s individual interests (Triandis, 1995; Bass, 1985). On the other hand, Idiocentrics hold self-interests in the highest regard and will thusly view the same leader’s actions through an entirely inverse perspective from Allocentrics (Markus & Kitayama, 1991; Triandis, 1995).

In light of the critical nature of followers' perceptions of a leader's actions, it is not surprising to see that "fake it till you make it" has evolved into a modern adage (Liedtka, 2008). Duignan and Bhindi (1997) propose that many leaders often don a "mask of authenticity, a façade of respectability; rarely revealing their true selves". These authors go on to claim that honesty and truth are the exception in many organisations as common belief dictates that the road to success is characterised by camouflage and deception (Duignan & Bhindi, 1997). Perhaps these beliefs are perpetuated by the recent literature urging leaders to *conform to the image* of an authentic leader to achieve success (Ceri-Booms, 2010). However, as we have seen in recent corporate melt-downs; the artifice is often discovered and those nearest feel betrayed and cheated (Duignan & Bhindi, 1997).

A counterargument is presented by Hochschild (1983) who differentiated between the 'deep' and 'surface' acting she witnessed in flight attendants who felt pressured to behave inauthentically by their organisations when faced with customer demands. It is posited that such 'deep' level acting may in fact transform from role playing to role taking (Ashforth & Humphrey, 1993) through the developmental nature of authenticity. Perhaps such a short-term ruse may be justified if authenticity is reached, especially considering that people are generally quite inept at recognising false impressions (Bond & DePaulo, 2006). These ideas are supported by Festinger's (1957) cognitive dissonance theory (see also Sosik, Juzbasich & Chun, 2011; Eberlin & Tatum, 2005). An unpleasant emotional state is developed when two simultaneously held attitudes or cognitions are inconsistent or when there is a conflict between belief and overt behaviour. The resolution of the conflict can be through changing attitudes to conform to the behaviour or changing the behaviour. Festinger (1957) found that belief patterns are generally modified so as to be consistent with behaviour.

SELF-DECEPTION

Kernis (2003) posits that a fundamental component of authenticity is one's unbiased evaluations of self; devoid of denials, distortions and

exaggerations. However, in order to attain such self-awareness we are urged to acknowledge our vices, our dark and flawed self, “the mask we wear to protect our fragile self” (Starratt, 1993). The issue arises again that we are all inherently flawed and biased processors of information, especially so regarding issues of self (Tice & Wallace, 2003).

It has been well documented that when faced with social interaction, individuals seek to adopt verbal and behavioural strategies aimed at improving their image (Schlenker & Weigold, 1992). The idea is supported by Gardner *et al.* (2005) finding that people tend to compartmentalise their personas for personal and work lives, assuming different personas for each.

Maslow (1962) contends that we engage in this kind of self-deception and deny reality for fear of knowledge that might make us feel inferior, worthless or detestable. More recent theory portrays this self-deception as a defence mechanism that allows us to preserve our self-esteem and current identity (Brown & Starkey, 2000). Such self-deception is an almost universal practice, oftentimes invoked unintentionally or unknowingly (Warner, 2001; Baumeister, 1998). Goleman (1985) argues that only through continual conscious self-regulatory and self-reflective efforts are we able to attune ourselves to, and overcome the on-going self-deception; processes distinctly similar to those of authentic development.

CULTURE

A naïve understanding of leadership might propose that a leader could operate successfully with knowledge of how to do business in only a single country, but the explosion of global business relationships and integration has brought to the fore the need to understand the impacts of culture on leadership (Hsieh, 2010). Many contend that in the past, leadership research has focused too narrowly on the United States (Alimo-Metcalfe, 1995), and subsequently, there has been a general ‘one size fits all’ belief (Newman & Nollen, 1996). Obviously, we cannot generalise globally from such a limited sample. While the majority of leadership theories fail to incorporate a contextual element (Avolio, 2007), there is

growing interest among scholars for theory and research exploring the impact of culture on leadership (Avolio, Walumbwa & Weber, 2009).

Gardner (1990) expressed a classical viewpoint that leaders must always be viewed in context as they are part of a 'system' and therefore subject to the forces within that system. This statement has been recently supported by Conger (2004) who deplores academia losing focus on the situation as an integral part of leadership. This is, of course, the echoes of contingency leadership theory, the main thesis of which stated that not all leadership styles are applicable in every situation (Yukl, 2002). Much of the more recent literature on contingency theory has focused on culture as the specific situational context (Francesco & Gold, 1998; Hofstede & Bond, 1988; Kreitner, 1995; Rodgrigues, 1990).

However, 'culture' itself is a multi-dimensional and complex construct around which there are on-going debates as to its definitions and effects (Avolio, Walumbwa & Weber, 2009). This lack of concept clarity brings to the study of leadership some of the same methodological issues experienced in cross-cultural research (Van de Vijver & Leung, 2000). There is, however, an increasing volume of literature claiming that culture presents a significant variable that influences leadership style and effectiveness (Toor & Ogunlana, 2009; Lord & Brown, 2004; Hartog, House, Hanges, Ruiz-Quintanilla & Dorfman, 1999; Newman & Nollen, 1996; Offermann & Hellmann, 1997; House *et al.* 1999; Byrne & Bradley, 2007; Nahavandi, 2006; Perrow, 1970; Gardner, 1990; Hsieh, 2010; Fahy, 2002; Coviello, Ghauri & Martin, 1998; House & Mitchell, 1974; Hersey & Blanchard, 1969; 1993; Fiedler, 1967). Unfortunately, a large portion of these works fail to account for within-country variations and as such are inherently biased (Graen, 2006).

Avolio (2007) guides us to strive to grasp what constitutes universally effective leadership, and what is culture-specific. It has been suggested that integrity (House, Hanges, Javidan, Dorfman & Gupta, 2004) and the basic human desire for development (Perterlin, Penger & Dimovski, 2009) might be two such globally generalizable constants.

HYPOTHESES

The research literature strongly indicates that followers' perception of authentic leadership creates positive follower outcomes, which lead to positive organisational outcomes. Also, the level of value congruence between authentic leader and follower moderates the extent of these positive effects. However, there is a clear knowledge gap regarding the influence of cultural differences on followers' perceptions of authentic leadership.

While defining culture as a construct is beyond the scope of this study, I propose to empirically investigate how authentic leaders' and followers' *ethnicity* moderates the relationship between followers' perception of authentic leadership and follower job satisfaction (see Figure 1.0 below). To the best of my knowledge, no studies to date have successfully analysed this particular relationship.

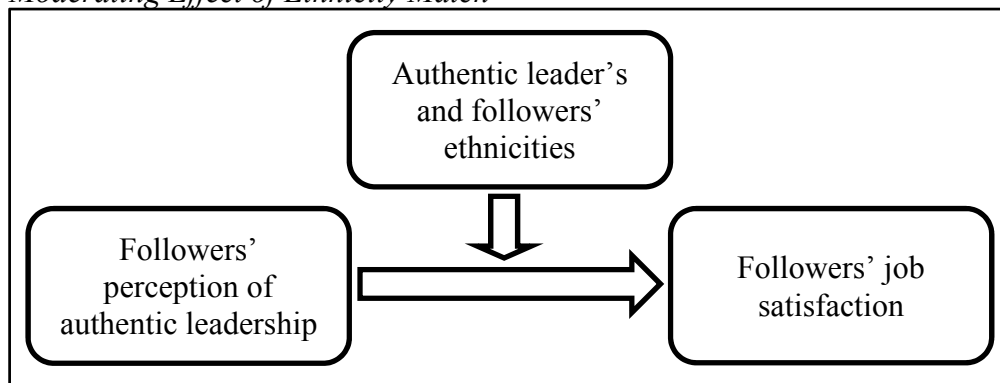
Moderating Effect of Ethnicity Match

Figure 1.0

Based on the theorised moderating effect of ethnicity, the following three hypotheses are proposed:

- H1 - Followers' level of perceived leadership authenticity in their supervisor will be significantly and positively correlated with their job satisfaction.
- H2 - Followers of the same ethnicity as their supervisor will demonstrate a significantly increased level of perceived authenticity in their supervisor.

H3 - Followers of the same ethnicity as their supervisor will demonstrate a significantly higher level of job satisfaction than those of different ethnicities.

RESEARCH DESIGN

EPISTEMOLOGY

This research was conducted under a positivist epistemological belief structure. Positivists believe in an objective, measurable reality, which allows them to test theoretical hypotheses in order to obtain reliable laws about how the world functions (Bryman & Bell, 2003 pp. 16). Positivism also stresses that science must be conducted in an object way that is free from bias. This rigor creates an opportunity to apply deductive logic to the observed facts in order to test hypotheses and ultimately; obtain generalisable knowledge (Bryman & Bell, 2003 pp. 16). As such, this research was conducted through the administration of a quantitative field survey research questionnaire, and analysed using standard inferential statistical methods.

SAMPLING

The target population was businesspeople currently employed by companies based in Auckland, New Zealand that satisfied the following criteria:

- Employed between 11-100 people
- Had an annual turnover of 1 to 5 million NZD

These criteria were selected specifically so that the results would be generalizable across small to medium-sized businesses in New Zealand. The Kompass database was used to locate such companies and 170 potential businesses were identified.

INITIAL CONSULTATIONS

Firstly, three businesspeople characteristic of the envisioned sample were contacted and the proposed research was explained to them. As representative participants, their feedback was encouraged. All three

businesspeople agreed that the research was worthwhile and were interested in the results. The main concern raised was the confidentiality of each participant's data, as some of the questions were regarding their immediate supervisor and may be sensitive. Their concerns were addressed in the research design insofar as each participant was provided with a postage-paid and addressed return envelope in which they could deposit their completed questionnaire immediately to prevent the possibility of a confidentiality breach. No further amendments to the proposed research design were suggested during these consultations.

RECRUITMENT

The relevant supervisor from each company was contacted by phone and asked for their permission to administer the survey to their employees. Upon obtaining the supervisor's consent, they were asked to forward via email an information sheet to all of their employees to act as an invitation to participate in the research (see Appendix A). Whereupon employees were able to volunteer to participate by contacting the researcher via email, who supplied them with the questionnaire and an addressed postage-paid return envelope. Neither the questionnaire, nor the return envelope required the participants to reveal their identity. Therefore, although some personal information such as the participants' email addresses was known to the researcher, once the questionnaires were returned there was no way to identify which survey belonged to which participant, ensuring that their anonymity was protected. Hence if participants preferred, neither their supervisors, nor co-workers could know who chose to participate.

QUESTIONNAIRE

The questionnaire consists of 36 questions, broken down into three sections (see Appendix B). The first five are demographic questions (age, gender, own ethnicity, immediate supervisor's ethnicity and duration of employment with that company). These are followed by 16 questions from the follower section of the Authentic Leadership Questionnaire (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008), which established the follower's perception of their immediate supervisor's authentic leadership.

Lastly, a selection of 15 questions adapted from the Abridged Job Descriptive Index (Stanton, Sinar, Balzer, Julian, Thoresen, Aziz, Fisher & Smith, 2001) was used to measure the follower's job satisfaction. The sequence of these questions was randomised across categories so as to minimise bias due to effects of adjacent items (Franke, 1997).

Although the Authentic Leadership Questionnaire (ALQ) was shown to be a valid and reliable scale (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008), because this particular questionnaire is a new construction from parts of the Abridged Job Descriptive Index (Stanton *et al.* 2001) and only the follower section of the ALQ (Walumbwa *et al.* 2008), scale reliability and validity had to be re-established to ensure that these new scales did indeed measure what was intended. Cronbach's alpha was used to test the variables for internal reliability; high scores consistent with the original design of the survey indicated an initial form of validity (Cronbach & Meehl, 1955).

CODING

Initially, all of the returned questionnaires were reviewed to ensure that they had been filled out in full; partially completed surveys were discarded, leaving a total of 144 usable responses. Also at this time, the values of the negatively worded questions in the job satisfaction section of the survey were reversed (i.e. if a respondent indicated a '3' for such a question, it was recorded as a '1' etc.). See the completed questionnaire in Appendix C for clarification.

Descriptive statistics were run for each respondent's perception of authentic leadership in their supervisor and for their job satisfaction (see Appendices D and E respectively). Each of the two mean scores were recorded on the corresponding respondent's completed survey, along with either an 'S' or a 'D' to signify whether they indicated that they were of the Same ethnicity as their supervisor, or if there were of Different ethnicities. The specific ethnicity of each participant was not recorded and neither was that of their supervisor because the main object of this study is focused on analysing the effects of *perceived* ethnicity match as an indicator of value

congruence, rather than that based on the objective ethnicities of leader and follower. Furthermore, such information could have made it possible to extrapolate from the data to a participant, and as such, could not be retained to ensure the participants' anonymity was protected. Although potentially important information, it could not be collected for the reasons stipulated.

At this stage, the following data were recorded for analyses:

- Gender
- Age
- Length of Employment
- Perception of Authentic Leadership in Supervisor Score
- Job Satisfaction Score
- Ethnicity Match
- All of the individual responses to the Authentic Leadership and Job Satisfaction questions (to allow for scale reliability analysis)

ANALYSIS

In order to analyse the gathered data, various statistical tests were conducted using the SPSS 17.0 package implementations and techniques. Results that demonstrated a significant ($p < .01$) relationship were used to verify theoretical hypotheses (Bryman & Bell, 2003 pp. 368).

FINDINGS

DESCRIPTIVE STATISTICS

In total, 144 usable responses were received. The respondents ranged in age from 19 to 69 years, with a mean of 45 years ($SD = 14$). Current employment was a first order criterion for participation and the average length of employment was 12 years ($SD = 12$, see Table 1.0). The majority of the respondents were male (72%), with 40 female respondents (see Table 2.0). Out of the 144 respondents, 59% reported having the same ethnicity as their immediate supervisor, while the remaining 41% were of a different ethnicity from their supervisor (see Table 3.0).

Table 1.0
Descriptive Statistics – Age and Length of Employment

	N	Minimum	Maximum	Mean	Std. Deviation
Age	144	19.0	69.0	44.5	14.3
Length of Employment	144	.3	49.0	12.2	12.2
Valid N (listwise)	144				

Table 2.0
Frequency – Gender

		Frequency	Percent	Valid Percent
Valid	Male	104	72.2	72.2
	Female	40	27.8	27.8
	Total	144	100.0	100.0

Table 3.0
Frequency – Ethnicity Match

		Frequency	Percent	Valid Percent
Valid	Different Ethnicities	59	41.0	41.0
	Same Ethnicities	85	59.0	59.0
	Total	144	100.0	100.0

SCALE RELIABILITY - LEADER'S AUTHENTICITY

There were 16 questions pertaining to the respondent's perception of their leader's authenticity. Scale reliability analysis using Cronbach's Alpha revealed a coefficient of .944 (see Table 4.0) which denotes the measure's reliability as 'excellent' (George & Mallery, 2003); indicating that this scale is a consistent measure of a latent variable which is a good representation of Leader's Authenticity. The itemised breakdown of Leader's Authenticity revealed that the alpha could be increased to .946 if Question 5 was removed from the scale (see Table 4.1). This marginal increase was rejected in favour of keeping the scale intact.

Table 4.0
Scale Reliability – Leader's Authenticity Alpha

Cronbach's Alpha	N of Items
.944	16

Table 4.1
Scale Reliability – Itemised Breakdown of Leader's Authenticity

Leader's Authenticity Question	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question 1	38.03	160.517	.666	.941
Question 2	38.50	151.580	.779	.939
Question 3	38.42	155.322	.707	.940
Question 4	38.24	159.458	.622	.942
Question 5	38.65	164.900	.413	.946
Question 6	38.27	159.318	.708	.941
Question 7	38.17	159.893	.635	.942
Question 8	38.60	155.052	.694	.941
Question 9	38.40	151.879	.808	.938
Question 10	38.95	158.480	.638	.942
Question 11	38.24	156.266	.690	.941
Question 12	38.53	153.817	.811	.938
Question 13	38.62	153.133	.747	.939
Question 14	39.06	157.010	.634	.942
Question 15	38.72	154.300	.780	.939
Question 16	38.63	152.374	.800	.938

SCALE RELIABILITY - JOB SATISFACTION

There were 15 questions that sought to ascertain the respondent's job satisfaction. This scale's reliability was also analysed using Cronbach's Alpha, which revealed a coefficient of .827 (see Table 5.0) which denotes the measure's reliability as 'good' (George & Mallery, 2003). While this result is lower than that of the previous scale, George and Mallery (2003) state that an alpha of .8 is a reasonable goal. As such this measure was deemed to be a good representation of Job Satisfaction. Similarly to the previous scale, the alpha could be marginally improved if Question 26 was removed (see Table 5.1), but this notion was rejected because its inclusion yields a necessary insight into one's job satisfaction.

Table 5.0
Scale Reliability – Job Satisfaction Alpha

Cronbach's Alpha	N of Items
.827	15

Table 5.1
Scale Reliability – Itemised Breakdown of Job Satisfaction

Job Satisfaction Question	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question 17	33.60	54.493	.613	.807
Question 18	34.89	55.666	.450	.816
Question 19	34.55	54.082	.513	.812
Question 20	33.38	57.804	.419	.819
Question 21	33.74	55.241	.527	.812
Question 22	34.38	55.187	.478	.814
Question 23	33.83	54.816	.462	.816
Question 24	33.69	58.272	.361	.822
Question 25	33.49	57.594	.359	.822
Question 26	34.14	58.946	.225	.831
Question 27	34.94	54.143	.518	.812
Question 28	34.40	56.451	.358	.823
Question 29	33.78	53.125	.668	.802
Question 30	33.86	55.687	.406	.820
Question 31	33.67	57.119	.357	.822

INITIAL CORRELATION ANALYSES

Having concluded that both the Leader's Authenticity and Job Satisfaction were reliable scales, all of the main variables were run through a simple correlations analysis, which revealed that Leader's Authenticity and Job Satisfaction were significantly correlated, $r = 0.509$, $p < 0.01$, and Authenticity accounts for 26% of the variance in Job Satisfaction; supporting the extant literature on this particular relationship (see Table 6.0). This analysis also highlighted several other significantly correlated variables, such as Age and Length of Employment; which is understandable, but also Gender and Age and Length of Employment. This indicated that perhaps the aforementioned disproportionate gender divide in this sample had significant influences on statistical relationships; as such further Gender-based analysis was completed during later stages.

Table 6.0

Initial Correlation Analysis

		Gender	Age	Length of Employment	Leader's Authenticity	Job Satisfaction
Gender	Pearson Correlation	1	-.432**	-.387**	-.141	-.078
	Sig. (2-tailed)		.000	.000	.092	.353
	N	144	144	144	144	144
Age	Pearson Correlation	-.432**	1	.654**	.122	.036
	Sig. (2-tailed)	.000		.000	.145	.666
	N	144	144	144	144	144
Length of Employment	Pearson Correlation	-.387**	.654**	1	.120	.011
	Sig. (2-tailed)	.000	.000		.151	.900
	N	144	144	144	144	144
Leader's Authenticity	Pearson Correlation	-.141	.122	.120	1	.509**
	Sig. (2-tailed)	.092	.145	.151		.000
	N	144	144	144	144	144
Job Satisfaction	Pearson Correlation	-.078	.036	.011	.509**	1
	Sig. (2-tailed)	.353	.666	.900	.000	
	N	144	144	144	144	144

** . Correlation is significant at the 0.01 level (2-tailed).

Next, a partial correlation analysis was conducted on the Leader's Authenticity and Job Satisfaction variables, while controlling for the other remaining variables (Gender, Age, Length of Employment and Ethnicity Match). This also displayed a significant correlation, $r = 0.507$, $p < 0.01$ (see Table 7.0), indicating that the demographic variables had a negligible influence on the relationship between Leader's Authenticity and Job Satisfaction.

Table 7.0
Partial Correlation Analysis

Control Variables = Gender & Age & Length of Employment		Leader's Authenticity	Job Satisfaction
Leader's Authenticity	Correlation	1.000	.507
	Significance (2-tailed)	.	.000
	df	0	139
Job Satisfaction	Correlation	.507	1.000
	Significance (2-tailed)	.000	.
	df	139	0

LINEAR REGRESSION - MODEL ONE

To discover the observed extent of the relationship between Leader's Authenticity and Job Satisfaction a linear regression analysis was conducted. Leader's Authenticity was entered as the independent variable and Job Satisfaction as the dependent variable (see Table 8.0). The Adjusted R Square coefficient denotes that Leader's Authenticity positively influences Job Satisfaction by 25.4% (see Table 8.1), and an analysis of variance confirms that this is in fact a significant relationship (see Table 8.2).

Table 8.0
Leader's Authenticity and Job Satisfaction – Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Leader's Authenticity ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: Job Satisfaction

Table 8.1

Leader's Authenticity and Job Satisfaction – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509 ^a	.259	.254	.45845

a. Predictors: (Constant), Leader's Authenticity

Table 8.2

Leader's Authenticity and Job Satisfaction – ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10.424	1	10.424	49.597	.000 ^a
Residual	29.845	142	.210		
Total	40.270	143			

a. Predictors: (Constant), Leader's Authenticity

b. Dependent Variable: Job Satisfaction

Table 8.3

Leader's Authenticity and Job Satisfaction – Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.597	.124		12.844	.000
Leader's Authenticity	.324	.046	.509	7.042	.000

a. Dependent Variable: Job Satisfaction

LINEAR REGRESSION - MODEL TWO

In order to further investigate the possibility that the remaining demographic variables were contributing to this influence, a similar linear regression was also conducted, but this time using not only Leader's Authenticity as the independent variable, but also Length of Employment, Gender and Age (see Table 9.0). While still significant (see Table 9.2), this model displayed a lower level of influence (24.1%, see Table 9.1) with Leader's Authenticity as the only variable showing a significant influence (see Table 9.3).

Table 9.0

Demographics and Job Satisfaction – Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
2	Length of Employment, Leader's Authenticity, Gender, Age ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: Job Satisfaction

Table 9.1

Demographics and Job Satisfaction – Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.512 ^a	.262	.241	.46232

a. Predictors: (Constant), Length of Employment, Leader's Authenticity, Gender, Age

Table 9.2

Demographics and Job Satisfaction – ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
2 Regression	10.560	4	2.640	12.352	.000 ^a
Residual	29.710	139	.214		
Total	40.270	143			

a. Predictors: (Constant), Length of Employment, Leader's Authenticity, Gender, Age

b. Dependent Variable: Job Satisfaction

Table 9.3

Demographics and Job Satisfaction – Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.665	.254		6.557	.000
Leader's Authenticity	.326	.047	.512	6.936	.000
2 Gender	-.035	.097	-.030	-.361	.719
Age	.000	.004	.003	.032	.974
Length of Employment	-.003	.004	-.065	-.662	.509

a. Dependent Variable: Job Satisfaction

ANALYSIS OF VARIANCE – ETHNICITY MATCH TEST ONE

An independent samples t-test was conducted to compare Leader's Authenticity scores between respondents who reported having supervisors of the same ethnicity, and different ethnicities (see Table 10.0). Results indicated that there was no significant effect for ethnicity match, $t(106.66) = -1.24, p = .22$ (see Table 10.1).

Table 10.0

Ethnicity Match and Leader's Authenticity – Group Statistics

	Ethnicity Match	N	Mean	Std. Deviation	Std. Error Mean
Leader's Authenticity	Different Ethnicities	59	2.4612	.93501	.12173
	Same Ethnicities	85	2.6429	.74980	.08133

Table 10.1

Ethnicity Match and Leader's Authenticity – Independent Samples t-test

Ethnicity Match		Leader's Authenticity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F Sig.	7.117 .009	
t-test for Equality of Means	t	-1.292	-1.242
	df	142	106.661
	Sig. (2-tailed)	.199	.217
	Mean Difference	-.18175	-.18175
	Std. Error Difference	.14072	.14640
95% Confidence Interval of the Difference	Lower	-.45994	-.47198
	Upper	.09643	.10847

ANALYSIS OF VARIANCE – ETHNICITY MATCH TEST TWO

To further investigate the possible impacts of Ethnicity Match, another independent samples t-test was run comparing Job Satisfaction with the two Ethnicity Match groups (see Table 11.0). The results demonstrated no significant difference between the two groups and Job Satisfaction, $t(142) = -1.83, p = .07$ (see Table 11.1).

Table 11.0

Ethnicity Match and Job Satisfaction – Group Statistics

	Ethnicity Match	N	Mean	Std. Deviation	Std. Error Mean
Job Satisfaction	Different Ethnicities	59	2.3332	.62094	.08084
	Same Ethnicities	85	2.4968	.44953	.04876

Table 11.1

Ethnicity Match and Job Satisfaction – Independent Samples t-test

Ethnicity Match		Job Satisfaction	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	5.992	
	Sig.	.016	
t-test for Equality of Means	t	-1.834	-1.733
	df	142	98.843
	Sig. (2-tailed)	.069	.086
	Mean Difference	-.16360	-.16360
	Std. Error Difference	.08919	.09441
95% Confidence Interval of the Difference	Lower	-.33991	-.35093
	Upper	.01270	.02372

ANALYSIS OF VARIANCE – GENDER TESTS ONE & TWO

Due to the disproportionate ratio of male to female respondents in this particular sample, it was prudent to investigate further as to whether or not Gender had a significant influence on either Leader's Authenticity or Job Satisfaction (see Tables 12.0 and 13.0 respectively). Independent samples t-test were conducted and the results suggested that neither Leader's Authenticity, $t(142) = 1.69$, $p = .09$ (see Table 12.1), nor Job Satisfaction, $t(142) = 0.93$, $p = .35$ (see Table 13.1), showed a significant relationship with Gender.

Table 12.0

Gender and Leader's Authenticity – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Leader's Authenticity	Male	104	2.6409	.82127	.08053
	Female	40	2.3803	.84197	.13313

Table 12.1

Gender and Leader's Authenticity – Independent Samples t-test

Gender		Leader's Authenticity	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.204	
	Sig.	.652	
t-test for Equality of Means	t	1.694	1.675
	df	142	69.254
	Sig. (2-tailed)	.092	.098
	Mean Difference	.26062	.26062
	Std. Error Difference	.15387	.15559
95% Confidence Interval of the Difference	Lower	-.04355	-.04976
	Upper	.56478	.57099

Table 13.0

Gender and Job Satisfaction – Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Job Satisfaction	Male	104	2.4554	.52847	.05182
	Female	40	2.3633	.53729	.08495

Table 13.1

Gender and Job Satisfaction – Independent Samples t-test

Gender		Job Satisfaction	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F Sig.	.124 .725	
t-test for Equality of Means	t	.933	.926
	df	142	69.765
	Sig. (2-tailed)	.353	.358
	Mean Difference	.09213	.09213
	Std. Error Difference	.09878	.09951
95% Confidence Interval of the Difference	Lower	-.10313	-.10635
	Upper	.28740	.29062

MEAN ANALYSIS - ETHNICITY MATCH

While no significant effects from Ethnicity Match were obtained for either Leader's Authenticity or Job Satisfaction, observation of consistent trends in the sample means and the 95% upper and lower bounds of the mean (see Table 14.0), shown in Figures 2.0 and 2.1 respectively, indicate that there may be a significant effect that is masked by the small sample size. The figures demonstrate a need for further research with larger samples to investigate how the implied trends of an Ethnicity Match between a managerial leader and a subordinate might lead to a higher perception of Authenticity and Job Satisfaction.

Table 14.0
Mean Analysis Estimates – Ethnicity Match

Dependent Variable	Ethnicity Match	Mean	95% Confidence Interval	
			Lower Bound	Upper Bound
Leader's Authenticity	Different Ethnicities	2.461	2.247	2.675
	Same Ethnicities	2.643	2.465	2.821
Job Satisfaction	Different Ethnicities	2.333	2.198	2.469
	Same Ethnicities	2.497	2.384	2.610

Leader's Authenticity Mean Distribution by Ethnicity Match

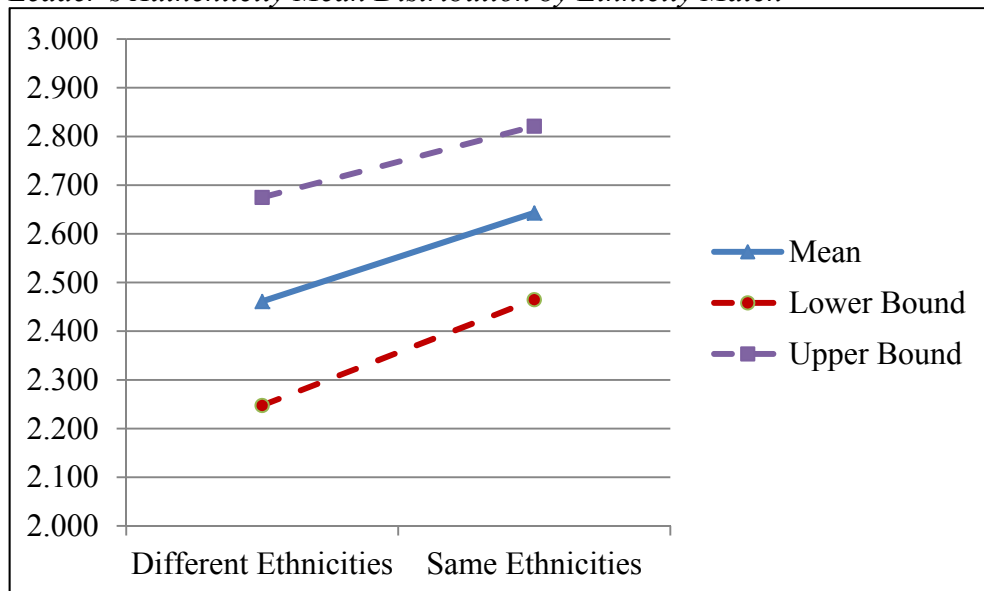


Figure 2.0

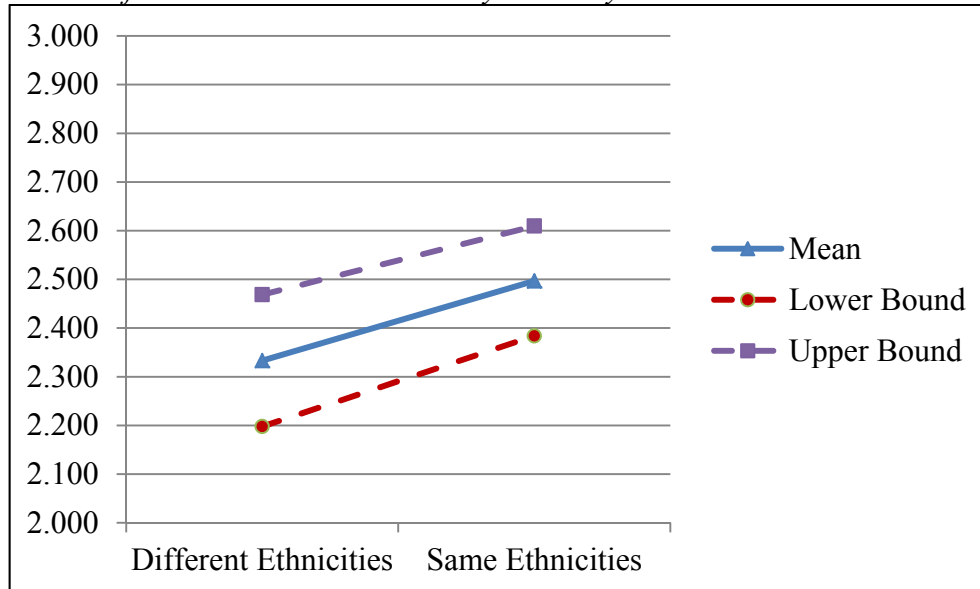
Job Satisfaction Mean Distribution by Ethnicity Match

Figure 2.1

MEAN ANALYSIS - GENDER

To complete this empirical enquiry, the Gender specific trends in the mean distribution of both Leader's Authenticity and Job Satisfaction were similarly analysed (see Table 15.0) and graphically displayed in Figures 3.0 and 3.1 respectively. The results indicate a sizeable difference between male and female participants' responses regarding Leader's Authenticity, which suggests that further research would require not only a larger sample but also a well-balanced male to female ratio of respondents to avoid bias.

Table 15.0

Mean Analysis Estimates – Gender

Dependent Variable	Gender	Mean	95% Confidence Interval	
			Lower Bound	Upper Bound
Leader's Authenticity	Male	2.641	2.481	2.801
	Female	2.380	2.122	2.639
Job Satisfaction	Male	2.455	2.352	2.558
	Female	2.363	2.197	2.529

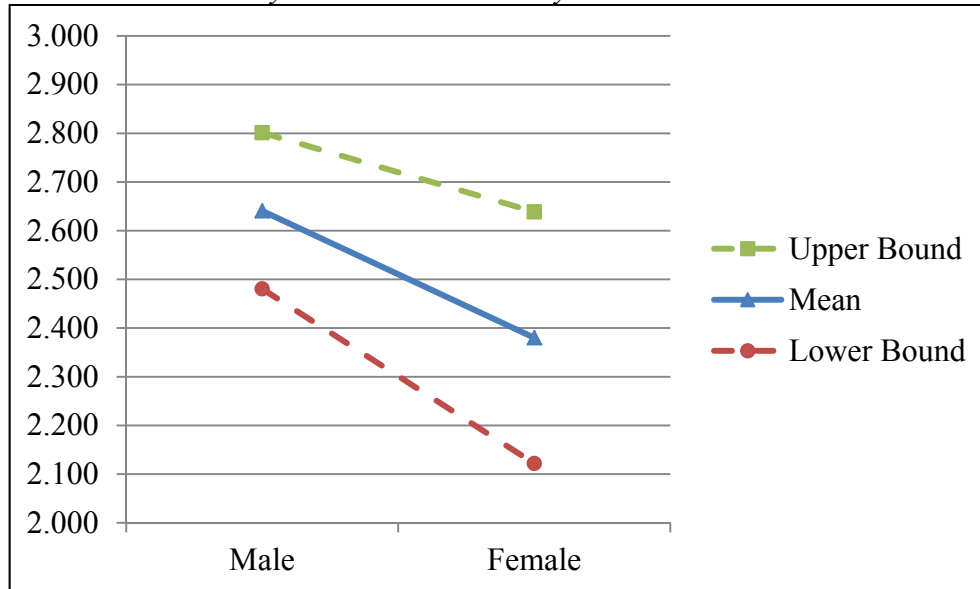
Leader's Authenticity Mean Distribution by Gender

Figure 3.0

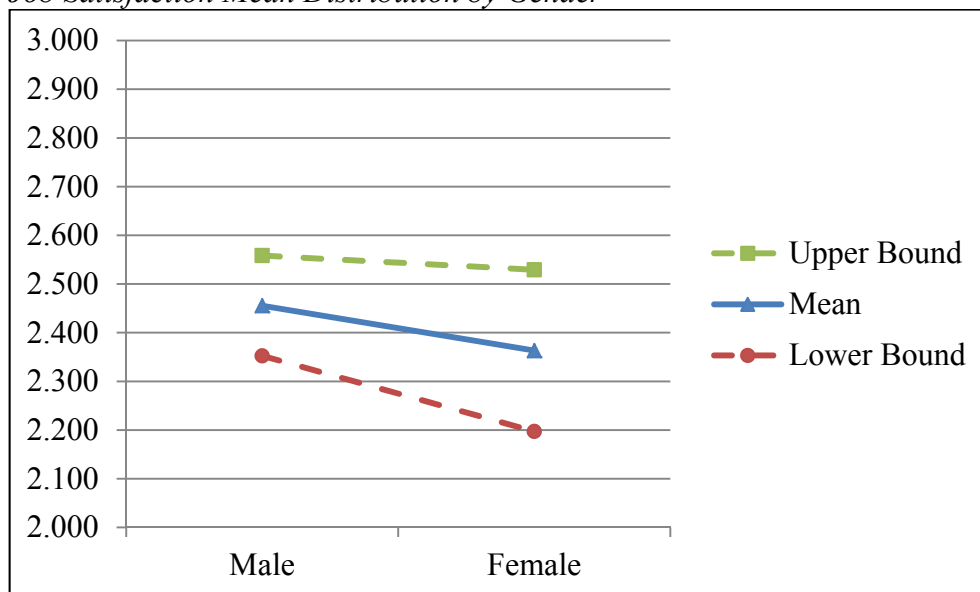
Job Satisfaction Mean Distribution by Gender

Figure 3.1

DISCUSSION

SCALE RELIABILITY

The Authentic Leadership Questionnaire was created to address the measurement of authentic leadership as a theoretical construct (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008). The authors tested their scale across a large sample drawn from The People's Republic of China, Kenya,

and the United States, using statistical analyses to assess the ALQ's validity in culturally diverse settings; their results affirmed initial construct validity. Furthermore, the same scale was administered to working New Zealand adults and the results indicated that the measure was sound and performed successfully in the New Zealand context as well (Caza, Bagozzi, Woolley, Levy & Caza, 2010).

Due to the focus on follower's perceptions of authentic leadership, only the follower section of the ALQ was used in this study, and as such, scale reliability and validity had to be re-established. Cronbach's alpha was used to test the Leader's Authenticity scale for internal reliability; revealing a coefficient of .944 which denotes the measure's reliability as 'excellent' (George & Mallery, 2003; Cronbach & Meehl, 1955) and indicating that this scale is a consistent measure of a latent variable which is a good representation of Leader's Authenticity.

The original Job Descriptive Index created by Smith, Kendall and Hulin (1969) is the most internationally used measure of job satisfaction (Buckley, Carragher & Cote, 1992; DeMeuse, 1985). The scale has since been improved numerous times in the last four decades; the latest yielding the Abridged Job Descriptive Index (Stanton *et al.* 2001) which reduced the original 72 items to a more usable 25, while ensuring that the validity and reliability were preserved by administering the new scale to over 1600 participants.

A simplified version of the processes followed by Stanton *et al.* (2001) was replicated here to remove a further two items from each of the five sections of the Abridged Job Descriptive Index to create the Job Satisfaction scale used in this study. The resulting Job Satisfaction scale's reliability was also analysed using Cronbach's Alpha, which revealed a coefficient of .827 designating the measure's reliability as 'good' (George & Mallery, 2003). As such, this measure was deemed to be a good representation of Job Satisfaction.

LEADER'S AUTHENTICITY & JOB SATISFACTION

It is predicated by the extant literature that job satisfaction has a positive relationship with authentic leadership (Kahneman, Diener & Schwartz, 1999; Ryan & Deci, 2000; Harter, Schmidt & Keyes, 2003) and this was supported by the findings. Initial correlation and partial correlation analysis controlling for demographic factors, showed Leader's Authenticity as significantly and positively related to Job Satisfaction.

Linear regression analysis confirmed that this relationship was in fact significant in the data and the Adjusted R Square coefficient denoted that the degree of influence was 25%. On this basis, H1 is accepted in that follower's level of perceived authenticity in their supervisor was found to be positively correlated with their job satisfaction. This finding is congruent with previous research and strengthens the support for the validity of the two new scales developed for use in this study.

ETHNICITY MATCH

Although the relationship between authentic leadership and positive follower outcomes is well documented, studies show that the extent of this effect is moderated by value-congruence between the authentic leader and follower (Ilies *et al.* 2005; Eagly, 2005; Peterlin, Penger & Dimovski, 2009). Logically, there is also burgeoning literature stating that culture as a variable significantly influences the effectiveness of the leadership relationship (Toor & Ogunlana, 2009; Lord & Brown, 2004; Hartog, House, Hanges, Ruiz-Quintanilla & Dorfman, 1999; Newman & Nollen, 1996; Offermann & Hellmann, 1997; House *et al.* 1999; Byrne & Bradley, 2007; Nahavandi, 2006; Perrow, 1970; Gardner, 1990; Hsieh, 2010; Fahy, 2002; Coviello, Ghauri & Martin, 1998; House & Mitchell, 1974; Hersey & Blanchard, 1969; 1993; Fiedler, 1967). Unfortunately, a large portion of these works failed to account for within-country variations and were therefore inherently biased (Graen, 2006). As such, a clear knowledge gap existed regarding the influence of cultural differences on followers' perceptions of authentic leadership.

Because defining culture as a construct is beyond the scope of this research, ethnicity was isolated as the potential moderating variable of the authentic leader's and followers' relationship.

An independent samples t-test was conducted and results indicated that there was no significant effect on Leader's Authenticity from Ethnicity Match. As such, H2 was rejected in that followers of the same ethnicity as their supervisor did not demonstrate an increased level of perceived authenticity in their supervisor.

The results of another independent samples t-test suggested that there was no significant difference between the two Ethnicity Match groups and Job Satisfaction either. Therefore H3 was also rejected in that followers of the same ethnicity as their supervisor did not demonstrate an increased level of job satisfaction.

LIMITATIONS

Although no significant affect from Ethnicity Match was obtained for either Leader's Authenticity or Job Satisfaction, observation of consistent trends in the data indicates that there may be a significant effect that is masked by the small sample size.

Because of the disparity between the number of male and female respondents in this particular sample, it was prudent to conduct an analysis of the mean distribution trends for Gender which indicated a sizeable difference between male and female participants' responses regarding Leader's Authenticity.

The 144 usable responses that comprised the foundation of this study represent a relatively small sample size and as such, any conclusions drawn must be tentative. However, the strong correlation results warrant further research which would benefit from a larger sample size and an even gender distribution.

CONCLUSION

The statistical analyses conducted herein have shown that as an initial field test, both the Leader's Authenticity and Job Satisfaction scales are valid and reliable measures of follower's perceptions of authenticity in their leader and the follower's job satisfaction respectively. Furthermore, the results suggest that ethnicity does not have a moderating effect on the relationship between a follower's perceptions of authenticity in their leader and their job satisfaction. As such, it may be cautiously posited that followers perceiving authentic leadership experience positive follower outcomes such as job satisfaction regardless of ethnic differences between them and their leader.

REFERENCES

- Alimo-Metcalfe, B. (1995). An investigation of female and male constructs of leadership and empowerment. *Women in Management Review*, 10(2), 3-8.
- Aquino, K. & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423-1440.
- Ashforth, B. & Humphrey, R. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, 18(1), 88-116.
- Ashkanasy, N. & Daus, C. (2002). Emotion in the workplace: The new challenge for managers. *Academy of Management Executive*, 16(1), 76-86.
- Ashkanasy, N. & Tse, B. (2000). Transformational leadership as management of emotion: A conceptual review. In Ashkanasy, N., Hartel, C. & Zerbe, W. (Eds.), *Emotions in the workplace: Theory, research and practice* (p. 221-235). Westport, CT: Quorum Books.
- Avolio, B. & Gardner, W. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338.

- Avolio, B. (2005). *Leadership development in balance: Made/born*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Avolio, B. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist*, 62(1), 25-33.
- Avolio, B., Gardner, W., Walumbwa, F., Luthans, F. & May, D. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15(6), 801-823.
- Avolio, B., Luthans, J. & Walumbwa, F. (2004). *Authentic leadership: Theory building for veritable sustained performance*. Working paper: Gallup Leadership Institute, University of Nebraska-Lincoln.
- Avolio, B., Walumbwa, F. & Weber, T. (2009). Leadership: Current theories, research, and future directions. *The Annual Review of Psychology*, 60, 421-449.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Bass, B. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Baumeister, R. (1998). The self. In Gilbert, D., Fiske, S. & Lindzey, G. (Eds.), *The handbook of social psychology* (4th ed.). New York, NJ: McGraw-Hill.
- Bennis, W. (2003). *On becoming a leader*. Cambridge, MA: Perseus Publishing.
- Block, P. (1993). *Stewardship: Choosing service over self-interest*. San Francisco, CA: Berrett-Koehler.
- Bond, C. & DePaulo, B. (2006). Accuracy of deception judgements. *Personality and Social Psychology Review*, 10(3), 214-234.

- Bono, J. & Judge, T. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89, 901-910.
- Brown, A. & Starkey, K. (2000). Organizational identity and learning: A psychodynamic perspective. *Academy of Management Review*, 25(1), 102-120.
- Bryman, A. & Bell, E. (2003). *Business Research Methods*. New York: Oxford University Press.
- Buckley, M., Carraher, S. & Cote, J. (1992). Measurement issues concerning the use of inventories of job-satisfaction. *Educational and Psychological Measurement*, 52, 529-543.
- Byrne, G. & Bradley, F. (2007). Culture's influence on leadership efficiency: How personal and national cultures affect leadership style. *Journal of Business Research*, 60, 168-175.
- Cameron, K., Dutton, J. & Quinn, R. (Eds.). (2003). *Positive organizational scholarship* (p. 55-74). San Francisco: Barrett-Kohler.
- Campbell, J., Trapnell, P., Heine, S., Katz, E., Lavalley, L. & Lehman, D. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of personality and Social Psychology*, 70, 141-156.
- Carver, C. & Scheier, M. (1981). *Attention and self-regulation: A control-theory approach to human behaviour*. New York, NJ: Springer-Verlag.
- Caza, A., Bagozzi, R., Woolley, L., Levy, L. & Caza, B. (2010). Psychological capital and authentic leadership: Measurement, gender, and cultural extension. *Asia-Pacific Journal of Business Administration*, 2(1), 53-70.
- Ceri-Booms, M. (2010). An empirical study on transactional and authentic leaders: Exploring the mediating role of trust in leader on organizational identification. *The Business Review, Cambridge*, 14(2), 235-243.
- Conger, J. (2004). Developing leadership capability: What's inside the black box? *Academy of Management Executive*, 18, 16-139.

- Coviello, N., Ghauri, P. & Martin, K. (1998). International competitiveness: Empirical findings from SME service firms. *Journal of International Marketing*, 6(2), 8-27.
- Cronbach, L. & Meehl, P. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281-302.
- Day, D. (2000). Leadership development: A review in context. *The Leadership Quarterly*, 11(4), 581-613.
- Deci, E. & Ryan, R. (1995). Human autonomy: The basis for true self-esteem. In Kernis, M. (Ed.), *Efficacy, agency and self-esteem* (p. 31-49). New York: Plenum Press.
- Deci, E. & Ryan, R. (2000). "What" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- DeMeuse, K. (1985). A compendium of frequently used measures in industrial-organizational psychology. *The Industrial-Organizational Psychologist*, 23, 53-59.
- Dirks, K. & Ferrin, D. (2002). Trust in leadership: Meta-analysis finding and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611-628.
- Duignan, P. & Bhindi, N. (1997). Authenticity in leadership: An emerging perspective. *Journal of Educational Administration*, 35(3), 195-209.
- Eagly, A. (2005). Achieving relational authenticity in leadership: Does gender matter? *The Leadership Quarterly*, 16(3), 459-474.
- Eberlin, R. & Tatum, B. (2005). Organizational justice and decision making: When good intentions are not enough. *Management Decision*, 43(7/8), 1040-1048.
- Erickson, R. (1995). The importance of authenticity for self and society. *Symbolic Interaction*, 18(2), 121-144.
- Fahy, J. (2002). A resource-based analysis of sustainable competitive advantage in a global environment. *International Business Review*, 11(1), 57-77.

- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Fiedler, F. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Fiske, S. & Taylor, S. (1991). *Social cognition*. New York: McGraw-Hill.
- Francesco, A. & Gold, B. (1998). *International organizational behaviour: Text, readings, cases and skills*. Englewood Cliffs, NJ: Prentice-Hall.
- Franke, G. (1997). "The whole is more than the sum of its parts": The effects of grouping and randomizing items on the reliability and validity of questionnaires. *European Journal of Psychological Assessment*, 13(2), 67-74.
- Gardner, J. (1990). *On leadership*. New York: The Free Press.
- Gardner, W., Avolio, B., Luthans, F. May, D. & Walumbwa, F. (2005). "Can you see the real me?": A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), 343-372.
- George, D. & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.)*. Boston: Allyn & Bacon.
- George, J. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53, 1027-1055.
- George, W. (2003). *Authentic leadership: Rediscovering the secrets to creating lasting value*. San Francisco: Jossey-Bass.
- Goldman, B. & Kernis, M. (2002). The role of authenticity in healthy psychological functioning and subjective well-being. *Annals of the American Psychotherapy Association*, 5, 18-20.
- Goleman, D. (1985). *Vital lies, simple truths: The psychology of self-deception*. New York, NJ: Touchstone.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantom.
- Goleman, D., Boyatzis, R. & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston: Harvard Business School Press.

- Graen, G. (2006). In the eye of the beholder: Cross-cultural lesson in leadership from project GLOBE: A response viewed from the third culture bonding (TBC) model of cross-cultural leadership. *Academy of Management Perspectives*, 45(2), 95-101.
- Greenleaf, R. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York, NY: Paulist Press.
- Grint, K. (2005). *Leadership: Limits and possibilities*. Hong Kong, China: Palgrave Macmillan.
- Hamel, G. (2000). *Leading the revolution*. Boston, MA: Harvard Business School Press.
- Harter, J., Schmidt, F. & Keyes, C. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In Keyes, C. & Haidt, J. (Eds.), *Flourishing: Positive psychology and the life well-lived* (p. 205-224). Washington, DC: American Psychological Association.
- Harter, S. (2002). Authenticity. In Snyder, C. & Lopez, S. (Eds.), *Handbook of positive psychology* (p. 382-394). Oxford, UK: Oxford University Press.
- Hartog, D., House, R., Hanges, P., Ruiz-Quintanilla, S. & Dorfman, P. (1999). Culture specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10(2), 219-238.
- Hatfield, E., Cacioppo, J. & Rapson, R. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Haybron, D. (2000). Two philosophical problems in the study of happiness. *The Journal of Happiness Studies*, 1, 207-225.
- Heidegger, M. (1962). *Being and time* (Macquarrie, J. & Robinson, E. Trans.). San Francisco: Harper Collins.
- Hersey, P. & Blanchard, K. (1969). Life cycle theory of leadership. *Training and Development Journal*, 23, 26-34.

- Hersey, P. & Blanchard, K. (1993). *Management of organizational behaviour: Utilising human resources*. Englewood Cliffs, NJ: Prentice-Hall.
- Hofstede, G. & Bond, M. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 4-21.
- House, R. & Mitchell, T. (1974). Path-goal theory of leadership. *Journal of Contemporary Business*, 3, 81-97.
- House, R., Hanges, P., Javidan, M., Dorfman, P. & Gupta, W. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage.
- House, R., Hanges, P., Ruiz-Quintanilla, S., Dorfman, P., Javidan, M., Dickson, M. & Gupta, V. (1999). Cultural influences on leadership and organization: Project GLOBE. In Mobley, W., Gessner, M. & Arnold, V. (Eds.), *Advances in global leadership*. Stamford, CT: JAI Press.
- Howell, J. & Avolio, B. (1992). The ethics of charismatic leadership: Submission or liberation? *The Executive*, 6, 43-52.
- Howell, J. & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30, 96-112.
- Hsieh, S. (2010). Literature review on global leadership competency. *The Journal of Human Resource and Adult Learning*, 6(2), 99-109.
- Ilies, R., Morgeson, F. & Nahrgang, J. (2005) Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16(3), 373-394.
- Isaac, R., Zerbe, W. & Pitt, D. (2001). Leadership and motivation: The effective application of expectancy theory. *Journal of Managerial Issues*, 13(2), 212-227.
- Jackson, K. (2005). Towards authenticity: A Sartrean perspective on business ethics. *Journal of Business Ethics*, 58, 307-325.

- Jensen, S. & Luthans, F. (2006a). Relationship between entrepreneurs' psychological capital and their authentic leadership. *Journal of Managerial Issues*, 18(2), 254-273.
- Jensen, S. & Luthans, F. (2006b). Entrepreneurs as authentic leaders: Impact on employee attitudes. *Leadership & Organization Development*, 27(8), 646-666.
- Jones, G. & George, J. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23(3), 531-546.
- Joseph, E. & Winston, B. (2005). A correlation of servant leadership, leader trust, and organizational trust. *Leadership & Organization Development Journal*, 26(1), 6-22.
- Kahneman, D., Diener, E. & Schwartz, N. (Eds.). (1999). *Well-being: The foundation of hedonic psychology*. New York: Russell Sage Foundation.
- Kernis, M. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14, 1-26.
- Kreitner, R. (1985). Some unexplored supervisory behaviors and their influence on salespeople's role clarity, specific self-esteem, job satisfaction, and motivation. *Journal of Marketing Research*, 22, 424-433.
- Liedtka, J. (2008). Strategy making and the search for authenticity. *Journal of Business Ethics*, 80, 237-248.
- London, M. (2002). *Leadership development: Paths to self-insight and professional growth*. Mahwah, NJ: Erlbaum.
- Lord, R. & Brown, D. (2004). *Leadership processes and follower self-identity*. Mahwah, NJ: Erlbaum.
- Luthans, F. & Avolio, B. (2003). Authentic leadership: A positive developmental approach. In Cameron, K., Dutton, J. & Quinn, R. (Eds.), *Positive organizational scholarship* (p. 241-261). San Francisco: Barrett-Koehler.

- Markus, H. & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Maslow, A. (1968). *Motivation and personality* (3rd ed.). New York: Harper.
- Maslow, A. (1971). *The farther reaches of human nature*. New York: Viking.
- May, D., Chan, A., Hodges, T. & Avolio, B. (2003). Developing the moral component of authentic leadership. *Organizational Dynamics*, 32(3), 247-260.
- Mayer, R., Davis, C. & Schoorman, F. (1995). An integration model of organizational trust. *Academy of Management Review*, 20(3), 709-729.
- Michie, S. & Gooty, J. (2005). Values, emotions, and authenticity: Will the real leader please stand up? *The Leadership Quarterly*, 16(3), 441-457.
- Nahavandi, A. (2006). *The art and science of leadership*. New Jersey: Pearson Education, Inc.
- Newman, K. & Nollen, S. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of International Business Studies*, 27(4), 753-779.
- Novicevic, M., Davis, W., Dorn, F., Buckley, M. & Brown, J. (2005). Barnard on conflicts of responsibility. *Management Decision*, 43(10), 1396-1409.
- Novicevic, M., Harvey, M., Buckley, M., Brown, J. & Evans, R. (2006). Authentic leadership: A historical perspective. *Journal of Leadership and Organizational Studies*, 13(1), 64-76.
- Nyham, R. & Marlowe, H. (1997). Development and psychometric properties of organizational trust inventory. *Evaluation Review*, 21(5), 614-635.

- O'Reilly, C. & Pfeffer, J. (2000). *Hidden value: How great companies achieve extraordinary results with ordinary people*. Boston, MA: Harvard Business School Press.
- Oakley, J. (1992). *Morality and the emotions*. London: Routledge.
- Offermann, L. & Hellmann, P. (1997). Culture's consequences for leadership behaviour: National values in action. *Journal of Cross-Cultural Psychology*, 28(3), 342-351.
- Perrow, C. (1970). *Organizational analysis: A sociological view*. London: Tavistock Publications Limited.
- Peterlin, J., Penger, S. & Dimovski, V. (2009). Authentic leadership as the promising link between western and eastern management practices: The case of Slovenian company. *The International Business & Economics Research Journal*, 8(12), 87-98.
- Ricoeur, P. (1992). *Oneself as another*, (Blamey, K. Trans.). Chicago: University of Chicago Press.
- Roche, M. (2010). Learning authentic leadership in New Zealand: A learner-centred methodology and evaluation. *American Journal of Business Education*, 3(3), 71-79.
- Rodrigues, C. (1990). The situation and national culture as contingencies for leadership behaviour: Two conceptual models. In Prasad, S. (Ed.), *Advances in international comparative management*. Greenwich, CT: JAI Press.
- Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships, as development in a client-centered framework. In Koch, S. (Ed.), *Psychology: A study of a science*, vol. 3. Toronto: McGraw-Hill.
- Rogers, C. (1963). The actualizing tendency in relation to "motives" and to consciousness. In Jones, M. (Ed.), *Nebraska symposium on motivation*, vol. 11. (p. 1-24). Lincoln, NE: University of Nebraska Press.
- Rokeach, M. (1979). *Understanding human values: Individual and societal*. New York: The Free Press.

- Ryan, R. & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Ryan, R. & Deci, E. (2001). On happiness and human potential: A review of research on hedonic and eudaemonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Salovey, P. & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- Salovey, P., Mayer, J. & Caruso, D. (2002). The positive psychology of emotional intelligence. In Snyder, C. & Lopez, S. (Eds.), *Handbook of positive psychology* (p. 159-171). Oxford, UK: Oxford University Press.
- Sartre, J. (1956). *Being and nothingness* (Barnes, H. Trans.). New Jersey: Grammercy Books.
- Schlenker, B. & Weigold, M. (1992). Interpersonal processes involving impression regulation and management. *Annual Review of Psychology*, 43(1), 133-168.
- Seligman, M. (2002). *Authentic happiness: Using the new psychology to realize your potential for lasting fulfilment*. New York: The Free Press.
- Shamir, B. & Eilam, G. (2005). "What's your story?": A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16(3), 395-417.
- Shirey, M. (2006). Authentic leaders creating healthy work environments for nursing practice. *American Journal of Critical Care*, 15(3), 256-267.
- Silvia, P. & Duval, T. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review*, 5, 230-241.
- Simons, T. (1999). Behavioural integrity as a critical ingredient for transformational leadership. *Journal of Organizational Change Management*, 12, 89-104.

- Smith, P., Kendall, L. & Hulin, C. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.
- Snyder, C. & Lopez, S. (Eds.). (2002). *Handbook of positive psychology*. Oxford, UK: Oxford University Press.
- Sosik, J., Juzbasich, J. & Chun, J. (2011). Effects of moral reasoning and management level on ratings of charismatic leadership, in-role and extra-role performance of managers: A multi-source examination. *The Leadership Quarterly*, 22(2), 434-450.
- Spitzmuller, M. & Ilies, R. (2010). Do they [all] see my true self? Leader's relational authenticity and followers' assessments of transformational leadership. *European Journal of Work and Organizational Psychology*, 19(3), 304-332.
- Stajkovic, A. & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26(4), 62-74.
- Stanton, J., Sinar, E., Balzer, W., Julian, A., Thoresen, P., Aziz, S., Fisher, G. & Smith, P. (2001). Development of a compact measure of job satisfaction: The abridged job descriptive index. *Educational and Psychological Measurement*, 61(6), 1104-1122.
- Starratt, R. (1993). *The Drama of Leadership*. London: Falmer Press.
- Stets, J. & Burke, P. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224-237.
- Tice, D. & Wallace, H. (2003). The reflected self: Creating yourself as (you think) others see you. In Leary, M. & Tangney, J. (Eds.), *Handbook of self and identity* (p. 91-105). New York: Guilford Press.
- Toor, S. & Ogunlana, S. (2009). Ineffective leadership: Investigating the negative attributes of leaders and organisational neutralizers. *Engineering, Construction and Architectural Management*, 16(3), 254-272.
- Treviño, L., Brown, M. & Hartman, L. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human Relations*, 56, 5-37.

- Triandis, H. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Trilling, L. (1972). *Sincerity and authenticity*. Cambridge, MA: Harvard University Press.
- Van de Vijver, F. & Leung, K. (2000). Methodological issues in psychological research on culture. *Journal of Cross-Cultural Psychology*, 31, 33-51.
- Vella-Brodrick, D. & Page, K. (2009). Positive leadership: Accentuating and cultivating human resources. In *Contemporary perspectives on leadership: Focus and meaning for ambiguous times* (1st ed.). Prahran Victoria: Tilde University Press.
- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T. & Peterson, S. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126.
- Warner, C. (2001). *Bonds that make us free: Healing our relationships, coming to ourselves*. Salt Lake City, UT: Shadow Mountain Publishing.
- Weick, K. (1979). *The social psychology of organizing* (2nd ed.). New York, NJ: McGraw-Hill.
- Weiss, H. (1977). Subordinate imitation of supervisor behaviour: The role of modelling in organisational socialisation. *Organisational Behaviour and Human Decision Processes*, 19, 89-105.
- Whitehead, G. & Brown, M. (2011). Authenticity in Chinese leadership: A quantitative study comparing western notions of authentic constructs with Chinese responses to an authenticity instrument. *International Journal of Leadership Studies*, 6(2), 162-188.
- Yukl, G. (2002). *Leadership in organizations* (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Zhu, W., May, D. & Avolio, B. (2004). The impact of ethical leadership behaviour on employee outcomes: The roles of psychological empowerment and authenticity. *Journal of Leadership and Organizational Studies*, 11(1), 16-26.

APPENDIX A

28 November 2011

page 1 of 2

INVITATION TO PARTICIPATE IN A BUSINESS RESEARCH STUDY



Project Title: Follower's Perception of Authentic Leadership
and their Job Satisfaction: Impact of Ethnicity.

An Invitation

My name is Andrei Lux and this research will allow me to complete my Masters of Business at the Auckland University of Technology. I cordially invite you to participate in this study, as the findings may benefit your own professional development.

What is the purpose of this study?

This corporate leadership study is focused on employees, and their perceptions regarding their immediate supervisor's leadership style. The aim is to investigate how ethnicity impacts the leader-follower relationship in order to further our understanding of successful corporate leadership in metropolitan environments. If meaningful results are obtained, the subsequent paper may be published as an article in an academic journal.

How was I identified and why am I being invited to participate in this research?

All the employees of Auckland based organisations, whose supervisor's granted consent, are invited to participate voluntarily. Neither your supervisor(s), nor your co-workers will know whether or not you are participating.

What happens in the study?

You are provided with a short questionnaire to complete and return via the postage-paid envelope provided. The resulting data will be statistically analysed and any correlations therein will allow us to gain insight into the dynamic leader-follower relationship.

What are the risks?

Although the focus of this research is on the sensitive topics of ethnicity in the workplace and your perceptions regarding your supervisor, there are no risks to participating; your data will be kept strictly confidential and your anonymity will be protected.

What are the benefits?

After completion, the research paper it will be publically available via the e-library at AUT University, and will contain findings that may benefit your own professional development.

This version was last edited on 8 September, 2011

28 November 2011

page 2 of 2

How will my privacy protected?

The questionnaire is completely anonymous; no company affiliation or individual name data will be collected or disseminated.

What are the costs of participating?

Approximately 15 minutes of your time.

Opportunity to consider invitation

Completion of the attached questionnaire will be taken as indicating your consent to participate. Participation is completely voluntary, you may decide to participate or not at any time. After the survey is sent to the researcher, we cannot identify your particular questionnaire, so it cannot be returned or withdrawn.

Interested in Participating?

Please contact researcher Andrei Lux, andrei.lux@hotmail.com, +64 21 522 420.

Participant concerns

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Romie Littrell, romie.littrell@aut.ac.nz, +64 9 921 9999 ext 5805. Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEK, Dr Rosemary Godbold, rosemary.godbold@aut.ac.nz, +64 9 921 9999 ext 6902.

Approved by the Auckland University of Technology Ethics Committee

Date: 14 September, 2011

AUTEK Reference Number: 11/207

This version was last edited on 8 September, 2011

APPENDIX B

16 September 2011 page 1 of 2

By completing this questionnaire you are indicating your consent to participate in this research.

I am (please circle): Male Female

My age is (years): _____

What ethnic group(s) do you consider yourself to be a member of?
(please state): _____

What ethnic group(s) do you consider your immediate supervisor to be a member of?
(please state): _____

I have worked with this organisation for (years): _____

The following survey items refer to **your immediate supervisor's** leadership style, as you perceive it. **Please grade how frequently each statement fits his or her leadership style using the following scale:**

Not at All	Once in a While	Sometimes	Fairly Often	Frequently/Always
0	1	2	3	4

My supervisor: (please circle)

1. Says exactly what he or she means.0 1 2 3 4
2. Admits mistakes when they are made.0 1 2 3 4
3. Encourages everyone to speak their mind.0 1 2 3 4
4. Tells you the hard truth.0 1 2 3 4
5. Displays emotions exactly in line with feelings.0 1 2 3 4
6. Demonstrates beliefs that are consistent with actions.0 1 2 3 4
7. Makes decisions based on his or her core values.0 1 2 3 4
8. Asks you to take positions that support your core values.0 1 2 3 4
9. Makes difficult decisions based on high standards of ethical conduct.0 1 2 3 4
10. Solicits views that challenge his or her deeply held positions.0 1 2 3 4
11. Analyses relevant data before coming to a decision.0 1 2 3 4

This version was last edited on 8 September, 2011

16 September 2011

page 2 of 2

12. Listens carefully to different points of view before coming to conclusions.0 1 2 3 4
13. Seeks feedback to improve interactions with others.0 1 2 3 4
14. Accurately describes how others view his or her capabilities.0 1 2 3 4
15. Knows when it is time to re-evaluate his or her positions on important issues.0 1 2 3 4
16. Shows he or she understands how specific actions impact others.0 1 2 3 4

The following items refer to how you perceive your work. **Please state to whether you agree or disagree with each of these statements, using the following scale:**

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4

(please circle)

17. My job gives me a sense of accomplishment.0 1 2 3 4
18. I consider myself underpaid.0 1 2 3 4
19. People here are promoted on ability.0 1 2 3 4
20. I see my co-workers as helpful.0 1 2 3 4
21. My work challenges me.0 1 2 3 4
22. I feel I am paid a fair amount.0 1 2 3 4
23. I find my work dull.0 1 2 3 4
24. I consider those I work with to be intelligent.0 1 2 3 4
25. The people I work with are boring.0 1 2 3 4
26. My income is adequate for normal expenses.0 1 2 3 4
27. There are good opportunities for promotion.0 1 2 3 4
28. The promotion policy here is unfair.0 1 2 3 4
29. I find my job satisfying.0 1 2 3 4
30. This is a dead-end job.0 1 2 3 4
31. The people I work with are lazy.0 1 2 3 4

This version was last edited on 8 September, 2011

APPENDIX C

16 September 2011 page 3 of 4

By completing this questionnaire you are indicating your consent to participate in this research.

I am (please circle): Male Female

My age is (years): 23

What ethnic group(s) do you consider yourself to be a member of?
(please state): European S

What ethnic group(s) do you consider your immediate supervisor to be a member of?
(please state): European 3.44/1.73

I have worked with this organisation for (years): 1

The following survey items refer to **your immediate supervisor's** leadership style, as you perceive it. **Please grade how frequently each statement fits his or her leadership style using the following scale:**

Not at All	Once in a While	Sometimes	Fairly Often	Frequently/Always
0	1	2	3	4

My supervisor: (please circle)

1. Says exactly what he or she means.0 1 2 3 4
2. Admits mistakes when they are made.0 1 2 3 4
3. Encourages everyone to speak their mind.0 1 2 3 4
4. Tells you the hard truth.0 1 2 3 4
5. Displays emotions exactly in line with feelings.0 1 2 3 4
6. Demonstrates beliefs that are consistent with actions.0 1 2 3 4
7. Makes decisions based on his or her core values.0 1 2 3 4
8. Asks you to take positions that support your core values.0 1 2 3 4
9. Makes difficult decisions based on high standards of ethical conduct.0 1 2 3 4
10. Solicits views that challenge his or her deeply held positions.0 1 2 3 4
11. Analysis relevant data before coming to a decision.0 1 2 3 4

This version was last edited on 8 September, 2011

16 September 2011

page 4 of 4

12. Listens carefully to different points of view before coming to conclusions.0 1 2 3 4
13. Seeks feedback to improve interactions with others.0 1 2 3 4
14. Accurately describes how others view his or her capabilities.0 1 2 3 4
15. Knows when it is time to re-evaluate his or her positions on important issues.0 1 2 3 4
16. Shows he or she understands how specific actions impact others.0 1 2 3 4

The following items refer to how you perceive your work. Please state to whether you agree or disagree with each of these statements, using the following scale:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4

(please circle)

17. My job gives me a sense of accomplishment.0 1 2 3 4
18. I consider myself underpaid.0 1 2 3 ~~4~~
19. People here are promoted on ability.0 1 2 3 4
20. I see my co-workers as helpful.0 1 2 3 4
21. My work challenges me.0 1 2 3 4
22. I feel I am paid a fair amount.0 1 2 3 4
23. I find my work dull.0 1 2 ~~3~~ 4
24. I consider those I work with to be intelligent.0 1 2 3 4
25. The people I work with are boring.0 1 2 ~~3~~ 4
26. My income is adequate for normal expenses.0 1 2 3 4
27. There are good opportunities for promotion.0 1 2 3 4
28. The promotion policy here is unfair.0 1 2 3 ~~4~~
29. I find my job satisfying.0 1 2 3 4
30. This is a dead-end job.0 1 2 ~~3~~ 4
31. The people I work with are lazy.~~0~~ 1 2 3 4

This version was last edited on 8 September, 2011

APPENDIX D

Respondent	Perceptions of Leader's Authenticity Questions																Authentic Leadership Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	2	1	1	1	2	2	3	2	3	3	3	2	2	2	3	2	2.13
2	3	4	3	3	4	4	4	4	3	2	3	3	4	4	4	3	3.44
3	4	4	3	4	3	3	4	2	3	3	4	3	3	2	2	3	3.13
4	4	4	4	4	4	4	4	4	4	4	3	3	2	1	4	3	3.50
5	4	1	1	3	0	2	2	0	0	0	1	1	0	0	1	0	1.00
6	3	1	2	4	0	1	1	0	0	0	3	2	1	3	2	1	1.50
7	2	2	1	4	2	2	2	0	1	2	4	2	1	1	2	2	1.88
8	4	3	3	4	4	2	3	1	3	3	3	3	4	2	2	3	2.94
9	4	3	4	3	2	4	3	3	3	3	4	4	4	4	3	4	3.44
10	3	4	3	2	2	3	3	3	4	4	4	4	4	4	4	4	3.44
11	3	4	3	4	2	3	3	1	2	2	3	4	4	3	3	2	2.88
12	4	4	3	3	4	3	3	3	4	4	4	3	3	3	4	4	3.50
13	2	3	2	2	3	2	3	3	2	2	2	3	2	2	3	2	2.38
14	2	4	4	3	3	4	4	4	4	4	3	3	4	2	3	3	3.38
15	1	2	2	2	1	2	2	1	2	2	2	2	1	2	2	2	1.75
16	4	4	4	3	4	4	4	3	4	4	3	4	4	4	4	4	3.81
17	3	2	3	2	2	3	3	2	3	3	3	3	3	2	3	3	2.69
18	3	4	3	2	2	3	3	4	3	2	4	4	3	2	2	2	2.88
19	3	1	1	3	3	2	3	3	1	2	2	2	1	1	1	1	1.88
20	3	3	4	4	2	3	3	3	3	3	4	3	4	3	3	3	3.19
21	4	3	3	4	3	3	4	4	4	3	3	3	3	3	4	3	3.38
22	4	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	3.88
23	4	4	3	3	2	3	4	4	3	2	4	2	2	1	2	3	2.88

24	4	4	4	4	3	4	4	3	4	3	4	4	4	3	3	4	3.69
25	3	4	3	4	2	3	3	4	3	3	3	3	3	2	2	3	3.00
26	4	3	2	4	4	3	4	2	4	1	3	2	2	3	3	3	2.94
27	3	1	1	2	0	3	3	0	2	2	1	1	1	0	2	0	1.38
28	4	2	2	4	3	4	2	4	4	2	3	2	1	0	0	0	2.31
29	3	3	2	1	1	2	1	1	2	0	4	3	2	2	3	3	2.06
30	4	3	3	4	3	3	3	3	3	3	3	3	3	2	3	3	3.06
31	4	3	4	4	3	3	3	3	4	4	3	3	3	3	3	3	3.31
32	3	1	3	3	3	2	3	3	3	2	4	2	1	1	1	2	2.31
33	4	3	3	3	4	3	3	3	3	2	3	2	3	3	2	3	2.94
34	4	4	3	4	2	3	3	3	4	2	3	3	2	3	3	3	3.06
35	3	2	3	3	3	3	3	3	3	2	3	2	2	2	3	3	2.69
36	4	4	4	4	3	3	1	4	4	1	2	4	4	4	4	4	3.38
37	4	2	3	2	2	4	4	0	4	1	4	3	3	3	3	2	2.75
38	4	4	3	4	4	4	3	4	4	4	4	4	4	4	4	4	3.88
39	3	2	1	2	2	3	3	2	1	0	3	2	2	1	2	1	1.88
40	3	2	2	3	2	1	1	2	3	2	2	2	2	2	1	1	1.94
41	4	1	1	4	2	1	4	0	3	0	3	0	0	1	0	1	1.56
42	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	3.94
43	2	3	3	2	2	2	2	3	3	2	2	2	2	2	3	2	2.31
44	3	2	1	4	3	3	2	2	3	1	0	2	4	2	2	3	2.31
45	2	2	1	2	3	2	2	1	3	3	3	1	1	2	1	3	2.00
46	2	3	3	2	3	3	3	3	2	3	2	2	2	2	2	3	2.50
47	3	3	2	3	3	4	3	3	3	3	3	4	3	3	3	2	3.00
48	1	1	2	2	2	2	2	2	2	0	2	2	3	2	1	0	1.63
49	3	4	2	4	3	4	4	2	2	3	4	2	3	3	3	2	3.00
50	3	3	4	3	2	2	3	3	2	2	3	3	3	2	2	3	2.69

51	4	0	0	0	4	2	4	3	0	2	2	1	1	1	1	2	1.69
52	3	2	3	4	3	2	2	2	2	1	2	3	3	2	3	2	2.44
53	1	0	0	1	0	3	2	4	0	1	3	1	1	0	0	2	1.19
54	3	3	4	3	4	3	3	3	3	3	2	2	3	3	3	2	2.94
55	1	0	3	2	2	0	1	2	1	2	0	2	2	2	3	2	1.56
56	4	3	4	4	3	3	4	4	4	3	4	3	3	4	4	4	3.63
57	1	2	2	1	1	2	3	1	1	1	2	1	2	1	2	1	1.50
58	2	2	2	3	1	2	3	1	0	0	1	1	1	0	1	1	1.31
59	2	0	1	4	2	2	3	3	2	2	1	1	1	1	2	4	1.94
60	2	1	3	2	2	3	2	2	3	2	0	2	3	2	2	3	2.13
61	3	4	4	4	4	3	3	2	4	3	3	3	2	2	2	2	3.00
62	3	2	3	2	2	3	3	1	2	1	2	2	1	1	1	1	1.88
63	3	2	4	4	3	3	4	4	3	3	3	3	4	2	3	3	3.19
64	3	3	2	3	3	3	3	3	3	2	4	3	3	3	3	3	2.94
65	3	1	1	4	3	2	3	3	3	3	4	2	3	3	2	2	2.63
66	3	2	3	3	3	3	4	2	4	3	3	4	4	3	3	4	3.19
67	4	3	4	3	3	4	4	4	3	4	4	3	4	3	4	4	3.63
68	4	4	4	4	4	3	3	4	3	2	4	4	3	0	3	3	3.25
69	4	3	3	3	2	3	3	2	3	2	4	3	3	3	2	2	2.81
70	2	1	3	2	0	1	3	3	3	2	3	2	3	3	2	1	2.13
71	4	3	2	2	1	1	0	0	3	0	4	2	4	3	2	1	2.00
72	4	4	4	4	2	4	3	4	3	3	4	4	4	1	4	3	3.44
73	2	2	2	2	1	1	2	2	3	2	2	2	2	1	2	2	1.88
74	3	4	4	4	3	3	4	4	3	3	3	4	4	3	4	4	3.56
75	2	0	0	1	1	2	1	0	1	0	1	2	1	2	1	0	0.94
76	3	3	4	4	3	3	4	4	3	4	3	4	4	3	3	4	3.50
77	4	3	3	3	4	4	4	3	2	1	3	3	2	2	3	4	3.00

78	3	4	4	3	3	3	2	1	3	0	3	2	2	1	1	2	2.31
79	3	3	4	4	3	2	1	1	1	2	2	2	4	2	1	2	2.31
80	3	2	1	2	2	2	2	1	2	1	2	2	2	1	2	2	1.81
81	3	1	2	2	3	2	2	0	1	2	1	0	1	1	1	0	1.38
82	3	2	1	3	3	3	3	2	3	3	4	2	2	1	2	3	2.50
83	1	0	1	2	1	1	0	1	0	0	1	1	1	1	0	0	0.69
84	2	1	2	2	4	3	1	2	2	2	2	2	2	1	0	1	1.81
85	3	3	3	3	2	3	3	3	3	2	4	3	2	3	2	2	2.75
86	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2.94
87	1	0	1	2	2	1	1	0	0	0	1	1	0	0	0	0	0.63
88	4	3	3	4	2	4	3	3	3	2	4	3	3	3	4	4	3.25
89	4	4	4	4	3	4	4	3	4	2	4	3	3	3	3	4	3.50
90	4	4	2	3	2	4	3	3	4	2	4	4	4	4	4	4	3.44
91	3	4	3	1	3	4	3	3	4	0	4	3	2	1	2	3	2.69
92	4	4	2	3	3	3	3	3	4	3	4	3	3	4	3	3	3.25
93	4	0	3	2	2	2	2	2	2	2	1	1	1	2	2	2	1.88
94	4	4	4	3	2	4	4	4	3	3	3	2	4	0	3	2	3.06
95	1	1	2	1	2	2	1	1	0	1	1	1	2	0	0	0	1.00
96	3	1	0	2	1	3	3	2	3	2	3	2	0	0	3	2	1.88
97	3	3	2	3	2	2	3	1	2	3	3	2	2	1	1	1	2.13
98	3	3	3	3	2	2	3	2	2	2	3	3	2	2	3	3	2.56
99	3	4	3	1	1	2	3	2	2	3	3	4	4	3	2	2	2.63
100	1	0	1	0	1	0	0	1	0	1	1	0	0	0	0	1	0.44
101	2	1	0	1	4	2	3	2	2	3	0	1	2	1	1	0	1.56
102	4	3	4	3	3	4	4	4	4	3	4	3	3	3	3	3	3.44
103	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3.00
104	3	2	1	1	0	4	3	2	3	2	4	3	0	0	1	1	1.88

105	3	2	3	1	2	3	3	2	1	2	3	3	3	2	3	3	2.44
106	3	4	3	3	3	4	4	3	3	3	4	3	3	3	3	3	3.25
107	2	3	3	3	3	3	2	2	2	2	2	2	3	2	3	2	2.44
108	3	3	4	3	2	3	3	3	3	2	4	4	3	3	3	3	3.06
109	2	1	2	1	4	2	2	1	0	1	0	0	0	0	1	0	1.06
110	4	4	3	3	3	4	4	4	4	2	3	2	3	3	3	3	3.25
111	4	3	2	4	2	4	4	2	3	2	3	3	3	3	3	4	3.06
112	1	1	0	2	2	2	3	2	2	2	1	0	0	0	1	1	1.25
113	4	3	2	3	1	3	1	2	0	0	2	1	0	0	0	2	1.50
114	3	1	3	3	3	2	4	2	3	2	1	1	1	2	2	1	2.13
115	3	3	2	3	1	3	4	1	2	2	3	0	0	1	1	3	2.00
116	3	2	3	3	2	3	3	3	3	3	3	3	2	2	2	3	2.69
117	3	4	4	2	3	2	2	3	2	2	3	3	4	1	2	2	2.63
118	2	1	1	2	1	2	2	1	1	1	2	2	2	1	3	2	1.63
119	4	4	4	4	1	4	4	4	4	3	4	4	4	3	4	4	3.69
120	3	3	2	2	4	2	2	3	3	2	3	3	3	2	3	3	2.69
121	4	4	4	3	1	3	4	4	4	4	4	4	4	3	3	4	3.56
122	2	3	3	4	4	3	2	4	4	3	3	3	4	3	3	3	3.19
123	4	4	4	4	3	4	4	4	4	3	4	4	3	4	4	4	3.81
124	4	4	4	4	1	4	3	3	4	0	4	4	3	0	4	4	3.13
125	4	4	4	4	3	4	4	4	4	2	4	4	3	0	4	4	3.50
126	3	2	3	2	2	3	3	3	3	2	3	4	3	2	2	2	2.63
127	3	1	0	3	0	3	4	0	3	3	4	2	0	0	0	4	1.88
128	4	3	3	3	2	3	4	2	3	2	2	2	2	3	2	3	2.69
129	0	0	3	0	1	1	0	2	0	0	0	0	0	0	1	0	0.50
130	4	3	4	4	2	3	3	3	4	4	4	4	3	2	3	3	3.31
131	3	2	4	3	2	1	3	3	3	2	4	4	4	3	3	3	2.94

132	2	3	3	2	3	3	3	2	3	2	2	3	3	3	2	3	2.63
133	3	3	4	2	2	3	3	2	3	1	2	3	3	2	3	2	2.56
134	2	3	2	2	1	3	4	3	2	1	2	2	3	2	2	2	2.25
135	4	4	4	3	3	4	4	3	4	3	4	4	2	3	3	3	3.44
136	4	4	4	3	3	4	4	4	4	3	4	4	3	0	3	3	3.38
137	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3.13
138	3	2	3	3	3	4	4	4	3	3	4	3	3	3	3	3	3.19
139	4	1	3	4	4	4	4	3	4	3	3	2	1	2	1	2	2.81
140	3	4	3	4	2	3	4	3	4	2	4	3	3	2	3	3	3.13
141	1	0	0	0	4	1	2	0	0	0	0	0	0	1	0	0	0.56
142	2	2	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1.13
143	4	4	4	4	4	4	4	3	4	3	4	4	3	3	3	3	3.63
144	4	3	4	4	3	4	4	4	4	3	4	4	4	3	3	4	3.69

APPENDIX E

Respondent	Job Satisfaction Questions															Job Satisfaction Score
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	2	1	2	3	2	3	1	2	2	3	2	0	3	1	2	1.93
2	3	0	3	3	1	0	1	1	1	4	1	0	3	1	4	1.73
3	4	2	3	4	4	4	3	4	3	3	4	3	4	3	3	3.40
4	3	2	4	4	4	3	3	3	4	3	4	4	3	4	4	3.47
5	1	3	3	2	1	3	1	4	2	2	3	2	1	2	3	2.20
6	0	2	0	0	1	3	0	3	0	4	2	2	0	1	4	1.47
7	3	2	3	4	3	3	1	3	1	1	3	4	2	2	3	2.53
8	3	3	3	4	3	4	3	3	3	3	2	2	3	2	4	3.00
9	4	3	4	4	1	3	2	1	4	2	4	3	3	3	3	2.93
10	2	4	3	4	3	3	2	4	2	3	3	3	3	4	4	3.13
11	4	4	3	4	4	4	4	2	3	3	3	3	4	4	1	3.33
12	3	2	3	4	3	2	1	3	3	2	2	2	3	2	3	2.53
13	2	1	2	2	3	2	2	2	2	3	2	2	2	2	2	2.07
14	4	1	4	3	4	2	4	2	4	1	3	3	4	4	3	3.07
15	3	2	3	4	3	2	3	4	4	2	1	2	3	4	4	2.93
16	4	3	4	4	4	4	2	3	4	2	3	1	4	1	3	3.07
17	3	1	2	3	3	2	2	3	2	2	2	2	3	2	2	2.27
18	2	0	3	4	4	2	1	2	4	2	0	2	2	1	2	2.07
19	3	3	2	4	3	3	2	4	4	3	1	2	3	1	3	2.73
20	4	1	4	4	4	3	3	3	4	3	1	3	4	1	1	2.87
21	4	0	2	3	3	1	4	2	2	3	0	2	3	3	2	2.27
22	4	2	2	4	3	2	3	3	4	2	2	2	3	3	4	2.87

23	3	2	1	3	3	3	4	3	2	3	2	3	3	4	4	2.87
24	3	2	3	4	3	2	3	4	3	2	2	3	4	3	3	2.93
25	4	2	2	3	4	2	3	3	3	3	2	3	4	3	3	2.93
26	2	2	1	3	2	1	3	3	2	1	1	2	3	1	3	2.00
27	1	2	1	3	0	2	1	4	3	1	0	4	1	0	2	1.67
28	3	1	2	4	2	3	2	3	4	1	1	2	2	3	3	2.40
29	2	2	0	3	2	3	2	3	3	2	1	1	2	1	3	2.00
30	3	1	2	2	3	2	3	2	3	2	1	2	3	1	3	2.20
31	3	2	2	3	3	2	3	3	3	3	1	2	3	4	4	2.73
32	3	2	0	3	2	3	4	2	0	1	1	3	3	4	4	2.33
33	3	3	2	3	3	4	3	2	3	4	2	2	3	3	3	2.87
34	3	3	2	3	3	3	3	3	3	3	1	2	3	3	3	2.73
35	3	1	2	2	2	2	2	3	2	2	2	2	3	1	2	2.07
36	2	1	3	3	2	1	2	3	4	3	1	3	2	3	4	2.47
37	3	2	3	3	3	2	3	3	3	3	1	3	3	4	3	2.80
38	4	1	2	3	3	2	3	2	3	2	1	2	3	3	2	2.40
39	3	0	0	2	2	1	1	0	2	3	0	4	0	4	2	1.60
40	2	1	2	2	2	1	2	2	3	2	1	3	2	3	2	2.00
41	1	0	1	2	1	0	0	2	2	1	0	3	1	3	2	1.27
42	3	2	1	4	3	3	4	3	4	3	0	0	3	4	4	2.73
43	3	1	0	3	3	2	3	3	1	3	2	2	3	4	4	2.47
44	2	1	1	4	3	1	3	3	3	2	2	1	2	3	4	2.33
45	1	2	1	1	1	2	1	2	2	3	0	1	0	1	2	1.33
46	2	2	2	3	2	2	2	2	2	2	1	2	2	2	2	2.00
47	4	3	2	3	3	3	4	2	4	3	3	0	4	0	3	2.73
48	2	0	1	3	3	0	1	3	3	0	2	0	2	2	2	1.60
49	3	2	3	4	4	2	1	2	1	2	2	3	3	1	3	2.40

50	2	3	1	3	2	3	1	3	2	3	0	2	1	1	3	2.00
51	2	0	2	4	3	1	3	2	4	1	0	2	3	2	3	2.13
52	3	1	2	2	3	2	3	3	3	3	1	1	3	2	2	2.27
53	3	2	4	3	2	3	2	3	4	3	3	4	3	4	3	3.07
54	3	1	2	3	3	1	3	3	3	3	2	2	3	3	2	2.47
55	3	1	1	3	3	1	3	3	3	1	1	1	3	2	3	2.13
56	4	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3.00
57	2	1	2	3	2	1	2	3	3	1	1	2	1	3	3	2.00
58	3	1	1	2	3	1	3	2	3	1	1	2	2	2	1	1.87
59	2	0	0	2	0	1	1	2	2	3	0	4	2	2	0	1.40
60	2	2	3	4	3	3	1	3	3	3	2	2	3	3	1	2.53
61	2	1	2	3	2	1	3	3	3	2	1	0	3	1	3	2.00
62	1	1	0	2	1	2	1	2	1	1	1	0	1	1	1	1.07
63	4	2	3	2	4	2	1	3	2	2	1	2	3	4	3	2.53
64	3	2	3	3	3	3	3	3	3	1	3	2	3	3	3	2.73
65	4	0	1	3	4	0	3	2	2	0	1	2	2	1	1	1.73
66	4	3	2	3	3	3	2	3	4	2	3	3	4	4	3	3.07
67	3	1	2	3	2	2	3	4	3	1	3	3	3	2	3	2.53
68	4	1	3	3	3	2	3	3	3	3	1	3	3	3	2	2.67
69	3	0	0	3	1	1	3	2	2	3	0	2	2	2	3	1.80
70	3	1	2	3	3	1	3	3	3	1	1	2	3	1	3	2.20
71	3	1	1	3	2	1	4	3	4	1	0	4	3	1	4	2.33
72	3	1	1	3	4	1	3	3	3	1	1	3	3	2	3	2.33
73	3	1	2	4	3	3	4	2	3	3	0	2	1	2	2	2.33
74	4	1	3	2	4	2	4	2	2	3	2	3	4	4	2	2.80
75	2	0	1	4	1	0	4	4	4	0	0	0	0	4	0	1.60
76	4	1	3	2	4	3	3	3	3	2	2	3	3	3	2	2.73

77	1	2	3	2	1	3	1	2	2	1	1	2	1	3	3	1.87
78	2	1	3	4	3	1	2	3	4	1	0	2	2	2	4	2.27
79	3	0	3	2	3	2	4	1	3	4	3	1	3	3	1	2.40
80	3	1	1	2	3	1	4	2	2	1	3	2	3	2	2	2.13
81	3	1	3	4	2	1	2	3	4	1	1	2	2	2	4	2.33
82	4	1	3	3	3	2	3	4	4	3	1	2	3	4	4	2.93
83	3	1	1	3	2	1	2	2	4	0	0	0	3	2	2	1.73
84	3	2	1	3	3	3	3	3	4	3	2	1	3	4	2	2.67
85	2	1	1	3	3	1	2	3	3	3	1	1	1	1	3	1.93
86	3	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2.20
87	3	2	1	3	3	3	2	2	2	3	2	2	3	2	2	2.33
88	2	1	0	4	3	1	2	4	4	2	0	0	2	3	3	2.07
89	3	2	2	3	2	2	2	3	3	3	1	2	3	3	4	2.53
90	2	1	0	4	3	2	2	4	4	2	0	1	2	2	4	2.20
91	4	2	2	3	3	3	3	3	3	3	2	2	3	3	3	2.80
92	3	1	3	2	3	2	2	2	2	2	3	3	3	3	2	2.40
93	2	2	2	3	4	3	4	3	4	3	3	2	4	4	4	3.13
94	4	1	3	4	4	1	4	4	4	3	2	4	4	4	4	3.33
95	2	1	0	1	2	1	0	1	0	3	0	0	2	0	1	0.93
96	3	2	0	3	3	2	3	3	3	3	1	1	3	3	3	2.40
97	2	0	1	2	2	1	3	3	2	1	1	0	2	2	2	1.60
98	3	1	2	2	4	2	3	3	3	3	2	1	3	3	1	2.40
99	3	0	3	4	4	0	3	4	4	0	3	3	3	3	4	2.73
100	1	2	0	4	1	2	0	4	4	2	0	1	1	3	4	1.93
101	3	1	0	4	3	1	3	3	4	2	0	0	2	2	4	2.13
102	3	2	3	3	3	2	3	2	2	1	2	2	3	2	2	2.33
103	4	2	3	4	3	3	4	4	4	4	2	2	3	4	4	3.33

104	2	2	1	4	2	3	1	3	4	3	1	2	2	2	4	2.40
105	4	2	1	2	3	2	4	2	3	2	0	3	4	4	0	2.40
106	3	2	3	4	3	3	2	3	3	3	1	2	3	2	3	2.67
107	3	2	2	4	3	2	3	3	3	1	2	3	3	3	3	2.67
108	3	3	2	3	4	3	4	3	2	3	1	2	3	3	3	2.80
109	3	0	0	3	2	4	2	3	3	2	1	3	2	3	3	2.27
110	3	2	2	4	2	2	1	3	3	2	1	3	2	3	3	2.40
111	4	0	2	3	3	0	4	2	3	3	2	2	4	3	3	2.53
112	1	2	1	3	1	2	1	3	3	1	1	2	1	3	3	1.87
113	3	0	2	4	3	1	4	2	3	4	2	4	3	4	4	2.87
114	4	1	3	4	4	1	4	4	4	2	2	2	4	0	3	2.80
115	4	2	3	3	3	3	3	3	3	2	3	3	3	2	3	2.87
116	3	2	2	3	3	3	3	3	3	3	1	2	3	3	3	2.67
117	3	3	2	3	2	3	4	2	4	3	0	4	4	3	4	2.93
118	2	1	1	2	2	1	4	1	2	3	2	3	1	3	3	2.07
119	4	4	2	4	4	4	4	4	4	4	2	2	4	4	4	3.60
120	2	2	1	3	2	2	2	2	3	3	1	2	2	2	3	2.13
121	4	3	3	3	3	3	3	3	3	1	3	2	3	3	3	2.87
122	2	0	2	3	2	1	2	3	4	1	2	0	2	2	4	2.00
123	4	3	3	3	3	3	4	3	4	4	2	3	4	4	4	3.40
124	4	3	3	4	2	3	4	4	4	3	4	4	4	4	4	3.60
125	2	4	4	4	3	4	3	3	3	4	3	3	3	4	3	3.33
126	3	2	1	3	3	2	3	3	2	3	2	2	3	3	3	2.53
127	2	3	3	4	0	3	3	3	4	4	0	2	3	1	1	2.40
128	2	0	2	3	1	1	3	2	3	3	0	0	2	3	2	1.80
129	3	1	0	2	3	1	4	2	3	2	0	0	3	2	2	1.87
130	4	2	2	3	4	3	4	4	4	4	3	2	4	4	4	3.40

131	3	2	2	3	3	2	3	4	4	1	2	4	3	4	4	2.93
132	2	1	1	2	3	3	3	3	4	3	2	1	3	3	2	2.40
133	4	3	2	4	4	3	4	3	3	3	3	3	4	4	2	3.27
134	3	2	2	3	3	2	2	3	3	2	2	2	3	2	3	2.47
135	3	4	1	2	3	4	3	2	3	4	0	3	1	2	3	2.53
136	4	3	2	3	3	3	4	3	3	2	2	2	3	4	3	2.93
137	3	0	2	3	3	1	3	3	3	3	2	1	3	3	3	2.40
138	4	0	3	3	3	1	3	3	3	1	3	2	3	3	3	2.53
139	3	2	0	2	3	2	4	3	3	3	2	1	4	2	2	2.40
140	3	1	1	3	3	2	2	4	3	2	2	2	3	2	3	2.40
141	3	1	1	3	3	1	4	2	4	3	1	2	3	2	3	2.40
142	0	1	1	3	1	1	0	0	3	3	0	0	0	4	0	1.13
143	2	1	1	2	3	1	3	2	3	2	1	2	3	3	2	2.07
144	3	2	2	4	4	3	3	4	3	2	1	2	3	3	3	2.80