Self-leadership as an antecedent of authentic leadership

An empirical study among Public Sector employees

M Kotze

Faculty of Economic and Management Sciences
University of the Free State
South Africa

ABSTRACT

There are scholarly claims that self-leadership and authentic leadership have positive outcomes for organisations. In pursuit of understanding the competency development needs of public sector leaders, this study examines the influence of self-leadership on authentic leadership among public sector managers. A convenience sample of 183 public sector managers applying for MBA and leadership programmes to a South African Business School participated in the study. The Authentic leadership Questionnaire (ALQ) was used to measure authentic leadership and the Abbreviated Self-Leadership Questionnaire (ASLQ) to measure self-leadership. The findings indicate that self-leadership positively influences all four dimensions of authentic leadership, namely self-awareness, balanced processing, relational-transparency and internalised-moral-perspective. The implications for leadership development stemming from the findings are discussed here.

INTRODUCTION

Ethical meltdowns, corruption, fraud (PWC 2014) as well as mistrust and disappointment with the government (Holzer and Illiash 2009:145) are some reasons why citizens' confidence and trust in the public sector is declining in South Africa. Despite the notion that the practice of public sector leadership is crucial for public governance and institutional performance, public leadership is often described as the "weakest link" in the public sector system (Kramer 2008). Public leaders – both political and administrative – are frequently viewed with suspicion and cynicism. Several authors, have identified this public leadership crisis as well as the collective desire for effective leaders (Beinecke and Spencer 2009:340; Holzer and Illiash 2009:145).

These problems created a need for public sector leaders who remain accountable and lead with integrity, courage and transparency (Diddams and Chang 2012). This type of leadership has been termed authentic leadership. Authentic leadership refers to genuine leaders who lead by example by fostering healthy, ethical climates, are true to themselves and lead others by helping them to achieve authenticity (Avolio and Gardner 2005; Gardner et al. 2005; Gardner et al. 2005). In the face of shifting and ethically ambiguous organisational practices, these leaders focus on their own transparency, internal principles and moral compass (Diddams and Chang 2012:594). George (2003) argues that public trust will not be restored until organisations are led by authentic leaders. Authentic leaders are needed, not for their charisma, but for their character, values and ability to motivate employees to create genuine value for stakeholders. They enhance performance and motivation and have a highly developed understanding of their responsibility to act morally and in the best interests of others (May et al. 2003:248). Additionally, authentic leaders positively influence their followers' identity by creating conditions that nurture the human spirit. Although authentic leadership shows some overlap with, and can incorporate different modern perspectives on leadership such as transformational, charismatic, servant and spiritual leadership (Avolio and Gardner 2005; Diddams and Chang 2012; Kiyani et al. 2013), Avolio and Gardner (2005) stress that authentic leadership is more generic and represents a root construct that provides the basis for other forms of positive leadership. Authentic leadership as a construct is gaining legitimacy in its own right (Kiyani et al. 2013: 396). Its value is evident in that it focuses scholars' attention on leadership as being, as opposed to leadership as doing or having (Klenke 2007:71).

Although positive outcomes of authentic leadership within organisations have been researched such as increased work engagement (Sekoere 2015), optimism and trust (Stander et al. 2015), increased satisfaction with supervisors and organisational commitment (Peus et al. 2012) and employee creativity and innovativeness (Rego et al. 2012; Müceldili et al. 2013), very little is known regarding the antecedents of authentic leadership (Gardner et al. 2011; Peus et al. 2012). In order to provide a foundation for authentic leadership development, Peus et al. (2012) and Gardner et al. (2011) called for more empirical investigations into its various antecedents. An extensive literature review indicates that only a few studies relate individual differences to authentic leadership, of which most were conducted in the private sector (Jensen and Luthans 2006; Tate 2008; Peus et al. 2012). In order to assist in filling this gap in public leadership research, the purpose of this study is to expand the research relating individual differences to authentic leadership.

According to Blanchard (2007), effective leadership in an organisational context follows a sequence that starts with the individual, namely, self-leadership, followed by one-on-one leadership, team leadership and organisational leadership. Leaders can move to a higher standard of leadership using an inside-out approach, starting with self-leadership (Covey 1996). The concept of self-leadership suggests that an individual who engages in self-evaluation, replacing ineffective behaviours and negative thought processes with more effective behaviours and positive thought processes can enhance personal accountability and improve professional performance. In short, self-leadership is a *process* through which people influence themselves to achieve self-direction and self-motivation necessary to perform (DiLiello and Houghton 2006:320, 321).



Manz (2015) addresses self-leadership in terms of the degree to which self-influence processes are characterised by authenticity, responsibility and increasing capacity. Authenticity encompasses the significance of addressing higher-level standards (for example, considering the why and what of self-influence beyond the how). Therefore, several authors (Van Zyl 2014; Van der Sandt and Neck 2003) conclude that self-leadership through self-influence processes may have an effect on leaders' moral actions and ethical behaviour. Furthermore, Stewart *et al.* (2011:196) propose that self-leading individuals may be more likely to leave if the organisation does not share their standards or values. No empirical research relating self-leadership to authentic leadership exists, however, the question remains whether self-leadership may be an antecedent of authentic leadership.

STUDY OBJECTIVE

The aim of this study is to examine whether self-leadership has a statistically significant positive relationship with authentic leadership among a group of public sector managerial employees.

CONCEPTUALISATION OF AUTHENTIC LEADERSHIP

Authentic leadership is gaining increased attention in the scholarly and practitioner communities. A variety of approaches and interpretations representing a developing framework within which to understand the concept of authenticity and authentic leadership is evident from the literature (Eagly 2005; Liu *et al.* 2015; Shamir and Eilam 2005; Sparrowe 2005). The concept proposed by Avolio and his colleagues (Avolio *et al.* 2004; Gardner *et al.* 2005; Gardner *et al.* 2011; Ilies *et al.* 2005; Luthans and Avolio 2003; Walumbwa *et al.* 2008) dominates current theorising and empirical research. Building on conceptualisations of authentic leadership by Avolio and colleagues, Walumbwa *et al.* (2008:94) define authentic leadership as "a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate".

Walumbwa et al. (2008:94) propose that authentic leadership consists of four distinct but related substantive components: self-awareness (SA), relational transparency (RT), balanced processing (BP) and internalised moral perspective (IMP). In this model of authentic leadership, self-awareness means showing an understanding of one's strengths and weaknesses and the multifaceted nature of the self, which includes gaining insight into the self through exposure to others and being cognisant of one's impact on them. Relational transparency refers to presenting one's authentic self to others and promotes trust through disclosures that involve sharing information and expressions of one's true thoughts and feelings while trying to minimise displays of inappropriate emotion (Walumbwa et al. 2008). Balanced processing refers to leaders who show that they analyse all relevant data objectively before coming to a decision; they also solicit views that challenge deeply-held assumptions (Walumbwa et al. 2008). Finally, internalised moral perspective refers to integrated self-regulation guided by internal moral standards and values as opposed to group, organisational

and societal pressures. Consequently, expressed decision making and behaviour that is consistent with these internalised values result.

SELF-LEADERSHIP

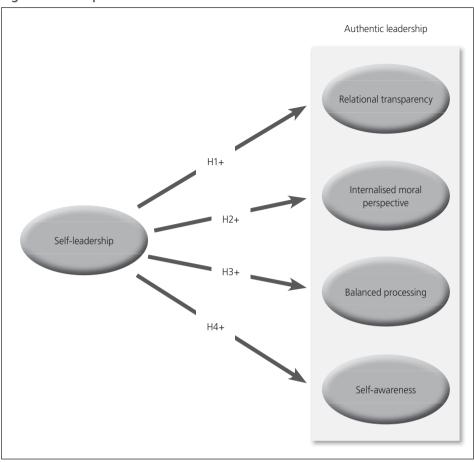
Self-leadership aims at the enhancement of personal effectiveness through three categories of individual-level strategies, namely, behaviour-focused strategies, natural reward strategies, and constructive thought strategies (Neck and Houghton 2006:271). Firstly, behaviour-focused selfleadership strategies pertain to self-observation, goal setting, self-reward, self-punishment and self-cues (Neck and Houghton 2006:271). Self-observation entails that people escalate their awareness of why, how and when they display certain behaviours to overcome the display of unproductive behaviour (Ugurluoglu et al. 2013). More accurate information regarding current behaviour and performance levels can assist individuals to set effective behaviouraltering goals for themselves (Manz and Neck 2004). Self-goal setting relates to setting and implementing challenging personal goals with a strong motivating effect on individual performance, while self-reward relates to using something tangible or abstract to reinforce desirable behaviours and goal attainments. These could be as simple as mentally praising oneself for a job well done or treating oneself to something enjoyable when certain goals are attained (Houghton et al. 2012:218). Self-punishment can also be used to shape desirable behaviours effectively, although constructive criticism has been found to be much more effective than excessive self-punishment (Houghton and Neck 2002). Self-reinforcement and self-punishment (or self-criticism) are essentially opposite sides of the same coin; both involve self-applied consequences (positive for self-reinforcement and negative for self-punishment) for behaviour (Manz 2015:135). Finally, self-cueing or behavioural rehearsal prior to actual performance can promote refinement, improvement and corrective adjustments for greater individual effectiveness and help avoid costly setbacks (Stewart et al. 2011:188).

Another set of self-leadership strategies is more focused on fostering positive affect. The general approach involves building natural motivation into the task itself (Manz 2015:135). Natural reward strategies aim to increase feelings of competence and self-determination through enhancement and focus on enjoyable task features (Alves *et al.* 2006:341). By building these features into activities, the tasks themselves become naturally rewarding (Norris 2008). Individuals apply two primary natural reward strategies, namely building more pleasant and enjoyable features into a given activity or shaping one's own perceptions by focusing attention away from the unpleasant aspects of a task (Mahembe *et al.* 2013:3).

Finally, constructive thought processes aim at creating positive thinking by reducing dysfunctional beliefs and assumptions, reducing negative self-talk and increasing positive self-image (Alves *et al.* 2006:341). It also involves visualising successful performance and examining individuals' beliefs and assumptions to align cognitions with desired behaviour (Ho and Nesbit 2013). Self-influence of thoughts to make one's thinking more constructive is a critical part of overall effective self-leadership (Manz 2015:236). Self-leadership in practice requires individuals to use strategies from all three categories above – behavioural, natural rewards and constructive thought (Alves *et al.* 2006:341). The self-leadership literature has suggested a number of predictable outcomes or dependent variables thought to be associated with self-leadership strategies. These include commitment, independence,



Figure 1: Conceptual model



creativity/innovation, coping with stress, trust, potency, positive effect, job satisfaction, psychological empowerment and self-efficacy (Neck and Houghton 2006; Houghton *et al.* 2012; Long *et al.* 2015; Choi and Kim 2014). Self-leading employees seem to have a more positive effect at work and tend to have higher productivity and more fulfilling careers (Stewart *et al.* 2011:196).

HYPOTHESES

In order to achieve the aim of the study, the hypotheses below were formulated.

Hypotheses 1: Self-leadership has a statistically significant positive influence on the Relational Transparency dimension of authentic leadership.

Hypotheses 2: Self-leadership has a statistically significant positive influence on the Internalised Moral dimension of authentic leadership.

Hypotheses 3: Self-leadership has a statistically significant positive influence on the Balanced Processing dimension of authentic leadership.

Hypothesis 4: Self-leadership has a statistically significant positive influence on the Self-Awareness dimension of authentic leadership.

METHODOLOGY

Participants

A convenience sample of 163 public sector managers applying for MBA and leadership programmes to a South African Business School participated in the study. The convenience sample comprised 93 males and 70 females. Most of the respondents are from the Republic of South Africa (84.7%). Furthermore, the majority (67%) are in the age group 26 to 40 years of age. Only three respondents are 50 years of age or older. Approximately 31% of the respondents speak Sesotho, 22% speak Afrikaans and 18% speak Setswana. About 45% of the respondents have obtained a degree. Of the rest of the respondents, 35.6% obtained a diploma and 19% completed matric (Grade 12) only.

Measurement instruments

Authentic Leadership: Authentic leadership was measured using the Authentic Leadership Questionnaire (ALQ) (Walumbwa et al. 2008). Grounded in the perspective of authentic leadership by Avolio and colleagues (Avolio and Gardner 2005; Gardner et al. 2005), the questionnaire is the instrument most frequently used to measure authentic leadership (Gardner et al. 2011). The ALQ consists of 16 five-point items and measures four dimensions: SA, RT, IMP and BP. Items include statements such as seeks feedback to improve interactions with others (SA), says exactly what he or she means (RT), demonstrates beliefs that are consistent with actions (IMP) and listens carefully to different points of views before coming to conclusions (BP). Individuals report the frequency (0: not at all; 4: frequently, if not always) with which they adopt the 16 behaviours/attitudes.

Self-leadership: The Abbreviated Self-Leadership Questionnaire (ASLQ) (Houghton et al. 2012) was used to measure self-leadership. The questionnaire consists of nine items and uses a five-point Likert scale (1: not at all accurate; 5: completely accurate). The instrument gives an overall measure of self-leadership, representing three coherent and rational groupings of self-leadership strategies (Houghton et al. 2012:224). A recent South African study (Nel and Van Zyl 2015:1) indicates that the ASLQ measures a single dimension that is very reliable and useful in the work context.

Statistical Analysis

The hypotheses were tested using the variance-based structural equations modelling programme SmartPLS 3. SmartPLS 3 was selected as the preferred programme to test the conceptual model because it can yield robust results with small sample sizes (Hair *et al.* 2011; Hair *et al.* 2012; Henseler *et al.* 2009). Before the hypotheses were tested, the psychometric properties of the measurement model were assessed by conducting a confirmatory factor analysis (CFA) also using SmartPLS 3. Construct validity was examined



using the measurement model for convergent and discriminant validity (Hair *et al.* 2010). Convergent validity was assessed by considering the standardised loadings *average variance extracted* (AVE) and *composite reliability* (CR). To demonstrate convergent validity, the standardised loadings in the measurement model should be significant – 0.50 or higher, ideally 0.70 or higher (Hair *et al.* 2010). The AVE should also be 0.50 or higher. The CR value of each latent variable should be 0.70 or higher (Hair *et al.* 2011). Discriminant validity was assessed using Fornell and Larcker's (1981) method which compares the square root of the AVE for each pair of constructs in the measurement model with the correlation between the two constructs. For evidence of discriminant validity, the square root of the AVE of two constructs must be higher than the correlation between the two constructs.

Table 1: Assessment of the reliability and validity of the measurement instruments

Constructs	Items	Outer loadings	AVE	CR
Authentic leadership – RT	AL-T1	0.824	0.514	0.806
	Al-T2	0.543		
	AL-T3	0.718		
	AL-T4	0.754		
Authentic leadership – Internalised IMP	AL-M1	0.741	0.519	0.811
	AL-M2	0.728		
	AL-M3	0.763		
	AL-M4	0.643		
Authentic leadership – BP	AL-B1	0.588	0.556	0.786
	AL-B2	0.836		
	AL-B3	0.789		
Authentic leadership – SA	AL-S1	0.673	0.597	0.855
	AL-S2	0.767		
	AL-S3	0.846		
	AL-S4	0.794		
SL	SL1	0.662	- 0.515	0.864
	SL4	0.700		
	SL5	0.789		
	SL6	0.688		
	SL7	0.742		
	SL8	0.715		

Table 2: Assessment of discriminant validity

	RT	ВР	IMP	SA	SL
RT	0.717				
ВР	0.422	0.746			
IMP	0.499	0.443	0.720		
SA	0.470	0.554	0.403	0.773	
SL	0.403	0.503	0.355	0.536	0.717

Square-root of the AVE on the diagonal, correlations below the diagonal

Research procedure and ethical clearance

Participants were asked to sign a consent form relating to their participation in the research. The form included written assurance of their anonymity and that no individual results would be reported in any publication. Only aggregated data relating to the total group would be reported and discussed.

RESULTS

Assessment of the reliability and validity of the measurement instruments

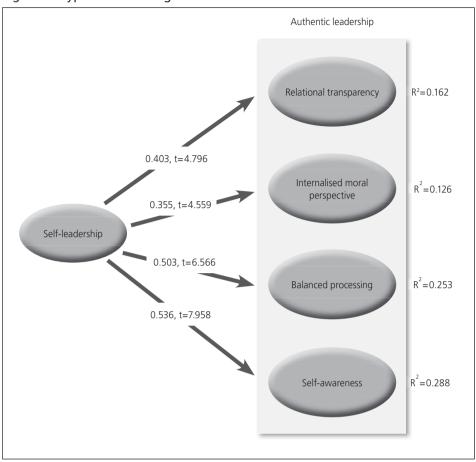
The initial assessment of the measurement instruments (measurement model) showed that three items (Item 5 relating to Relational Transparency component (AL-T5)) of the ALQ and two items on the ASLQ (SL2 and SL9) had loadings below 0.5 (see Annexure 1). Therefore, these three items were removed from the measurement model because they did not meet the criterion proposed by Hair *et al.* (2010). Furthermore, the AVE for RT and self-leadership (SL) was below 0.5. Excluding AL-T5 from the measurement model improved the AVE of RT to 0.514. However, after removing SL2 and SL9, the AVE of SL was only 0.469. Therefore, to achieve an AVE over than 0.5, SL3 (loading of 0.580, see Annexure 1) was also removed. The diagnostics of the modified measurement model after removing these four items are presented in Table 1. In Table 1 all item loadings and the AVE of each construct are above 0.5. The CR for each construct is above 0.7.

The results of the Fornell and Larcker test for discriminant validity are presented in Table 2. From Table 2 it can be deduced that the square root of the AVEs of each pair of constructs are more than the correlation between the two constructs. Thus, the measurement model meets the Fornell and Larcker (1981) discriminant validity criterion.

Based on the results presented in this section, it is concluded that the measurement model exhibits adequate reliability and validity to continue with hypotheses testing.



Figure 2: Hypotheses testing results



Hypotheses testing

The hypotheses testing results are presented in Figure 2. As hypothesised, self-leadership positively influences all four components of authentic leadership. Thus, Hypotheses 1 to 4 are accepted. Self-leadership explains approximately 16% of relational transparency, 13% of internalised moral perspective, 25% of balanced processing and 29% of self-awareness.

Self-leadership has the strongest positive influence on the self-awareness component of authentic leadership (0.536), followed by the influence of self-leadership on balanced processing (0.503). Furthermore, as shown in Figure 2, self-leadership has a moderate influence on the relational transparency (0.403) and internalised moral perspective components (0.355).

DISCUSSION

From the results it is evident that self-leadership has a statistically significant positive influence on all four components of authentic leadership. Firstly, with regard to the positive

influence of self-leadership on *self-awareness*, the results indicate that individuals who have higher levels of self-leadership tend to show a better understanding of their own strengths and weaknesses and of the impact of their behaviour on others. This result makes sense since the concept of self-leadership includes self-observation. Self-observation is regarded as *the lifeblood of self-leadership* and centres on the observation of our own behaviour to obtain information about it (Manz 2015:135). Self-observation can increase self-awareness (Manz 2015:135) because people escalate their awareness of why, how and when they display certain behaviour in order to overcome unproductive behaviour (Ugurluoglu *et al.* 2013). Furthermore, self-awareness creates a basis for positive change in the choices we make and how we apply various influences to our own behaviour. Thus, effective self-leaders are likely to place greater value on and exert more effort in pursuing a higher degree of self-awareness (Manz 2015:135).

Several researchers (Avolio and Gardner 2005; Gardner *et al.* 2005; Avolio *et al.* 2004; Dasborough *et al.* 2014; Walumbwa *et al.* 2008) focus on the importance of self-awareness, -knowledge and -regulation in authentic leadership. The study by Peus *et al.* (2012) empirically supports the proposition that the development of authentic leadership as perceived by followers is directly related to gains in the leader's self-knowledge. Diddams and Chang (2012) argue that it is not always possible to judge one's own level of self-awareness. Rather than equate self-awareness with extensive self-knowledge alone, they suggest that authentic leaders are also more aware of their own ambiguities, inconsistencies and self-knowledge limits and realise that their self-knowledge is always incomplete.

Secondly, the results relating to the positive influence of self-leadership on *relational transparency* indicate that those who measure higher on self-leadership are inclined to present their authentic self to others and promote trust by sharing their true feelings, thoughts and emotions. According to Dolbier *et al.* (2001:469, 482), self-leadership is significantly related to interpersonal trust. The self is relational, fostering feelings of connectedness. Self-leaders see the world as a safe and dependable place, and feel more at ease with emotional expressions which builds interpersonal trust.

Thirdly, the results indicate that those who measure higher on self-leadership also measure higher on balanced processing, meaning that they analyse all relevant data objectively before coming to a decision. During this process, they solicit views from others that challenge their assumptions. Findings from previous qualitative research conducted among senior public service managers in South Africa (Barnard and Simbhoo 2014:1) showed that authenticity seems to develop through a continuous process of internal and external adaptation and it ultimately leads to building a differentiated yet integrated self-identity. These authors conclude that authenticity is an effective state resulting from continuous self-appraisal of the extent to which self-expression is congruent with a subjective and socially constructed expectation of the self in relation to others.

Lastly, those who measure higher on self-leadership also measure higher on internalised moral perspective. This means that they are guided by their own internal moral standards and values as opposed to group, organisational and societal pressure, leading to behaviour consistent with their internalised values. This seems to be in line with self-leadership literature which indicates that self-leaders give attention to higher-level standards that guide behaviour and address the degree of consistency of the underlying reasons for effort and behaviour with their own personal values, as opposed to forfeiting determination of the rationale for



self-influence to external sources such as a superior (Manz 2015:133-134). Their self-led intentions and behaviour relate to responsible ends with a concern for the wider good and higher-level values (e.g. courage, compassion, integrity) and transcendent purpose (Manz 2015:134). Also, Barnard and Simbhoo (2014:4) found that senior managers in public service experience authenticity when they feel good about themselves in work-related interaction as a result of being able to be and act in accordance with their personal values, while personal in-authenticity is ascribed to conflict between external and internal self-expectations.

While more research is needed to draw definite conclusions, these initial findings suggest the potential value of recognising, developing and leveraging the levels of individual selfleadership so these individuals can lead their organisations more authentically and towards desired outcomes. Previous research has shown that individuals who receive education in leadership are more inclined towards self-leadership strategies (Ugurluoglu et al. 2013). Also, self-influence-which makes one's thinking more constructive-is a critical part of overall effective self-leadership (Manz 2015:136). Therefore, individuals need to be made aware of how their thought processes contribute towards leadership success (Ricketts et al. 2012:7, 8). Several authors found that self-leadership strategies can be taught with great success (Houghton et al. 2012:218, 219; Tat and Zeitel-Bank 2013:189). It seems that self-observation and self-assessment are vital first steps in the self-leadership process because people cannot influence their own actions if they are inattentive to relevant aspects of their behaviour (Van Zyl 2014:10). Self-observation (observing one's own actions and thoughts, or getting someone else to do so) and self-assessment (performing a formal assessment of behaviours and thoughts) involve systematic data gathering about one's own behaviour and cognition (Van der Sandt and Neck 2003:377).

CONCLUSION AND RECOMMENDATIONS

This study serves as a first exploratory step toward a better understanding and application of one of the antecedents of authentic leadership, namely, self-leadership within a group of public sector managers. Although developing self-leadership capacities requires time and attention (Manz 2015:137), in the light of the results of this study, as well as previous research relating to self- and authentic leadership, it is suggested that leaders in the public sector be exposed to self-leadership development interventions. These interventions may include thought self-leadership, self-observation strategies, task performance process strategies and work context strategies. Thought self-leadership-strategies is a means for individuals to manage their own thinking tendencies (Stewart et al. 2011:197). It involves a process of influencing or leading oneself through purposeful control of one's thoughts including successful selftalk, and evaluating one's internalised beliefs which create habitual, constructive ways of thinking (Neck et al. 1995:281). Self-observation strategies may include soliciting feedback from others (co-workers, followers, leaders) (Manz 2015: 135) about own behaviours during critical events. Task performance process strategies relate to aspects that affect intrinsically motivating properties of work, such as successfully rewarding oneself (natural reward elements). Work context strategies include the manipulation of the work context to maximise intrinsic motivation-that is, enhancing mundane or tedious task performance by selecting an aesthetically pleasing environment conducive to task enjoyment. For instance, people tend to perform mundane, well-learned tasks better when working in the presence of others instead of alone (Williams 1997:141). Furthermore, multisource feedback programmes, such as leadership coaching, can improve self-influencing skills.

REFERENCES

- Alves, J.C., Lovelace, K.J., Manz, C.C., Matsypura, D., Toyasaki, F., and Ke, K. 2006. A cross-cultural perspective of self-leadership. *Journal of Managerial Psychology*, 21(4):338–359.
- Avolio, B.J. and Gardner, W.L. 2005. Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16:315-338.
- Avolio, B.J., Gardner, W.L., Walumbwa, F.O., Luthans, F. and May, D.R. 2004. Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviours. *Leadership Quarterly*, 15:801-823.
- Barnard, A. and Simbhoo, N. 2014. South African managers in public service: On being authentic. *International Journal of Qualitative Studies in Health and Well-being*, 9:1–12.
- Beinecke, R.H. and Spencer, J. 2009. Examination of mental health leadership competencies across IIMHL countries. In Raffel, J.A., Leisink, P. and Middlebrook, A.E. (eds.), *Public sector leadership: international challenges and perspectives*. Massachusetts: Edward Elgar. pp. 240–359.
- Blanchard, K. 2007. Leading at a Higher Level. Edinburg: Pearson.
- Choi, Y.H and Kim, H.M. 2014. Effect of Self-leadership recognized by newly-employed nurses on job satisfaction: Mediating effect of organizational commitment. *Journal of Korean Academic Psychiatric, Mental an Health Nursing,* 23(4):242–249.
- Covey, S. 1996. Principle Centered Leadership. Sydney: Simon and Schuster.
- Dasborough, M., Todorova, G. and Qu, Y. 2014. The dark side of authentic leadership: Leading dissimilar followers through conflict. In Neider, L.K. and Schrieshein, C.A. (eds), *Advances in authentic and ethical leadership*. Charlotte, NC: Information Age Publishing, pp. 95–125.
- Diddams, M. and Chang, G.C. 2012. Only human: Exploring the nature of weakness in authentic leadership. *Leadership Quarterly*, 23(3):593–603.
- DiLiello, T.C. and Houghton, J.D. 2006. Maximizing organisational leadership capacity for the future: Toward a model of self-leadership, innovation and creativity. *Journal of Managerial Psychology*, 21(4):319–377.
- Dolbier, C.L., Soderstrom, M., and Steinhardt, M.A. 2001. The relationships between self-leadership and enhanced psychological, health, and work outcomes. *The Journal of Psychology*,135(5):469–485.
- Eagly, A.H. 2005. Achieving relational authenticity in leadership: Does gender matter? Leadership Quarterly, 6:459–474.
- Fornell, C. and Larcker, D.F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1):39–50.
- Gardner, W.L., Avolio, B.J., Luthans, F., May, D.R. and Walumbwa, F. 2005. Can you see the real me? A self-based model of authentic leader and follower development. *Leadership Quarterly*, 16:343–372.
- Gardner, W.L., Cogliser, C.C., Davis, K.M. and Dickens, M.P. 2011. Authentic leadership: A review of the literature and research agenda. *Leadership Quarterly*, 22(6):1120–1145.
- George, B. 2003. Authentic Leadership. San Francisco: Jossey-Bass.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. 2010. *Multivariate data analysis: A global perspective*. 7th ed. New Jersey: Pearson Prentice Hall.



- Hair, J.F., Ringle, C.M. and Sarstedt, M. 2011. PLS-sem: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2):139–152.
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. 2012. An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3):414–433.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. 2009. The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20:277–320.
- Ho, J. and Nesbit, P.L. 2013. Exploring self-leadership across Eastern and Western cultures. *Journal of Service Science and Management*, 6:241–249.
- Holzer, M. and Illiash, I. Russian bureaucracy as an alternative model of leadership. In Raffel, J.A., Leisink, P. and Middlebrooks, A.E. (eds.), Public sector leadership: International challenges and perspectives. Massachusetts: Edward Elgar, pp. 145–162.
- Houghton, J.D. and Neck, C.P. 2002. The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. *Journal of Managerial Psychology*, 17:672–691.
- Houghton, J.D., Dawley, D., and DiLiello, T.C. 2012. The abbreviated self-leadership questionnaire (ASLQ): A more concise measure of self-leadership. *International Journal of Leadership Studies*, 7(2):216–232.
- Ilies, R., Morgeson, F.P. and Nahrgang, J.D. 2005. Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *Leadership Quarterly*, 16:373–394.
- Jensen, S.M. and Luthans, F. 2006. Relationship between entrepreneurs' psychological capital and their authentic leadership. *Journal of Management Issues*, 18(2):254–273.
- Kiyani, K., Saher, N., Saleem, S. and Iqbal, M. 2013. Emotional intelligence (EI) and employee outcomes: The mediating effect of authentic leadership style. *Interdisciplinary Journal of Contemporary Research in Business*. 5(1):394–405.
- Klenke, K. 2007. Authentic leadership: A self, leaders, and spiritual identity perspective. *International Journal of Leadership Studies*, 3(1):68–97.
- Kramer, R. 2008. Learning how to learn: Action learning for leadership development. In Morse, R.S. and Buss, T.F. (eds.), *Innovations in Public Leadership Development*. New York: M.E. Sharpe, pp. 296–326.
- Liu, H., Cutacher, L. and Grant, D. 2015. Doing authenticity: The gendered construction of authentic leadership. Gender, Work and Organisation, 22(3):237–255.
- Long, C.S., Alifiah, M.N., Kowang, T.O. and Ching, C.W. 2015. The relationship between Self-leadership, personality and job satisfaction: A review. *Journal of Sustainable Development*, 8(1):16–23.
- Luthans, F. and Avolio, B.J. 2003. Authentic leadership development. In Cameron, K.S., Dutton, J.E. and Quinn, R.E (eds.), Positive organisational scholarship: Foundations of a new discipline. San Francisco: Barrett-Koehler, pp. 241–261.
- Mahembe, B., Engelbrecht, A.S. and De Kock, F.S. 2013. A confirmatory factor analytic study of a self-leadership measure in South Africa. *SA Journal of Human Resource Management*, 11(1), Art #520, 10 pages. Available at: http://dx.doi.org/10.4102/sajhrm.v11i1.520 (accessed).
- Manz, C.C. 2015. Taking the self-leadership high road: smooth surface or potholes ahead? The Academy of Management Perspectives, 29(1):132–151.
- Manz, C.C. and Neck, C.P. 2004. *Mastering Self-leadership: Empowering yourself for personal excellence*. 3rd ed., New Jersey: Pearson Prentice-Hall.
- Manz, C.C. and Sims, H.P. Jr. 1989. Superleadership: Leading others to lead themselves. New York: Prentice-Hall, Englewoord Cliffs.
- May, D.R., Chan, A., Hodges, T., and Avolio, B.J. 2003. Developing the moral component of authentic leadership. *Organizational Dynamics*, 32:247–260.

- Müceldili, B., Turan, H., and Erdil, O. 2013. The influence of authentic leadership on creativity and innovativeness. *Procedia Social and Behavioral Sciences*, 99:673–681.
- Neck, C.P. and Houghton, J.D. 2006. Two decades of self-leadership theory and research. *Journal of Managerial Psychology*, 21(4):270–295.
- Neck, C.P., Stewardt, G.L. and Manz, C.C. 1995. Thought Self-Leadership as a framework for enhancing the performance of performance appraisers. *Journal of Applied Behavioural Science*, 31(3):278–302.
- Nel, P. and Van Zyl, E. 2015. Assessing the psychometric properties of the revised and abbreviated self-leadership questionnaires. *SA Journal of Human Resource Management*, 13(1), Art. #661. Available at: http://dx.doi.org/10.4102/.sajhrm.v13i1.661 (accessed).
- Norris, E. 2008. An examination of self-leadership. Emerging Leadership Journeys, 2:43-61.
- Peus, C., Wesche, J.S., Streicher, B., Braun, S. and Frey, D. 2012. Authentic leadership: An empirical test of its antecedents, consequences, and mediating mechanisms. *Journal of Business Ethics*, 107:331–348.
- PWC. 2014. Global economic crime survey: Confronting the changing face of economic crime. 4th South African ed. Available at: http://www.pwc.co.za/crimesurvey (accessed 13 March 2015).
- Rego, A., Sousa, F., Marques, C., and Cunha, M.P.E. 2012. Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3):429–437.
- Ricketts, K.G., Carter, H.S., Place, N.T. and McCoy, T. 2012. A look inside: Self-leadership perceptions of extension educators. *Journal of Extension*, 50(5). Available at: http://www.pwc.co.za/crimesurvey (accessed 25 June 2015).
- Sekoere, I.M. 201). The effect of authentic leadership and psychological capital on work engagement amongst employees in leadership positions at Standard Lesotho Bank. Masters Thesis in Industrial Psychology, University of the Free State, Bloemfontein, South Africa.
- Shamir, B and Eilam, G. 2005. What's your story? A life-stories approach to authentic leadership development. The Leadership Quarterly, 16:95–417.
- Sparrowe, R.T. 2005. Authentic leadership and the narrative self. The Leadership Quarterly, 16:19-439.
- Stander, F.W., De Beer, L.T. and Stander, M.W. 2015. Authentic leadership as a source of optimism, trust in the organisation and work engagement in the public health care sector. *South African Journal of Human Resource Management*, 13(1), doi: 10.4102/sajhrm.v13i1.675.
- Stewart, G.L., Courtright, S.H. and Manz, C.C. 2011. Self-leadership: A multilevel review. *Journal of Management*, 37(1):185–222.
- Tat, U. and Zeitel-Bank, N. 2013. Self-leadership development: The link between body, mind, and reflection. Paper delivered at Management, Change and Learning International Conference, Zadar, Croatia, 19–21 June.
- Tate, B. 2008. A longitudinal study of the relationships among self-monitoring, authentic leadership, and perceptions of leadership. *Journal of Leadership and Organisational Studies*, 15:16-29.
- Ugurluoglu, O., Saygili, M., Ozer, O., and Santas, F. 2013. Exploring the impacts of personal factors on self-leadership in a hospital setting. *The International Journal of Health Planning and Management*, 30(1), doi: 10.1002/hpm.v30.1/issuetoc pp. 3-13.
- Van der Sandt, C.V. and Neck, C.P. 2003. Bridging ethics and self-leadership: Overcoming ethical discrepancies between employee and organisational standards. *Journal of Business Ethics*, 43:363–387.
- Van Zyl, E. 2014. The role of self-leadership in becoming an ethical leader in the South African context. *African Journal of Business Ethics*, 8(2):5–4.
- Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S. and Peterson, S.J. 2008. Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1):89–126.
- Williams, S. 1997. Personality and self-leadership. Human Resource Management Review, 7(2):139-155.



ANNEXURE 1 – RESULTS OF THE INITIAL ASSESSMENT OF THE MEASUREMENT MODEL

Constructs	Items	Outer loadings	AVE	CR
Authentic leadership – RT	AL-T1	0.808	0.438	0.79
	AL-T2	0.551		
	AL-T3	0.709		
	AL-T4	0.724		
	AL-T5	0.454*		
Authentic leadership – Internalised IMP	AL-M1	0.721	0.523	0.813
	AL-M2	0.749		
	AL-M3	0.785		
	AL-M4	0.629		
	AL-B1	0.629	0.554	0.786
Authentic leadership – BP	AL-B2	0.828		
	AL-B3	0.763		
Authentic leadership – SA	AL-S1	0.661	0.596	0.854
	AL-S2	0.762		
	AL-S3	0.851		
	AL-S4	0.803		
SL	SL1	0.609	0.404	0.856
	SL2	0.477*		
	SL3	0.580**		
	SL4	0.653		
	SL5	0.752		
	SL6	0.733		
	SL7	0.711		
	SL8	0.668		
	SL9	0.469*		

^{*}Removed because loading was below 0.5

^{**}Removed to improve AVE