

# THF Working Paper

Working Papers Series No.13/2015

---

## LEADERSHIP CONSTRUCTS AND ASSESSMENTS

**Shaun Ang Zhixian**

The HEAD Foundation  
[shaunang1991@gmail.com](mailto:shaunang1991@gmail.com)



The  
HEAD  
Foundation

## **Introduction**

What constructs are associated with effective leaders? And how can we measure these constructs? These two questions are pertinent not only to academics in the field of business or applied psychology, but also to any member of an organisation that seeks to take stock of and improve its leadership. In essence, this current report was produced to help address these two questions. Drawing from the extant literature on leader-centric research, this report puts together a catalogue of constructs related to effective leadership. Over 50 distinct traits, competencies, influence tactics, and general behaviours are discussed here, along with assessment instruments designed to measure these very constructs in leaders.

Although this report covers a substantial number of leadership constructs, the comprehensiveness of the information here is limited by the rigour of the extant literature reviewed. Other constructs that have yet to receive much attention by leadership theorists or researchers may rise to prominence in the future, and be deemed important for leadership. In the same vein, not all the constructs discussed here are supported by the same amount of rigorous research. Some constructs have clearly passed the trial by fire of empirical studies, while others may only be founded on theoretical underpinnings as yet.

The four categories of constructs are not equal either. The early trait approach, which studied how internal personality traits and competencies influence leadership, failed to “find any traits that would guarantee leadership success” (Yukl, 2013, p. 12). Subsequently, the behavior and power-influence approach rose to prominence instead, investigating how a leader’s action patterns in the external world can more directly impact leadership outcomes (Yukl, 2013). Though considerably more successful, research into leadership behaviours and influence tactics found that the precise effectiveness of such constructs still depended heavily on situational factors (Yukl, 2013).

Some constructs also tend to be related to each other within and beyond categories. Despite the early disappointments of the trait approach to leadership, some underlying traits may be important for building up competencies or behavioural patterns that are favourable for leadership. For example, the trait of emotional stability may be essential for developing the competency of emotional intelligence. Consequently, a high emotional intelligence may enable a leader to use effective influence tactics such as inspirational appeals, and to display transformational/charismatic behaviours that motivate subordinates to contribute wholeheartedly to the organisation. While such links across the different constructs may seem intuitive and are easy to draw, further research must be undertaken to verify any such relationships.

A handful of constructs in this report, being substantiated by greater theoretical support and research evidence, stand out more than the rest. Such outstanding constructs include the traits of activity and assertiveness (i.e. the agentic components of extraversion), the influence tactics of rational persuasion, inspirational appeal, consultation, and collaboration, and the general behaviour of transformational/charismatic leadership. Do and Minbashian’s meta-analytic review

(2014) found impressive correlations between observer ratings of leadership effectiveness with agentic aspects of extraversion ( $r = .30$ , high for traits) and with transformational/charismatic leadership ( $r = .61$ ). Yukl and Tracey's research (1992) on influence tactics also validated the abovementioned influence tactics, concluding that these were highly effective whether with subordinates, peers, or superiors.

The fact that a few constructs stand out, however, does not mean that we may dismiss the rest of the constructs offhand. On the contrary, more research must be poured into examining the other constructs to verify their importance to leadership effectiveness. In fact, the assessment instruments described in this report generally exhibit high internal consistencies (e.g. as demonstrated through Cronbach's alpha calculations in survey studies), attesting to the instruments' reliability. Further effort has to be made to link these reliable instruments to outcomes of leadership effectiveness. Some promising constructs, such as mindfulness and agile leadership, which have experienced recent surges in popularity, certainly deserve additional research attention.

At the end of the day, though, leadership outcomes depend on more than just leader-centric qualities or behaviours. These leader-centric constructs must be considered alongside other factors relating to the organisational structure, the followers, and the specific context. For instance, the behaviour of external monitoring may be more relevant for higher-level leaders with the power to execute major changes, in organisations operating within a volatile environment that demands constant attention. Excessively monitoring the external environment, at the cost of neglecting other important behaviours, may prove counterproductive for many lower-level leaders.

In short, this report serves as a useful tool with which to navigate the complex field of leadership constructs and assessments. One should not take this report as the last word on the subject matter. A sound understanding of the constructs and critical use of the assessments below, while not guaranteed to be comprehensive, may nevertheless inform training programmes to develop leadership effectiveness.

### **Activity and assertiveness (Extraversion)**

Activity, as a psychological construct, relates to the level of energy and vitality experienced by a subject. Individuals who score high in activity, measured as a specific facet of Extraversion in the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), tend to be

“active and have a fast-paced life. When they do things, they do them vigorously. They often feel as if they are bursting with energy and usually seem to be in a hurry.” (Weiner & Greene, 2007, p. 329)

Bass and Stogdill (1990) discuss the importance of activity to leaders, citing case studies of politicians who sustained vigorous activity for long periods of time, and interviews with chief executive officers who stated that high energy levels were needed to keep up with the work demands. Yukl (2013) also suggests that high energy levels, along with stress tolerance, allow leaders to “cope with the hectic pace, long hours, and unrelenting demands of most managerial jobs” (p. 139).

Assertiveness, another facet of Extraversion in the NEO PI-R, characterises individuals who

“are dominant, forceful, and assertive, and often have been leaders of groups to which they belong. Other people look to them to make decisions. In conversations, they tend to do most of the talking.” (Weiner & Greene, 2007, p. 329)

Bass and Stogdill (1990) note that assertive leaders, while exhibiting more controlling behaviours, are better able to adapt themselves to the situational demands imposed by other members. Providing further evidence for the importance of activity and assertiveness in leadership are Do and Minbashian (2014), who ran a meta-analytic examination relating extraversion on leadership outcomes. Do and Minbashian (2014) found that the agentic aspects of extraversion (e.g. activity and assertiveness) were positively correlated with transformational/charismatic leadership ( $r = .24$ ) and leadership effectiveness ( $r = .30$ ) as measured by observer ratings, while the affiliative aspects of extraversion (e.g. gregariousness and warmth) were negatively correlated with the same outcomes. While extraversion as a whole has been touted as a desirable trait, with Judge et al. (2002) reporting a correlation of  $r = .31$  with composite leadership measures, Do and Minbashian's study (2014) suggests that activity and assertiveness are the key components of extraversion that contribute to leadership effectiveness.

#### *Assessment of activity and assertiveness (extraversion)*

One of the most studied instruments that assesses the separate facets of extraversion is the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992). Factor analyses, agreements between self- and observer-ratings, and convergence with other personality measures such as the Eysenck Personality Questionnaire point towards the validity of the NEO PI-R (Costa & McCrae, 2008). Costa and McCrae (1992) also report that Cronbach's alpha calculations support the internal consistency of the facet scales (ranging from .56 to .81), and even more so the domain scales (.86 to .92). The test-retest reliability of the Extraversion scale is also supported by an impressive stability coefficient of .82 over a 6-year period in a large adult sample (Costa & McCrae, 1988). While sample questions from the NEO PI-R are available online, the entirety of the instrument must be purchased from a commercial administrator.

The 100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992) may serve as an alternative to the NEO PI-R in assessing the “Big Five” traits, including Surgency (analogous to extraversion). The 100-UBFM exhibits high internal consistency through its Cronbach's alphas (with Surgency ranging from .90 to .92 across six data sets), and acceptable convergence with the analogous measures in the NEO PI-R (Goldberg, 1992). The Surgency subscale of the 100-UBFM exhibits the greatest correlation with the NEO PI's Assertiveness facet ( $r = .58$ ), and also high correlations with Activity ( $r = .47$ ), Gregariousness ( $r = .47$ ), and Positive Emotions ( $r = .46$ ; Goldberg, 1992). Thus, the 100-UBFM may thus be explored as a free alternative measure to the NEO PI-R, albeit with caution paid to the affiliative aspect of

## Leadership Constructs and Assessments

extraversion intertwined with this measure. A high Surgency score paired with a low need for affiliation (discussed below) may be more indicative of leadership effectiveness.

100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992): Underlined green are items coded for Surgency; Underlined red are items reverse coded for Surgency

**The 100 Unipolar Markers Developed in Study 4**

How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.  
Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

Inaccurate					Accurate			
Extremely	Very	Quite	Slightly	Neither	Slightly	Quite	Very	Extremely
1	2	3	4	5	6	7	8	9
Active								
Agreeable								
Anxious								
Artistic								
Assertive								
Bashful								
Bold								
Bright								
Careful								
Careless								
Cold								
Complex								
Conscientious								
Considerate								
Cooperative								
Creative								
Deep								
Demanding								
Disorganized								
Disruptive								
Efficient								
Emotional								
Energetic								
Envious								
			Extraverted					
			Fearful					
			Fretful					
			Generous					
			Haphazard					
			Harsh					
			Helpful					
			High-strung					
			Imaginative					
			Imperceptive					
			Imperturbable					
			Impractical					
			Inconsistent					
			Inefficient					
			Inhibited					
			Innovative					
			Insecure					
			Intellectual					
			Introspective					
			Intrusive					
			Irritable					
			Jealous					
			Kind					
			Moody					
			Neat					
						Negligent		
						Nervous		
						Organized		
						Philosophical		
						Pleasant		
						Practical		
						Prompt		
						Quiet		
						Relaxed		
						Reserved		
						Rude		
						Self-pitying		
						Selfish		
						Shallow		
						Shy		
						Simple		
						Sloppy		
						Steady		
						Sympathetic		
						Systematic		
						Talkative		
						Temperamental		
						Thorough		
						Timid		
						Toothy		
								Trustful
								Unadventurous
								Uncharitable
								Uncooperative
								Uncreative
								Undemanding
								Undependable
								Unemotional
								Unenvious
								Unexcitable
								Unimaginative
								Uninquisitive
								Unimicellaneous
								Unintelligent
								Unkind
								Unreflective
								Unrestrained
								Unsophisticated
								Unsympathetic
								Unsystematic
								Untalkative
								Verbal
								Vigorous
								Warm
								Withdrawn

**References cited (activity and assertiveness: extraversion)**

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.

Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO PI. *Journal of Personality and Social Psychology, 54*, 853-863.

Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

Costa, P. T., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). *The SAGE Handbook of Personality Theory and Assessment, 2*, 179-198.

Do, M. H., & Minbashian, A. (2014). A meta-analytic examination of the effects of the agentic and affiliative aspects of extraversion on leadership outcomes. *The Leadership Quarterly, 25*(5), 1040-1053.

Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment, 4*(1), 26.

Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765-780.

Weiner, I. B., & Greene, R. L. (2007). *Handbook of personality assessment*. Hoboken, NJ: John Wiley & Sons, Inc.

Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson

### **Emotional stability**

Emotional stability is often characterised as the opposite personality trait to neuroticism, which represents “the degree to which a person experiences the world as distressing, threatening, and unsafe” (Kwon & Weed, 2007). Stress tolerance is an important facet of emotional stability, especially for leaders in the workplace, reflecting the ability of energetic leaders to “cope with the hectic pace, long hours, and unrelenting demands of most managerial jobs” (Yukl, 2013, p. 139). Yukl (2013) theorises that such stress tolerance is vital to resolving complex problems effectively, and providing confident direction to subordinates in a crisis. More generally, emotional stability may also contribute to emotional maturity, which encompasses other such traits as self-awareness that helps to maintain cooperative relationships with subordinates, peers, and superiors (Yukl, 2013).

Research findings support the notion that emotional stability leads to more effective leadership. In measuring leadership effectiveness based on observer ratings of a “leader’s performance in influencing and guiding the activities of his or her unit toward achievement of its goals”, Judge, Bono, Ilies, and Gerhardt (2002) found a correlation of -.22 between neuroticism and leadership. While the perceptions of subordinates, peers, and superiors of leadership effectiveness cannot be treated as purely objective markers of performance, the robust result that links emotional stability and perceived leadership speaks to the importance of this particular personality trait. Self-control, a vital component of emotional stability, was also found to have a correlation of .18 with leadership ratings (Eichler, 1934, cited in Bass & Stogdill, 1990).

### *Assessment of emotional stability*

One of the most studied instruments that assesses emotional stability is the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992). Factor analyses, agreements between self- and observer-ratings, and convergence with other personality measures such as the Eysenck Personality Questionnaire point towards the validity of the NEO PI-R (Costa & McCrae, 2008). Costa and McCrae (1992) also report that Cronbach’s alpha calculations support the internal consistency of the facet scales (ranging from .56 to .81), and even more so the domain scales (.86 to .92). The test-retest reliability of Neuroticism is also supported by an impressive stability coefficient of .83 over a 6-year period in a large adult sample (Costa & McCrae, 1988). While sample questions from the NEO PI-R are available online, the entirety of the instrument must be purchased from a commercial administrator. In assessing emotional stability, the Neuroticism subscale of the NEO PI-R should be reversely

## Leadership Constructs and Assessments

coded; stress tolerance would similarly be assessed by reverse coding the Vulnerability subscale of Neuroticism.

The 100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992) may serve as an alternative to the NEO PI-R in assessing the “Big Five” traits, including neuroticism. The 100-UBFM exhibits high internal consistency through its Cronbach’s alphas (with Emotional Stability ranging from .82 to .88 across six data sets), and acceptable convergence with the analogous measures in the NEO PI-R (Goldberg, 1992). The 100-UBFM may thus be explored as a free alternative measure to the NEO PI-R.

100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992): Underlined green are items coded for Emotional Stability; Underlined red are items reverse coded for Emotional Stability.

**The 100 Unipolar Markers Developed in Study 4**

---

How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

Inaccurate									Accurate			
Extremely	Very	Quite	Slightly						Slightly	Quite	Very	Extremely
1	2	3	4						6	7	8	9
_____ Active			_____ Extraverted					_____ Negligent			_____ Trustful	
_____ Agreeable			_____ Fearful					_____ Nervous			_____ Unadventurous	
_____ <u>Anxious</u>			_____ Fretful					_____ Organized			_____ Uncharitable	
_____ Artistic			_____ Generous					_____ Philosophical			_____ Uncooperative	
_____ Assertive			_____ Haphazard					_____ Pleasant			_____ Uncreative	
_____ Bashful			_____ Harsh					_____ Practical			_____ Undemanding	
_____ Bold			_____ Helpful					_____ Prompt			_____ Undependable	
_____ Bright			_____ High-strung					_____ Quiet			_____ Unemotional	
_____ Careful			_____ Imaginative					_____ Relaxed			_____ Unequivocal	
_____ Careless			_____ Imperceptive					_____ Reserved			_____ Unexcitable	
_____ Cold			_____ Imperturbable					_____ Rude			_____ Unimaginative	
_____ Complex			_____ Impractical					_____ Self-pitying			_____ Uninquisitive	
_____ Conscientious			_____ Inconsistent					_____ Selfish			_____ Unintellectual	
_____ Considerate			_____ Inefficient					_____ Shallow			_____ Unintelligent	
_____ Cooperative			_____ Inhibited					_____ Shy			_____ Unkind	
_____ Creative			_____ Innovative					_____ Simple			_____ Unreflective	
_____ Daring			_____ Insecure					_____ Sloppy			_____ Unrestrained	
_____ Deep			_____ Intellectual					_____ Steady			_____ Unsophisticated	
_____ Demanding			_____ Introspective					_____ Sympathetic			_____ Unsympathetic	
_____ Disorganized			_____ Introverted					_____ Systematic			_____ Unsystematic	
_____ Distrustful			_____ Irritable					_____ Talkative			_____ Untalkative	
_____ Efficient			_____ Jealous					_____ Temperamental			_____ Verbal	
_____ Emotional			_____ Kind					_____ Thorough			_____ Vigorous	
_____ Energetic			_____ Moody					_____ Timid			_____ Warm	
_____ Envious			_____ Neat					_____ Touchy			_____ Withdrawn	

### References cited (*emotional stability*)

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO PI. *Journal of Personality and Social Psychology*, 54, 853-863.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

- Costa, P. T., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). *The SAGE Handbook of Personality Theory and Assessment*, 2, 179-198.
- Eichler, G. A. (1934). *Studies in student leadership*. Doctoral dissertation, Pennsylvania State College, State College, PA
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4(1), 26.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765-780.
- Kwon, S., & Weed, N. (2007). Neuroticism. In R. Baumeister, & K. Vohs (Eds.), *Encyclopedia of social psychology*. (pp. 619-621). Thousand Oaks, CA: SAGE Publications, Inc.
- Yukl, G. (2013). *Leadership in organizations* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.

### **Self-awareness**

Self-awareness refers to “expert knowledge of oneself, independent of others” (Sabiston, 2014), including knowledge about one’s own strengths and weaknesses (Yukl, 2013). Yukl (2013) suggests that self-awareness is an important part of emotional maturity, and allows leaders to be more “oriented toward self-improvement instead of denying weaknesses and fantasising success” (p. 141). In contributing to general emotional maturity, self-awareness may help to “maintain more cooperative relationships with subordinates, peers, and superiors” (Yukl, 2013, p. 141).

Modest empirical evidence links self-awareness with leadership effectiveness. McCauley and Lombardo (1990, cited in Yukl, 2013, p. 141) found that “managers with good self-awareness and a desire to improve had higher advancement”. Higgs and Rowland (2010) also found from interviews with 33 managers that self-awareness was associated with successful change efforts in the organisation. More research into the mechanism by which self-awareness affects such outcomes is required.

### *Assessment of self-awareness*

Ashley and Reiter-Palmon's Self-Awareness Scale (ARPSAS; Ashley & Reiter-Palmon, 2012) assesses self-awareness through five different factors: self-criticality, self-insight, reflection, feedback seeking, and performance indifference. Cronbach's alphas are high for each of the factors, indicating high internal consistency (Ashley & Reiter-Palmon, 2012). Expected correlations between the ARPSAS and other measures such as self-consciousness also demonstrated construct validity (.822 for short form; Ashley & Reiter-Palmon, 2012). Criterion validity was also weakly indicated by a marginal correlation between ARPSAS scores and observer ratings of students' performance in a Master of Business Administration course (Ashley & Reiter-Palmon, 2012).



**Appendix**

Scale Items for Short Form (54 items)

**Factor 1 Name: Self-Critical**

- 01 When you make a mistake to what extent has it tended to disrupt your day?
- 03 To what extent have you found yourself dwelling over minor social mistakes?
- 13 How difficult has it been for you to accept the fact that you were not as good at something as you thought you were?
- 14 How difficult has it been for you to cope with situations that forced you to see yourself in a different way?
- 16 How important has it been for you to receive praise from others?
- 24 How often do you compare your standards to those of others?
- 25 How often do you criticize your own work?
- 27 How often do you feel guilty when you have not performed to standards?
- 30 How often do you question your abilities?
- 31 How often do you reflect on your performance standards after a failure?
- 34 How often do you compare your performance to the performance of others?
- 37 How often do you assess whether you "belong" in a given situation?
- 38 How often has an emotional or difficult situation caused you to reassess your strengths and weaknesses?
- 40 When entering new situations, have you often found yourself worrying about your qualifications?

**Factor 2 Name: Insight**

- 06 To what extent are you aware of your own values and beliefs?
- 07 To what extent do you reflect on the things you like to do?
- 08 To what extent do you understand how your characteristics and your experiences have led to you becoming the person you are today?
- 09 To what extent do you understand how your personal characteristics lead to your behavior in different situations?
- 10 To what extent do you use diverse perspectives to arrive at new conclusions about yourself?
- 12 To what extent would your friends describe you as someone who knows themselves well?
- 19 After a major accomplishment how likely are you to sit back and enjoy the moment?
- 20 How likely are your friends to say that you know yourself well?
- 28 How often do you know what qualities you bring to a relationship?
- 29 How often do you modify your standards in order to improve performance?
- 39 When working on a project, how often can you tell in advance what part would be the easiest for you?

**Factor 3 Name: Reflection**

- 11 To what extent would you say that you consciously think about the ways your thoughts and emotions influence your behavior?
- 18 How likely are your friends to describe you as introspective?
- 22 How often did you spend time alone in high school so you could have time to think?
- 35 How often do you enjoy time alone because it allows you to reflect on your day's activities?
- 47 How often do you set time aside to reflect on your day?
- 48 How often do you ponder over how to improve yourself from knowledge of previous experiences?
- 49 I integrate information about myself from different sources to better understand myself?
- 50 I often find myself searching internally for explanations of my behavior and emotions?
- 51 How frequently have the outcomes of your behavior in a given situation caused you to reach an "a-ha" moment about yourself?
- 53 Relative to your friends, how much time do you spend trying to understand yourself?
- 54 Relative to your friends, how much time do you spend thinking about the reasons for your behaviors?

**Factor 4 Name: Feedback**

- 02 To what extent have you used feedback from your professor or boss to improve your performance?
- 04 To what extent do you like instructors or bosses to provide feedback?
- 05 To what extent do you enjoy participating in activities that are challenging?

## Leadership Constructs and Assessments

- 23 How often do you check with someone (advisor, teacher) to see if you're on the right track?  
32 How often do you seek feedback regarding the quality of your work?  
33 How often do you set personal goals?  
44 How often has criticism resulted in a significant improvement in your performance?  
45 How often do you write down your goals and track your progress towards them?

### Factor 5 Name: Performance Indifference

- 15 How difficult has it been for you to criticize your own performance?  
17 How likely are you to accurately tell if your work will meet the standards for your supervisor?  
21 How often are your standards for work higher than the standards others have for you?  
26 How often do you decrease the difficulty of your goals to make them more attainable?  
36 How often have you used other's level of interest in a given activity to help you decide the level of your own interest?  
41 In school, when assigned a project, how often do you put in only enough effort to get a passing grade?  
42 How often were you surprised by a grade you received in a course?  
43 How often have you been surprised by requests for help from friends?  
46 How often do you turn down a project because it is beyond your abilities?  
52 When you are upset, how long does it take you to figure out what caused it?

Response formats (items were grouped by response format):

Items 1 - 12:	Not At All Slight Extent Moderately Extent Large Extent To a Great Extent	Items 13 - 15:	Not At All Difficult Slightly Difficult Moderately Difficult Somewhat Difficult Extremely Difficult
Item 16:	Not At All Important Slightly Important Moderately Important Somewhat Important Extremely Important	Items 17 - 20:	Extremely Unlikely Unlikely Neither Likely Nor Unlikely Likely Extremely Likely
Items 21 - 50:	Never Rarely Sometimes Frequently Always	Item 51:	Never Rarely Sometimes Frequently Always
Item 52:	Very Little Time A Little Time Some Time A Long Time A Very Long Time	Items 53 - 54:	Much Less Time Relative To My Friends Less Time Relative To My Friends Same Time Relative To My Friends More Time Relative To My Friends Much More Time Relative To My Friends

### References cited (*self-awareness*)

- Ashley, G. C., & Reiter-Palmon, R. (2012). Self-awareness and the evolution of leaders: The need for a better measure of self-awareness. *Journal of Behavioral and Applied Management*, 14(1), 2.
- Higgs, M., & Rowland, D. (2010). Emperors with clothes on: The role of self-awareness in developing effective change leadership. *Journal of Change Management*, 10(4), 369-385.
- McCauley, C. D., & Lombardo, M. M. (1990). Benchmarks: An instrument for diagnosing managerial strengths and weaknesses. In K. E. Clark & M. B. Clark (Eds.), *Measures of leadership*. West Orange, NJ: Leadership Library of America. pp. 535-545.
- Sabiston, C. (2014). Self-awareness. In R. Eklund, & G. Tenenbaum (Eds.), *Encyclopedia of sport and exercise psychology*. (Vol. 18, pp. 616-618). Thousand Oaks, CA: SAGE Publications, Inc.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson

### **Self-confidence**

Self-confidence refers to a general positive outlook about oneself, and according to Yukl (2013), includes related concepts such as self-esteem (an overall subjective evaluation of one's worth) and general self-efficacy (a belief in one's own ability to produce behaviours for specific performance attainment).

Yukl (2013) cites numerous benefits of high self-confidence in leadership, including an increased likelihood of making influence attempts, greater success rate of such influence attempts, and an increased initiative to solve problems and introduce desirable changes (citing Paglis & Green, 2002). Self-confident leaders may also have higher expectations for themselves and for subordinates (citing Kouzes & Posner, 1987), greater optimism and persistence at work, and greater decisiveness in times of crisis.

Nevertheless, extreme self-confidence often rears its ugly head. "When an individual has excessive pride, an inflated sense of self-confidence, and makes self-evaluations in terms of talent, ability, and accomplishment that are much more positive than any reasonable objective assessment would otherwise suggest", *hubris* is said to occur (Judge, Piccolo, & Kosalka, 2009, p. 867). According to Kroll, Toombs, and Wright (2000), hubris may result from the leader experiencing a series of successes, uncritically accepting accolades from these successes, being exempted from organizational rules for benefit of the doubt, and narcissism. While such high levels of self-esteem and self-efficacy enable hubristic individuals to emerge as leaders in difficult times (Zuckerman & O'Loughlin, 2006), the psychological distortions of hubris may well lead to erroneous decision-making (Hayward & Hambrick, 1997; Smalley & Stake, 1996). Kroll, Toombs, and Wright (2000) further suggest that a hubristic leader would likely believe future successes to be obtainable by past means, and hence stick to such means without considering new information, thus compromising organizational change. Yukl (2013) also warns against excessive self-confidence getting in the way of participative leadership, when hubristic leaders dismiss others' opinions. To prevent these outcomes as a result of hubris, Yukl (2013) recommends a moderately high level of self-confidence, which he suggests is optimal for charismatic leadership.

Self-confidence is commonly linked to positive leadership perceptions as well as more tangible outcomes in the research literature. Drake (1944) found from a sample of college girls that observer ratings of self-confidence and leadership was highly and positively correlated ( $r = .59$ ). Evidence for the importance of self-confidence in crisis management was also borne out by Boyatzis (1982, cited in Yukl, 2013), who found that self-confidence differentiated between effective and ineffective managers in a study of critical incidents. Self-confidence was also found to be associated with subsequent advancement to higher rungs of management (Bass & Stogdill, 1990; Howard & Bray, 1988, cited in Yukl, 2013).

### *Assessment of self-confidence*

We may assess self-confidence through the two related constructs of self-esteem and general self-efficacy. The Rosenberg Self-esteem Scale (RSE; Rosenberg, 1965) is a time-tested instrument that explores the former construct. Robins, Hendin, and Trzesniewski (2001) affirmed the construct validity of the RSE in convergence

with other measures and theoretical underpinnings of global self-esteem. The RSE also demonstrated high test-retest reliability through stable scores over repeated measures and high internal consistency with Cronbach's alphas of between .88 and .90 (Robins, Hendin, & Trzesniewski, 2001).

The New General Self-efficacy Scale (NGSE; Chen, Gully, & Eden, 2001) has been validated to assess general self-efficacy. High Cronbach's alphas (.86 and .90) and high test-retest coefficients (.67) for the NGSE indicate good internal consistency and test-retest reliability respectively (Chen, Gully, & Eden, 2001). The NGSE also exhibited high content validity and predictive validity when correlated with 10 different occupational tasks, and discriminant validity with respect to the RSE (Chen, Gully, & Eden, 2001).

In order to assess and guard against hubris, the Workplace Arrogance Scale (WARS; Johnson et al., 2010) may be used. The WARS exhibited the hypothesised correlations with relevant scales (e.g. positive with dominance, negative with humility) and irrelevant scales (e.g. exploitiveness), supporting construct validity (Johnson et al., 2010). Criterion validity was also supported by the WARS' negative correlation with task performance beyond measures of narcissism (Johnson et al., 2010). Cronbach's alpha calculations (.93 for whole scale) also support internal consistency of the WARS (Johnson et al., 2010).

New General Self-efficacy Scale (NGSE; Chen, Gully & Eden, 2001):

"The NGSE scale was scored on a 5 point Likert-type scale from strongly disagree (1) to strongly agree (5)" (p. 68)

### **New General Self-Efficacy Scale**

---

1. I will be able to achieve most of the goals that I have set for myself.
  2. When facing difficult tasks, I am certain that I will accomplish them.
  3. In general, I think that I can obtain outcomes that are important to me.
  4. I believe I can succeed at most any endeavor to which I set my mind.
  5. I will be able to successfully overcome many challenges.
  6. I am confident that I can perform effectively on many different tasks.
  7. Compared to other people, I can do most tasks very well.
  8. Even when things are tough, I can perform quite well.
-

## Leadership Constructs and Assessments

Workplace Arrogance Scale (WARS; Johnson et al., 2010): “a 5-point Likert response scale from 1 (*strongly disagree*) to 5 (*strongly agree*)

Item	λ
1. Believes that s/he knows better than everyone else in any given situation	.78
2. Makes decisions that impact others without listening to their input	.78
3. Uses non-verbal behaviors like glaring or staring to make people uncomfortable	.76
4. Criticizes others	.75
5. Belittles his/her employees publicly	.75
6. Asserts authority in situations when s/he does not have the required information	.72
7. Discredits others' ideas during meetings and often makes those individuals look bad	.72
8. Shoots down other people's ideas in public	.71
9. Exhibits different behaviors with subordinates than with supervisors	.70
10. Makes unrealistic time demands on others	.70
11. Does not find it necessary to explain his/her decisions to others	.70
12. *Willing to listen to others' opinions, ideas, or perspectives	.69
13. *Welcomes constructive feedback	.69
14. *Takes responsibility for his/her own mistakes	.68
15. *Never criticizes other employees in a threatening manner	.67
16. *Realizes that it does not always have to be 'his/her way or the highway'	.67
17. *Avoids getting angry when his/her ideas are criticized	.66
18. Takes him/herself too seriously	.66
19. *Gives others credit for their ideas	.66
20. *Is considerate of others' workloads	.66
21. *Is willing to take credit for success as well as blame for failure	.66
22. *Does not mind doing menial tasks	.64
23. *Can get others to pay attention without getting emotionally 'heated up'	.64
24. *Promises to address subordinates' complaints with every intention of working to resolve them	.63
25. *Does not see him/herself as being too important for some tasks	.62
26. *Puts organizational objectives before his/her personal agenda	.61

Note.  $\alpha = .93$ .

### References cited (self-confidence)

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Boyatzis, R. E. (1982). *The competent manager*. New York: John Wiley.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83.
- Drake, R. M. (1944). A study of leadership. *Journal of Personality*, 12(4), 285-289.
- Hayward, M. L. A., & Hambrick, D. C. (1997). Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42, 103.
- Howard, A., & Bray, D. W. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford Press.
- Johnson, R., Silverman, S., Shyamsunder, A., Swee, H., Rodopman, O., Cho, E., & Bauer, J. (2010). Acting superior but actually inferior?: Correlates and consequences of workplace arrogance. *Human Performance*, 23(5), 403-427.

- Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. *The Leadership Quarterly*, 20(6), 855-875.
- Kouzes, J. M., & Posner, B. Z. (1987). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco: Jossey-Bass.
- Kroll, M. J., Toombs, L. A., & Wright, P. (2000). Napoleon's tragic march home from Moscow: Lessons in hubris. *The Academy of Management Executive*, 14(1), 117-128.
- Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Studies*, 23, 215-235.
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg self-esteem scale. *Personality and Social Psychology Bulletin*, 27(2), 151-161.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Smalley, R. L., & Stake, J. E. (1996). Evaluating sources of ego-threatening feedback: Self-esteem and narcissism effects. *Journal of Research in Personality*, 30(4), 483-495.
- Yukl, G. (2013). *Leadership in organizations* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.
- Zuckerman, M., & O'Loughlin, R. E. (2006). Self-enhancement by social comparison: A Prospective analysis. *Personality and Social Psychology Bulletin*, 32(6), 751-760.

### **Openness to ideas**

Individuals with high openness to ideas, measured as a facet of the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), tend to

“enjoy playing with theories or abstract ideas and solving problems or puzzles. They have a wide range of intellectual interests and a lot of intellectual curiosity.” (Weiner & Greene, 2007, p. 329)

Judge, Bono, Ilies, and Gerhardt (2002) argue that openness gives rises to originality, which was reported by Bass and Stogdill (1990) to be one of the best correlates of leadership. Judge and colleagues (2002) also cite the correlation of openness with divergent thinking and creativity. Divergent thinking and creativity may enable a leader to approach complex problems in different ways, thus developing original solutions to tackle these problems. In tackling such workplace problems specifically, openness to *ideas* and not to fantasy, aesthetics, feelings, actions, or values (i.e. the other facets of Openness in the NEO PI-R) would be especially pertinent.

General Openness (as measured in the NEO PI-R) was found to correlate modestly and positively with both leadership emergence and leadership effectiveness, measured with observer ratings of leaders' performance (Judge, Bono, Ilies, & Gerhardt, 2002). However, the measure of Openness was not broken down to explore the relation of each isolated facet (e.g. Ideas) with leadership. Further

research is required to empirically verify the theorised link between openness to ideas and leadership effectiveness, as well as the precise mechanism and outcomes involved.

*Assessment of openness to ideas*

One of the most studied instruments that assesses openness to ideas is the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992). Factor analyses, agreements between self- and observer-ratings, and convergence with other personality measures such as the Eysenck Personality Questionnaire point towards the validity of the NEO PI-R (Costa & McCrae, 2008). Costa and McCrae (1992) report that Cronbach's alpha calculations also support the internal consistency of the facet scales (ranging from .56 to .81), and even more so the domain scales (.86 to .92). The test-retest reliability of Openness is also supported by an impressive stability coefficient of .83 over a 6-year period in a large adult sample (Costa & McCrae, 1988). While sample questions from the NEO PI-R are available online, the entirety of the instrument must be purchased from a commercial administrator. In assessing openness to ideas, the Ideas facet of the Openness subscale should be isolated.

The 100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992) may serve as an alternative to the NEO PI-R in assessing the "Big Five" traits, including openness. The 100-UBFM factor of Intellect is analogous to the NEO PI-R trait of Openness. The 100-UBFM exhibits high internal consistency through its Cronbach's alphas (with Intellect ranging from .82 to .94 across six data sets), and acceptable convergence with the analogous measures in the NEO PI-R (Goldberg, 1992). The 100-UBFM may thus be explored as a free alternative measure to the NEO PI-R. Specifically, Intellect exhibits a relatively strong correlation of  $r = .36$  with the Ideas facet of NEO PI's Openness, but an even greater correlation of  $r = .45$  with the Aesthetics facet (Goldberg, 1992). Possibly the removal of the "Artistic" item from the subscale would streamline the measure of openness to ideas.

100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992):  
 Underlined green are items coded for Intellect; Underlined red are items reverse coded for Intellect

The 100 Unipolar Markers Developed in Study 4

How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

Inaccurate									Accurate			
Extremely	Very	Quite	Slightly	Neither					Slightly	Quite	Very	Extremely
1	2	3	4	5					6	7	8	9
_____ Active										_____ Negligent		_____ Trustful
_____ Agreeable										_____ Nervous		_____ Unadventurous
_____ Anxious										_____ Organized		_____ Uncharitable
_____ Artistic										_____ Philosophical		_____ Uncooperative
_____ Assertive										_____ Pleasant		_____ Uncreative
_____ Bashful										_____ Practical		_____ Undemanding
_____ Bold										_____ Prompt		_____ Undependable
_____ Bright										_____ Quiet		_____ Unemotional
_____ Careful										_____ Relaxed		_____ Unenvious
_____ Careless										_____ Reserved		_____ Unexcitable
_____ Cold										_____ Rude		_____ Unimaginative
_____ Complex										_____ Self-pitying		_____ Uninquitive
_____ Conscientious										_____ Selfish		_____ Unintellectual
_____ Considerate										_____ Shallow		_____ Unintelligent
_____ Cooperative										_____ Shy		_____ Unkind
_____ Creative										_____ Simple		_____ Unreflective
_____ Daring										_____ Sloppy		_____ Unrestrained
_____ Deep										_____ Steady		_____ Unsophisticated
_____ Demanding										_____ Sympathetic		_____ Unsympathetic
_____ Disorganized										_____ Systematic		_____ Unsystematic
_____ Distrustful										_____ Talkative		_____ Untalkative
_____ Efficient										_____ Temperamental		_____ Verbal
_____ Emotional										_____ Thorough		_____ Vigorous
_____ Energetic										_____ Timid		_____ Warm
_____ Envious										_____ Touchy		_____ Withdrawn

References cited (*openness to ideas*)

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO PI. *Journal of Personality and Social Psychology, 54*, 853-863.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). *The SAGE Handbook of Personality Theory and Assessment, 2*, 179-198.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment, 4*(1), 26.



Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765-780.

Weiner, I. B., & Greene, R. L. (2007). *Handbook of personality assessment*. Hoboken, NJ: John Wiley & Sons, Inc.

### **Competence**

Individuals high in competence, measured as a facet of the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992), tend to be

“known for their prudence and common sense. They keep themselves informed and usually make intelligent decisions. They pride themselves on their sound judgment. They are effective and efficient at their work. They are productive persons who always get the job done.” (Weiner & Greene, 2007, p. 329, emphases mine)

Bass and Stogdill (1990) discuss several aspects of competence that have been found to correlate with leadership effectiveness. Clearly, intelligent decision-making and sound judgment are vital for directing the organization to achieve organizational goals, and are thus positively correlated with leadership (Bass & Stogdill, 1990). Dependability is also vital to ensuring that the various tasks associated with managerial jobs are followed through with, which also inspires confidence in subordinates (Bass & Stogdill, 1990). In fact, Bass and Stogdill (1990) report that “Partridge (1934) observed a correlation of .87 between dependability and leadership” (p. 69). Judge, Bono, Ilies, and Gerhardt (2002) also found that the NEO PI-R’s Conscientiousness trait – of which Competence is a facet – modestly and positively correlates with observer ratings of leadership emergence and effectiveness.

Competence may more specifically refer to the required aptitude, ability or knowledge in a particular field, such as computer programming in an IT firm (Bass & Stogdill, 1990). While arguably important for leadership, a generalised instrument to assess such technical competence is by default not possible. Nevertheless, by developing an instrument that assesses trait competence as defined by Weiner and Greene (2007) above, assessments of technical competence may be subsumed under the self-and observer ratings.

### *Assessment of competence*

One of the most studied instruments that assesses competence is the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992). Factor analyses, agreements between self- and observer-ratings, and convergence with other personality measures such as the Eysenck Personality Questionnaire point towards the validity of the NEO PI-R (Costa & McCrae, 2008). Costa and McCrae (1992) also report that Cronbach’s alpha calculations support the internal consistency of the facet scales (ranging from .56 to .81), and even more so the domain scales (.86 to .92). The test-retest reliability of the is also supported by a high stability coefficient of .79 over a 3-year period (Weiner & Greene, 2007). While sample questions from the

## Leadership Constructs and Assessments

NEO PI-R are available online, the entirety of the instrument must be purchased from a commercial administrator. In assessing competence, the Competence facet of the Conscientiousness subscale should be isolated.

The 100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992) may serve as an alternative to the NEO PI-R in assessing the “Big Five” traits, including conscientiousness. The 100-UBFM exhibits high internal consistency through its Cronbach’s alphas (with Conscientiousness ranging from .88 to .94 across six data sets), and acceptable convergence with the analogous measures in the NEO PI-R (Goldberg, 1992). The 100-UBFM may thus be explored as a free alternative measure to the NEO PI-R. The main problem with the 100-UBFM is that the Conscientiousness factor is not specifically broken down into separate facets (e.g. Competence as in the NEO PI-R). No information about the 100-UBFM’s Conscientiousness correlation with the NEO PI-R’s Competence is available as well. While the 100-UBFM may still be used to assess competence, the NEO PI-R is more recommended for its isolation of the competence trait.

100 Unipolar Big Five Markers (100-UBFM; Goldberg, 1992): Underlined green are items coded for Conscientiousness; Underlined red are items reverse coded for Conscientiousness

**The 100 Unipolar Markers Developed in Study 4**

---

How Accurately Can You Describe Yourself?

Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

Inaccurate									Accurate			
Extremely	Very	Quite	Slightly						Slightly	Quite	Very	Extremely
1	2	3	4	5	6	7	8	9				
_____ Active			_____ Extraverted		_____ <u>Negligent</u>		_____ Trustful					
_____ Agreeable			_____ Fearful		_____ Nervous		_____ Unadventurous					
_____ Anxious			_____ Fretful		_____ Organized		_____ Uncharitable					
_____ Artistic			_____ Generous		_____ Philosophical		_____ Uncooperative					
_____ Assertive			_____ Haphazard		_____ Pleasant		_____ Uncreative					
_____ Bashful			_____ Harsh		_____ Practical		_____ Undemanding					
_____ Bold			_____ Helpful		_____ Prompt		_____ Undependable					
_____ Bright			_____ High-strung		_____ Quiet		_____ Unemotional					
_____ Careful			_____ Imaginative		_____ Relaxed		_____ Unequivocal					
_____ Careless			_____ Imperceptive		_____ Reserved		_____ Unexcitable					
_____ Cold			_____ Imperturbable		_____ Rude		_____ Unimaginative					
_____ Complex			_____ Impractical		_____ Self-pitying		_____ Uninquisitive					
_____ Conscientious			_____ Inconsistent		_____ Selfish		_____ Unintellectual					
_____ Considerate			_____ Inefficient		_____ Shallow		_____ Unintelligent					
_____ Cooperative			_____ Inhibited		_____ Shy		_____ Unkind					
_____ Creative			_____ Innovative		_____ Simple		_____ Unreflective					
_____ Daring			_____ Insecure		_____ Sloggy		_____ Unrestrained					
_____ Deep			_____ Intellectual		_____ Steady		_____ Unsophisticated					
_____ Demanding			_____ Introspective		_____ Sympathetic		_____ Unsympathetic					
_____ Disorganized			_____ Introverted		_____ Systematic		_____ Unsystematic					
_____ Distrustful			_____ Irritable		_____ Talkative		_____ Untalkative					
_____ Efficient			_____ Jealous		_____ Temperamental		_____ Verbal					
_____ Emotional			_____ Kind		_____ Thorough		_____ Vigorous					
_____ Energetic			_____ Moody		_____ Timid		_____ Warm					
_____ Envious			_____ Neat		_____ Touchy		_____ Withdrawn					

### References cited (competence)

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.

- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO PI. *Journal of Personality and Social Psychology*, 54, 853-863.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). *The SAGE Handbook of Personality Theory and Assessment*, 2, 179-198.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4(1), 26.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765-780.
- Partridge, E. D. (1934). Leadership among adolescent boys. *Teachers College Contributions to Education*, No. 608.
- Weiner, I. B., & Greene, R. L. (2007). *Handbook of personality assessment*. Hoboken, NJ: John Wiley & Sons, Inc.

### **Achievement orientation**

An achievement orientation refers to “a set of related needs and values, including a *need for achievement*, willingness to assume responsibility, performance orientation, and concern for task objectives” (Yukl, 2013). Bass & Stogdill (1990) break this achievement orientation down into a “need for achievement”, reflecting “a deep-seated fantasy about success and accomplishment”, and “task orientation”, concerned with “conscious preferences” for the same objectives (p. 147). In other words, achievement orientation involves both a valuation of and a need for accomplishing tasks.

Yukl (2013) theorises that a moderately high achievement orientation is optimal for leadership. Achievement orientation may enable managers to initiate the discovery and solution of task-related problems, and especially to undertake solutions that involve only moderate levels of risk (Yukl, 2013). A healthy achievement orientation may also lead to “setting challenging but realistic goals and deadlines, developing specific action plans, determining ways to overcome obstacles, organizing the work efficiently, and emphasising performance when talking to others” (Boyatzis, 1982, cited in Yukl, 2013, p. 145). A more extreme achievement orientation, though, may lead to an overemphasis on individual advancement rather than team accomplishments: the leader may attempt to accomplish tasks alone and avoid diffusing responsibility among subordinates (McClelland & Burnham, 1976, cited in Yukl, 2013). Thus, Yukl (2013) recommends that a leader’s achievement orientation be subordinated to a strong need for socialised power, as discussed below.

Thus far, research into the effect of achievement orientation on leadership effectiveness has been inconsistent. Bass and Stogdill (1990) report mixed results from such studies. For example, based on projective measures, “McClelland (1961) and McClelland and Winter (1969) provided strong initial evidence to support the

proposition that the need for achievement is an important value for effective leaders, particularly successful entrepreneurs” (pp. 147-148). Hall and Donnell (1979, cited in Bass & Stogdill, 1990) also found that achievement motivation was associated with a managers’ speed of career advancement. Bass and Stogdill (1990) also state that “correlations of .47, .29, and .64 between leadership and desire to excel were reported by Webb (1915), Drake (1944), and Bellingrath (1930), respectively” (p. 68). However, other researchers failed to replicate similar findings for the specific effect of achievement orientation on leadership effectiveness or success, which may support Yukl’s (2013) hypothesis that a more moderate achievement orientation may be best.

#### *Assessment of achievement orientation*

The Personality Research Form (PRF; Jackson, 1971) assesses achievement orientation under its Achievement subscale. In addition, the PRF also assesses need for affiliation and need for power, two other traits related to leadership effectiveness. Mayes and Ganster (1983) confirmed the construct validity of the PRF using a multitrait-multimethod matrix analysis, and also found acceptable internal consistency within the scale (Cronbach’s alpha = .73 for Achievement). However, the PRF is not available for free, and must be purchased from a commercial administrator.

Alternatively, the 49-item Achievement Motivation Scale (AMS; Cassidy & Lynn, 1989) may be used to more specifically assess achievement orientation. The AMS breaks achievement orientation down into the components of work ethic, acquisitiveness (which may be overly concerned with financial incentives), dominance (which may be confounded with need for power), excellence, competitiveness, status aspiration, and mastery (Cassidy & Lynn, 1989). Cronbach’s alpha calculations of the subscales (.55 to .81) vary, but generally support the internal consistency of the AMS (Cassidy & Lynn, 1989). The least internally consistent subscale appears to be Excellence (.55 to .65), with the other subscales all having Cronbach’s alphas of at least .60. Split-half scores further support the AMS’ reliability. Predicted correlations with related scales such as the Work and Family Orientation Scale (WFOS; Spence & Helmreich, 1983) also provide evidence for the construct validity of the AMS (Cassidy & Lynn, 1989). The AMS, as opposed to the PRF, is available for free. Caution, however, should be taken with the Acquisitiveness and Dominance subscales of the AMS – which may be removed altogether if not relevant to the sample.

Achievement Motivation Scale (AMS; Cassidy & Lynn, 1989): "Yes-No response format"

Item

---

*Factor 1: Work Ethic (WE)*

Hard work is something I like to avoid  
I can easily sit for a long time doing nothing  
I must admit I often do as little work as I can get away with  
I am basically a lazy person  
I often put off until tomorrow things I know I should do today  
I easily get bored if I don't have something to do  
I like to work hard

*Factor 2: Acquisitiveness (Acq)*

If there is an opportunity to earn money, I am usually there  
I would be willing to work for a salary that was below average if the job was pleasant  
The kind of work I like is the one that pays top salary for top performance  
As long as I'm paid for my work, I don't mind working while others are having fun  
I frequently think about what I might do to earn a great deal of money  
It is important to me to make lots of money  
The most important thing about a job is the pay

*Factor 3: Dominance (Dom)*

I think I would enjoy having authority over other people  
If given the chance I would make a good leader of people  
I think I am usually a leader in my group  
I enjoy planning things and deciding what other people should do  
I like to give orders and get things going  
People take notice of what I say  
When a group I belong to plans an activity I would rather direct it myself than just help out and have someone else organize it

*Factor 4: Excellence (Exc)*

I hate to see bad workmanship  
Part of the satisfaction in doing something comes from seeing how good the finished product looks  
It is no use playing a game when you are playing with someone as good as yourself  
I get a sense of satisfaction out of being able to say I have done a very good job on a project  
I find satisfaction in working as well as I can  
I find satisfaction in exceeding my previous performance even if I don't outperform others  
There is satisfaction in a job well done

*Factor 5: Competitiveness (Com)*

I try harder when I'm in competition with other people  
It annoys me when other people perform better than I do  
I judge my performance on whether I do better than others rather than on just getting a good result  
If I get a good result, it doesn't matter if others do better  
I would never allow others to get the credit for what I have done  
To be a real success I feel I have to do better than everyone I come up against  
It is important to me to perform better than others on a task

*Factor 6: Status Aspiration (SA)*

I would like an important job where people looked up to me  
I like talking to people who are important  
I want to be an important person in the community  
I really admire people who have fought their way to the top  
If I had enough money I would not work  
Even if I won a great deal of money on the pools I would prefer to continue to work  
If unemployment benefit was really high I would still prefer to work  
I like to be admired for my achievements  
I dislike being the centre of attention  
I like to have people come to me for advice  
I find satisfaction in having influence over others because of my position in the community

*Factor 7: Mastery*

I would rather do something at which I feel confident and relaxed than something which is challenging and difficult  
I would rather learn easy fun games than difficult thought games  
If I'm not good at something I would rather keep struggling to master it than move on to something I may be good at  
I prefer to work in situations that require a high level of skill  
I more often attempt tasks that I am not sure I can do than tasks I know I can do  
I like to be busy all the time  
I feel like giving up quickly when things go wrong

---

**References cited (achievement orientation)**

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.

- Bellingrath, G. C. (1930). *Qualities associated with leadership in extracurricular activities of the high school*. New York: Teachers College Contributions to Education.
- Boyatzis, R. E. (1982). *The competent manager*. New York: John Wiley.
- Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psychology*, 62(4), 301-312.
- Drake, R. M. (1944). A study of leadership. *Journal of Personality*, 12(4), 285-289.
- Hall, J., & Donnell, S. M. (1979). Managerial achievement: The personal side of behavioral theory. *Human Relations*, 32, 77-101.
- Jackson, D. N. (1971). The dynamics of structured personality tests: 1971. *Psychological Review*, 78, 229–248.
- Mayes, B. T., & Ganster, D. C. (1983). A multitrait-multimethod matrix analysis of the PRF and MNQ need scales. *Journal of Management*, 9(2), 113-126.
- McClelland, D. C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.
- McClelland, D. C., & Burnham, D. H. (1976). Power is the great motivator. *Harvard Business Review*, March-April, 100-110.
- McClelland, D. C., & Winter, D. G. (1969). *Motivating economic achievement*. New York: Free Press.
- Spence, J. T. & Helmreich, R. L. (1983). Achievement related motives and behavior. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches*. San Francisco: W. H. Freeman.
- Webb, U. (1915). Character and intelligence. *British Journal of Psychology Monograph*, No. 20.
- Yukl, G. (2013). *Leadership in organizations* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.

### **Socialised power orientation**

Yukl (2013) describes a socialised power orientation in the workplace as a high need for power expressed through prosocial exercises that benefit the organization and others. A socialised power orientation can thus be conceptualised as the combination of two separate traits: a high need for power, and a prosocial orientation. An individual with a high need for power “enjoys influencing people and events and is more likely to seek positions of authority” (Yukl, 2013, p. 142). Yukl (2013) reviews several studies that find a strong link between career advancement and a need for power in managers of large organisations (e.g., Howard & Bray, 1988; McClelland & Boyatzis, 1982; Stahl, 1983), supporting his claim that “people with a strong need for power seek positions of authority and power, and they are likely to be more attuned to the power politics of the organizations” (p. 142).

Yukl (2013) further specifies theoretical links between need for power and the requirements of managerial positions that involve power and influence. For example, in large organisations, a high need for power enables leaders to exercise their power in influencing others, to have the “desire and assertiveness to organize and direct group activities, to negotiate favourable agreements, to lobby for necessary resources, to advocate and promote desirable changes, and to impose necessary discipline” (Yukl, 2013, p. 142). McClelland and Burnham (2003) confirm that a

strong need for power, as measured through projective tests, was vital to the role of exerting influence over others that comes with most managerial jobs. Bass and Stogdill (1990) also claim that “leadership and bossiness were related, to some extent, in the children studied by Tyron (1939), who reported correlations of .28 and .29 between these two factors for 15-year-old boys and girls, respectively” (p. 67).

This need for power, Yukl (2013) warns, should be expressed as a *socialised power orientation*, as opposed to a *personalised power orientation*. This socialised power orientation manifests itself through power exercises for the benefit of others, hesitation towards manipulating others, less egotism and defensiveness, less accumulation of material possessions, a longer-range view for the organisation, and a greater receptivity to expert advice (Yukl, 2013). A leader who possess such a trait would be more committed to boosting the organisation’s success, to participative leadership, and to developing their subordinates (Yukl, 2013). As McClelland (1975, p. 302) notes, such leaders “help make their subordinates feel strong and responsible, bind them less with petty rules, help produce a clear organizational structure, and create pride in belonging to the unit”. In contrast, leaders with a personalised power orientation tend to be egotistical and inconsiderate towards others (Yukl, 2013). Bass and Stogdill (1990) support the importance of a socialised orientation, stating that “Drake (1944) and Webb (1915) reported correlations of .44 and .69 between cooperativeness and leadership” and that “Webb (1915) reported a correlation of .69 between leadership and corporate spirit” (p. 73)

#### *Assessment of socialised power orientation*

In assessing one’s socialised power orientation, two separate components should be examined: need for power, and a prosocial orientation. Firstly, a need for power may be assessed through the Dominance subscale of the Personality Research Form (PRF; Jackson, 1971). In addition, the PRF also assesses need for achievement and need for affiliation, two other traits related to leadership effectiveness. Mayes and Ganster (1983) confirmed the construct validity of the PRF using a multitrait-multimethod matrix analysis, and also found acceptable internal consistency within the scale (Cronbach’s alpha = .75 for Dominance). However, the PRF is not available for free, and must be purchased from a commercial administrator.

A prosocial orientation may be assessed through the Altruism subscale of the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992). According to Weiner and Greene (2007), a high-Altruism individual tends to be “thoughtful, and considerate”, and “go out of their way to help others”, while a low-Altruism individual tends to be “selfish, egotistical, cold, and calculating”, and “not known for their generosity” (p. 332).

The NEO PI-R has been well validated for measuring different personality traits. Factor analyses, agreements between self- and observer-ratings, and convergence with other personality measures such as the Eysenck Personality Questionnaire point towards the validity of the NEO PI-R (Costa & McCrae, 2008). Costa and McCrae (1992) also report that Cronbach’s alpha calculations support the internal consistency of the facet scales (ranging from .56 to .81), and even more so the domain scales (.86 to .92). The test-retest reliability of Agreeableness is also supported by a moderately high stability coefficient of .63 over a 3-year period



(Weiner & Greene, 2007). While sample questions from the NEO PI-R are available online, the entirety of the instrument must also be purchased from a commercial administrator.

### **References cited (socialised power orientation)**

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO PI. *Journal of Personality and Social Psychology*, *54*, 853-863.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). *The SAGE Handbook of Personality Theory and Assessment*, *2*, 179-198.
- Drake, R. M. (1944). A study of leadership. *Journal of Personality*, *12*(4), 285-289.
- Howard, A., & Bray, D. W. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford Press.
- Jackson, D. N. (1971). The dynamics of structured personality tests: 1971. *Psychological Review*, *78*, 229-248.
- Mayes, B. T., & Ganster, D. C. (1983). A multitrait-multimethod matrix analysis of the PRF and MNQ need scales. *Journal of Management*, *9*(2), 113-126.
- McClelland, D. C. (1975). *Power: The inner experience*. New York: Irvington.
- McClelland, D. C., & Boyatzis, R. E. (1982). Leadership motive pattern and long-term success in management. *Journal of Applied Psychology*, *67*(6), 737-743.
- McClelland, D. C., & Burnham, D. H. (2003). *Power is the great motivator*. Boston, MA: Harvard Business School Press.
- Stahl, M. J. (1983). Achievement, power, and managerial motivation: Selecting managerial talent with the job choice exercise. *Personnel Psychology*, *36*(4), 775-789.
- Tyron, C. M. (1939). Evaluations of adolescent personality by adolescents. *Monographs in Social Research and Child Development*, *4*, No. 4.
- Webb, U. (1915). Character and intelligence. *British Journal of Psychology Monograph*, No. 20.
- Weiner, I.B., & Greene, R. L. (2007). *Handbook of personality assessment*. Hoboken, NJ: John Wiley & Sons, Inc.
- Yukl, G. (2013). *Leadership in organizations* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.

### **Personal integrity**

An individual with personal integrity is one whose behaviour is consistent with espoused values, and is honest, ethical, and trustworthy (Yukl, 2013). Such integrity

forms the foundation for interpersonal trust, which comes in important for retaining the loyal support of subordinates, as well as the cooperation of peers and superiors. Specifically, integrity allows a leader to maintain credibility in fulfilling promises and responsibilities, trust and confidence in handling sensitive information, and a consistent vision that inspires their team (Yukl, 2013).

Research findings bear out the theorised link between personal integrity and leadership effectiveness. Bass and Stogdill (1990) reviewed different six studies that related integrity and fortitude to observer ratings of outstanding adult leaders. Yukl (2013) also reports a Center for Creative Leadership study that found that “lack of integrity was common among the managers whose career derailed, whereas managers who succeeded were regarded as having strong identity” (p. 143).

#### *Assessment of personal integrity*

The Perceived Leader Integrity Scale (PLIS; Craig & Gustafson, 1998), as its title suggests, may be used to assess subordinate perceptions of a leader’s personal integrity. Internal consistency of the PLIS is supported by an outstanding Cronbach’s alpha of  $>.97$  (Craig & Gustafson, 1998). Construct validity of the PLIS is also supported by convergent validity with theoretically related measures (e.g. respondents’ job satisfaction) and discriminant validity with theoretically unrelated measures (e.g. conscientiousness; Craig & Gustafson, 1998). However, convergence of the PLIS with other more related measures of honesty and behavioral consistency may provide sounder evidence of construct validation.

Perceived Leader Integrity Scale (PLIS; Craig & Gustafson, 1998):

The following items concern your immediate supervisor. You should consider your immediate supervisor to be the person who you feel has the most control over your daily work activities. Circle responses to indicate how well each item describes your immediate supervisor.

**Response choices:** (1) = Not at all; (2) = Somewhat; (3) = Very much; (4) = Exactly

1. Would use my mistakes to attack me personally
2. Always gets even
3. Gives special favors to certain "pet" employees, but not to me
4. Would lie to me
5. Would risk me to protect himself/herself in work matters
6. Deliberately fuels conflict among employees
7. Is evil
8. Would use my performance appraisal to criticize me as a person
9. Has it in for me
10. Would allow me to be blamed for his/her mistake
11. Would falsify records if it would help his/her work situation
12. Lacks high morals
13. Makes fun of my mistakes instead of coaching me as to how to do my job better
14. Would deliberately exaggerate my mistakes to make me look bad when describing my performance to his/her superiors
15. Is vindictive
16. Would blame me for his/her own mistake
17. Avoids coaching me because (s)he wants me to fail
18. Would treat me better if I belonged to a different ethnic group
19. Would deliberately distort what I say
20. Deliberately makes employees angry at each other
21. Is a hypocrite
22. Would limit my training opportunities to prevent me from advancing
23. Would blackmail an employee if (s)he thought (s)he could get away with it
24. Enjoys turning down my requests
25. Would make trouble for me if I got on his/her bad side
26. Would take credit for my ideas
27. Would steal from the organization
28. Would risk me to get back at someone else
29. Would engage in sabotage against the organization
30. Would fire people just because (s)he doesn't like them if (s)he could get away with it
31. Would do things which violate organizational policy and then expect his/her subordinates to cover for him/her

**References cited (*personal integrity*)**

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.

Craig, S. B., & Gustafson, S. B. (1998). Perceived leader integrity scale: An instrument for assessing employee perceptions of leader integrity. *The Leadership Quarterly*, 9(2), 127-145.

Yukl, G. (2013). *Leadership in organizations* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.

### **Internal locus of control**

Internals, or individuals with an internal locus of control, “believe that they are in control of their own destinies and happenings in their lives” and thus often “feel in control of their life situations and responsible for what happens to them” (Jashinsky & Scherer, 2008). Such individuals stand in contrast to externals, who “more likely to believe that their fate is determined by chance or outside forces that are beyond their control” (Jashinsky & Scherer, 2008).

Yukl (2013) theorises that internals are ipso facto more likely to take responsibility for their own actions and for their organization’s performance, to have a more future-oriented perspective, to proactively plan how to accomplish objectives, and to initiate discovering and resolving problems. Goodstadt and Hjelle’s study (1973) also found that internals are more likely to use persuasive than coercive or manipulative influence tactics, which leads to more effective influence (as discussed in the section on Influence Tactics). In terms of objective criteria of leadership effectiveness, Miller and Toulouse’s study (1986) found that among chief executive officers in 97 different firms, internals were more highly associated with profitability and sales growth. This relationship tended to be stronger for firms in dynamic environments where it is more important to have major product innovations (Miller & Toulouse, 1986), which may reflect the importance of an internal locus of control in mastering the environment and effecting organisational change. It must be noted, however, that the causative link may well be in the opposite direction, or that an internal locus of control and leadership effectiveness may be more complexly related to other variables.

### *Assessment of internal locus of control*

Rotter’s Locus of Control Scale (RLCS; Rotter, 1966) was developed along with the original conception that an internal and an external locus of control were measurable psychological constructs. The constructs demonstrated discriminant validity with a variety of theoretically unrelated variables such as social desirability and intelligence (Rotter, 1966). Multimethod measurement involving other related scales such as “the earlier James-Phares Likert-type scale” also supported construct validity of the RLCS (Rotter, 1966). Internal consistency estimates are also relatively stable (with Kuder-Richardson *rs* between .69 and .76 from different samples), and consistent results from repeated testing in a 1-month period attest to test-retest reliability (Rotter, 1966).

*Leadership Constructs and Assessments*

Rotter's Locus of Control Scale (RLCS; Rotter, 1966):

6 fillers items out of 29, as labelled

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (*and only one*) which you more strongly *believe* to be the case as far as you're concerned. Be sure to select the one you actually *believe* to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Your answers to the items on this inventory are to be recorded on a separate answer sheet which is loosely inserted in the booklet. REMOVE THIS ANSWER SHEET NOW. Print your name and any other information requested

by the examiner on the answer sheet, then finish reading these directions. Do not open the booklet until you are told to do so.

Please answer these items *carefully* but do not spend too much time on any one item. Be sure to find an answer for *every* choice. Find the number of the item on the answer sheet and black-in the space under the number 1 or 2 which you choose as the statement more true.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the *one* you more strongly believe to be the case as far as you're concerned. Also try to respond to each item *independently* when making your choice; do not be influenced by your previous choices.

1.a. Children get into trouble because their parents punish them too much.			
b. The trouble with most children nowadays is that their parents are too easy with them.		(Filler)	
2.a. Many of the unhappy things in people's lives are partly due to bad luck.	.265	.250	.200
b. People's misfortunes result from the mistakes they make.			
3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.			
b. There will always be wars, no matter how hard people try to prevent them.	.214	.147	.182
4.a. In the long run people get the respect they deserve in this world.			
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.	.238	.344	.280
5.a. The idea that teachers are unfair to students is nonsense.			
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.	.230	.131	.179
6.a. Without the right breaks one cannot be an effective leader.	.345	.200	.319
b. Capable people who fail to become leaders have not taken advantage of their opportunities.			
7.a. No matter how hard you try some people just don't like you.	.200	.202	.229
b. People who can't get others to like them don't understand how to get along with others.			
8.a. Heredity plays the major role in determining one's personality.			
b. It is one's experiences in life which determine what they're like.		(Filler)	
9.a. I have often found that what is going to happen will happen.	.152	.172	.164
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.			
10.a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.			
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.	.227	.252	.238
11.a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.			
b. Getting a good job depends mainly on being in the right place at the right time.	.391	.215	.301

## Leadership Constructs and Assessments

12.a.	The average citizen can have an influence in government decisions.			
b.	This world is run by the few people in power, and there is not much the little guy can do about it.	.313	.222	.265
13.a.	When I make plans, I am almost certain that I can make them work.			
b.	It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.	.252	.285	.271
14.a.	There are certain people who are just no good.		(Filler)	
b.	There is some good in everybody.			
15.a.	In my case getting what I want has little or nothing to do with luck.			
b.	Many times we might just as well decide what to do by flipping a coin.	.369	.209	.288
16.a.	Who gets to be the boss often depends on who was lucky enough to be in the right place first.	.205	.318	.307
b.	Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.			
17.a.	As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.	.313	.407	.357
b.	By taking an active part in political and social affairs the people can control world events.			
18.a.	Most people don't realize the extent to which their lives are controlled by accidental happenings.	.258	.362	.310
b.	There really is no such thing as "luck."			
19.a.	One should always be willing to admit mistakes.		(Filler)	
b.	It is usually best to cover up one's mistakes.			
20.a.	It is hard to know whether or not a person really likes you.	.255	.307	.271
b.	How many friends you have depends upon how nice a person you are.			
21.a.	In the long run the bad things that happen to us are balanced by the good ones.	.108	.197	.152
b.	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.			
22.a.	With enough effort we can wipe out political corruption.			
b.	It is difficult for people to have much control over the things politicians do in office.	.226	.224	.227
23.a.	Sometimes I can't understand how teachers arrive at the grades they give.	.275	.248	.255
b.	There is a direct connection between how hard I study and the grades I get.			
24.a.	A good leader expects people to decide for themselves what they should do.		(Filler)	
b.	A good leader makes it clear to everybody what their jobs are.			
25.a.	Many times I feel that I have little influence over the things that happen to me.	.521	.440	.480
b.	It is impossible for me to believe that chance or luck plays an important role in my life.			
26.a.	People are lonely because they don't try to be friendly.			
b.	There's not much use in trying too hard to please people, if they like you, they like you.	.179	.227	.195
27.a.	There is too much emphasis on athletics in high school.		(Filler)	
b.	Team sports are an excellent way to build character.			
28.a.	What happens to me is my own doing.			
b.	Sometimes I feel that I don't have enough control over the direction my life is taking.	.331	.149	.238
29.a.	Most of the time I can't understand why politicians behave the way they do.	.004	.211	.109
b.	In the long run the people are responsible for bad government on a national as well as on a local level.			

**References cited (*internal locus of control*)**

- Goodstadt, B. E., & Hjelle, L. A. (1973). Power to the powerless: Locus of control and the use of power. *Journal of Personality and Social Psychology*, 27(2), 190-196.
- Jashinsky, T., & Scherer, J. (2008). Locus of control. In F. Leong (Ed.), *Encyclopedia of counseling*. (Vol. 3, pp. 1203-1206). Thousand Oaks, CA: SAGE Publications, Inc.
- Miller, D., & Toulouse, J. (1986). Chief executive personality and corporate strategy and structure in small firms. *Management Science*, 32(11), 1389-1409.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1-28.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson

**Persistence**

Persistence refers to persevering in a course of action despite frustration or fatigue (Cloninger, Svrakic, & Przybeck, 1993). Persistence tends to be related to other personality traits such as activity and stress tolerance in sustaining the leader throughout the strenuous tasks of managerial roles, but may also be studied in its own right. Cox (1926, cited in Bass and Stogdill, 1990, p. 68) found that “great face-to-face leaders were characterized, to an outstanding degree, by ‘persistence in the face of obstacles,’ ‘capacity to work with distant objects in view,’ ‘degree of strength of will or perseverance,’ and ‘tendency not to abandon tasks from mere changeability.’” Pigors (1933, cited in Bass and Stogdill, 1990) similarly observed that the development of determination in children was related to the pursuit of remote goals instead of immediate short-term objectives, which is necessary for future leadership. However, excessive persistence may become counterproductive in fuelling the pursuit of goals that cease to be relevant or fruitful. A more moderate level of persistence may be more optimal for leadership.

Bass and Stogdill (1990) review modest evidence for the relationship between persistence and leadership effectiveness, as rated by observers. The studies reviewed mostly demonstrate a positive correlation between persistence and leadership, but vary in the size of the correlation. For example, Webb (1915) reported a correlation of .70 between leadership and “persistence in overcoming obstacles”, whereas Eichler (1934) and Sheldon (1927) found correlations of .23 and .34 between leadership and persistence. In sum, these studies provide some evidence that persistence generally contributes to leadership, as rated by other observers. The variation in the correlation size between persistence and leadership may be related to the notion that moderate – instead of extremely high – persistence is best for leadership.

*Assessment of persistence*

The Persistence Scale (PS; Ticu, Andrei, & Ana, 2012) was developed to assess an individual’s level of persistence. The PS separately measures long-term purposes pursuing, current purposes pursuing, and recurrence of unattained purposes in three different subscales (Ticu, Andrei, & Ana, 2012). Both exploratory and confirmatory

factor analysis were conducted to validate the PS (Ticu, Andrei, & Ana, 2012). Cronbach's alpha calculations (.79 for whole scale) also indicate high internal consistency (Ticu, Andrei, & Ana, 2012). Furthermore, the Pearson and canonical correlations between the three subscales and other measures indicate good levels of convergent and discriminant validity, supporting the construct validation of the PS (Ticu, Andrei & Ana, 2012)

*Persistence Scale* (PS; Ticu, Andrei, & Ana, 2012):

Participants were required to indicate the measure that they think each item describes them, on a 5-point scale, ranging from in a very low degree to in a very high degree.

1. I often come up with new ideas on an older problem or project.<sup>c</sup>
2. I remain motivated even in activities that spread on several months.<sup>a</sup>
3. I have a good capacity to focus on daily tasks.<sup>b</sup>
4. From time to time I imagine ways to use opportunities that I have given up.<sup>c</sup>
5. Long term purposes motivate me to surmount day to day difficulties.<sup>a</sup>
6. Once I decide to do something, I am like a bulldog: I don't give up until I reach the goal.<sup>b</sup>
7. Even though it doesn't matter anymore, I keep thinking of personal aims that I had to give up.<sup>c</sup>
8. I purposefully pursue the achievement of the projects that I believe in.<sup>a</sup>
9. I continue a difficult task even when the others have already given up on it.<sup>b</sup>
10. I often find myself thinking about older initiatives that I had abandoned.<sup>c</sup>
11. I keep on investing time and effort in ideas and projects that require years of work and patience.<sup>a</sup>
12. The more difficult a task is, the more determined I am to finish it.<sup>b</sup>
13. It's hard for me to detach from an important project that I had given up in favor of others.<sup>c</sup>

<sup>a</sup> Long-term purposes pursuing

<sup>b</sup> Current purposes pursuing

<sup>c</sup> Recurrence of unattained purposes

#### **References cited (persistence)**

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Cox, C. M. (1926). *The early mental traits of three hundred geniuses*. Stanford: Stanford University Press.
- Eichler, G. A. (1934). *Studies in student leadership*. Doctoral dissertation, Pennsylvania State College, State College, PA.
- Cloninger, C. R., Svrakic, D. M., & Przybeck, T. R. (1993). A psychobiological model of temperament and character. *Archives of General Psychiatry*, 50(12), 975-990.
- Pigors, P. (1933). Leadership and domination among children. *Sociologus*, 9, 140-157.



- Sheldon, W. H. (1927). Social traits and morphologic type. *Personnel Journal*, 6, 47-55.
- Ticu, C., Andrei, H., & Ana, H. M. (2012). Development and validation of a motivational persistence scale. *Psihologija*, 45(2), 99-120.
- Webb, U. (1915). Character and intelligence. *British Journal of Psychology Monograph*. No. 20.

### **Hardiness/Resilience**

In much of the psychological literature, hardiness and resilience are closely related concepts. Hardiness tends to refer more to the individual *disposition* “to manage and respond to stressful life events with coping strategies that turn potentially unfortunate circumstances into learning opportunities”, while resilience implies the *process* of such managing and responding (Scott-Sheldon, 2007; Maddi, 2013). While hardiness may be technically conceptualised as the pathway to resilience (Maddi, 2013), in a less strict sense, either hardiness or resilience may essentially refer to an individual’s stable pattern of managing and responding to stressful life events in a positive and instructive way.

Hardiness is characterised by three key dimensions:

“Hardy individuals believe that they control the events they experience (control dimension), have the ability to feel deeply committed to the activities of their lives and finding meaning in such activities (commitment dimension), and construe change as a challenge for further learning and growth (challenge dimension).” (Day, 2014, citing Kobasa, 1979, p. 204)

The control dimension is equivalent to Rotter’s internal locus of control as discussed above. But taken into consideration with the commitment and challenge dimensions, the hardiness trait emerged as a predictor of less physical illness among middle to upper level executives (Kobasa, 1979). Hardiness positively affected health outcomes in managers through the use of social resources and active coping strategies in managing the stress that results from hectic managerial roles (Kobasa, Maddi, & Khan, 1982; Florian, Mikulincer, & Taubman, 1995). Of course, hardiness/resilience may well overlap with not only internal locus of control, but also other related traits such as self-confidence and emotional stability (Day, 2014). While this area demands further research, hardiness/resilience may still be taken practicably as an additional trait predictor of leadership effectiveness.

#### *Assessment of hardiness/resilience*

The 15-item Dispositional Resilience (Hardiness) Scale (DRS-15; Hystad, Eid, Johnsen, Laberg, & Bartone, 2010) may be used to assess hardiness/resilience. The DRS-15 comprises three subscales that assess each of the hardiness/resilience dimensions: control, commitment, and challenge (Hystad, Eid, Johnsen, Laberg, & Bartone, 2010). Cronbach’s alpha calculations suggest satisfactory internal consistency – reported as within the range of .60-.70 (Hystad, Eid, Johnsen, Laberg,

& Bartone, 2010). Confirmatory factor analysis also supported the construct validity of the DRS-15 (Hystad, Eid, Johnsen, Laberg & Bartone, 2010).

15-item Dispositional Resilience (Hardiness) Scale (DRS-15; Hystad, Eid, Johnsen, Laberg, & Bartone, 2010):

---

English

---

Most of my life gets spent doing things that are meaningful (CM).

By working hard you can nearly always achieve your goals (CO).

\*I don't like to make changes in my regular activities (CH).

\*I feel that my life is somewhat empty of meaning (CM).

Changes in routine are interesting to me (CH).

How things go in my life depends on my own actions (CO).

I really look forward to my work activities (CM).

\*I don't think there's much I can do to influence my own future (CO).

I enjoy the challenge when I have to do more than one thing at a time (CH).

Most days, life is really interesting and exciting for me (CM).

\*It bothers me when my daily routine gets interrupted (CH).

It is up to me to decide how the rest of my life will be (CO).

\*Life in general is boring for me (CM).

\*I like having a daily schedule that doesn't change very much (CH).

My choices make a real difference in how things turn out in the end (CO).

---

*Instructions:*

Nedenfor følger noen påstander om livet som folk vil oppfatte ulikt. Vennligst indiker i hvor stor grad du synes hver påstand stemmer. Gi uttrykk for din oppriktige mening. Det er ingen rette eller gale svar.

Svaralternativer som følger: 0 = Slett ikke riktig; 1 = Litt riktig; 2 = Ganske riktig; 3 = Fullstendig riktig.

[Below are statements about life that people often feel differently about. Please show how much you think each one is true. Give your own honest opinion. There are no right or wrong answers.

Response options: 0 = Not at all true; 1 = A little true; 2 = Quite true; 3 = Completely true.]

*Scoring:*

Asterisks indicate items that are negatively keyed and are reversed before scoring (0 = 3; 1 = 2; 2 = 1; 3 = 0). To obtain scale and subscale scores, sum responses to items and appropriate subscale items.

CM, commitment; CO, control; CH, challenge.

Copyright (c) 2007 by Paul T. Bartone; all rights reserved. Terms of use are available at <http://www.hardiness-resilience.com>.

**References cited (*hardiness/resilience*)**

- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York: Oxford University Press.
- Florian, V., Mikulincer, M., & Taubman, O. (1995). Does hardiness contribute to mental health during a stressful real-life situation?: The roles of appraisal and coping. *Journal of Personality and Social Psychology*, 68(4), 687-695.
- Hystad, S. W., Eid, J., Johnsen, B. H., Laberg, J. C., & Bartone, P. T. (2010). Psychometric properties of the revised Norwegian Dispositional Resilience (Hardiness) Scale. *Scandinavian Journal of Psychology*, 51(3), 237.
- Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37(1), 1-11.
- Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*, 42(1), 168-177.
- Maddi, S. R. (2013). *Hardiness: Turning stressful circumstances into resilient growth*. Dordrecht; New York: Springer.
- Scott-Sheldon, L. (2007). Hardiness. In R. Baumeister, & K. Vohs (Eds.), *Encyclopedia of social psychology*. (pp. 415-416). Thousand Oaks, CA: SAGE Publication, Inc.

**Proactive personality**

A proactive personality is the “relatively stable tendency to affect environmental change”, exemplified by the “employee who tackles issues and crusades for constructive reform” in contrast with “another who just ‘goes with the flow’” (Bateman & Crant, 1993, p. 103). Crant and Bateman (2000) found that such proactive personality has been associated with charismatic leadership beyond an array of control variables, including the Big Five traits. Parker, Williams, and Turner (2006) also found that proactive personality positively predicted the initiation of problem-solving procedures via the broadening of self-efficacy across roles and the flexibility of role orientation. Day (2014) suggests that a proactive personality may be especially important in novel situations, where adaptability calls for proactive goal generation and goal striving.

Bass and Stogdill (1990) discuss the importance of initiative, a similar concept to proactivity, in leadership. Although only tangential to the construct of proactive personality, the authors cite findings that “industriousness and leadership were correlated .55 and .16 in the studies of Bellingrath (1930) and Flemming (1935)” and that “Drake (1944) and Sheldon (1927) reported correlations of .56 and .52 between aggressiveness and leadership” (p.68).

*Assessment of proactive personality*

The Proactive Personality Scale (PPS; Bateman & Crant, 1993) may be used to assess, as its name suggests, proactive personality. Cronbach’s alpha calculations (.89 from one sample) support the high internal consistency of the PPS (Bateman & Crant, 1993). Construct validity was supported in correlational analyses with other scales hypothesised to be either correlated with the PPS (e.g. need for achievement, extraversion, conscientiousness) or uncorrelated (e.g. locus of control, agreeableness; Bateman & Crant, 1993). Criterion validity was also supported by

correlations of the PPS which three different criteria: the nature of the individuals' extracurricular and civic activities, the nature of their personal achievements, and identification by peers as transformational leaders (Bateman & Crant, 1993).

Proactive Personality Scale (PPS; Bateman & Crant, 1993):

- 
1. I am constantly on the lookout for new ways to improve my life
  2. I feel driven to make a difference in my community, and maybe the world
  - \*3. I tend to let others take the initiative to start new projects
  4. Wherever I have been, I have been a powerful force for constructive change
  5. I enjoy facing and overcoming obstacles to my ideas
  6. Nothing is more exciting than seeing my ideas turn into reality
  7. If I see something I don't like, I fix it
  8. No matter what the odds, if I believe in something I will make it happen
  9. I love being a champion for my ideas, even against others' opposition
  10. I excel at identifying opportunities
  11. I am always looking for better ways to do things
  12. If I believe in an idea, no obstacle will prevent me from making it happen
  13. I love to challenge the *status quo*
  14. When I have a problem, I tackle it head-on
  15. I am great at turning problems into opportunities
  16. I can spot a good opportunity long before others can
  17. If I see someone in trouble, I help out in any way I can
- 

\* Reverse coded.

Responses are indicated on 7-point Likert scales.

#### **References cited (proactive personality)**

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118.
- Bellingrath, G. C. (1930). *Qualities associated with leadership in extracurricular activities of the high school*. New York: Teachers College Contributions to Education.

- Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior*, 21(1), 63-75.
- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York: Oxford University Press.
- Drake, R. M. (1944). A study of leadership. *Journal of Personality*, 12(4), 285-289.
- Flemming, E. G. (1935). A factor analysis of the personality of high school teachers. *Journal of Applied Psychology*, 19, 596-605.
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behaviour at work. *Journal of Applied Psychology*, 91(3), 636-652.
- Sheldon, W. H. (1927). Social traits and morphologic type. *Personnel Journal*, 6, 47-55.

### **Self-monitoring**

According to the *Encyclopedia of Social Psychology*,

“self-monitoring is a personality trait that captures differences in the extent to which people control the image they present to others in social situations. High self-monitors are motivated and skilled at altering their behavior to influence the impressions others have of them. In contrast, low self-monitors tend to focus on remaining true to their inner attitudes by presenting a relatively consistent image of themselves to others regardless of the situation.” (Rawn, 2007, emphases mine)

Snyder (1974) highlights three components of self-monitoring: a concern for social appropriateness, sensitivity to others' behavior in social situations, and usage of these cues to guide individual behavior. However, after factor analysis of the self-monitoring construct, Lennox and Wolfe (1984) dissociated the first component – due to its close relationship with social anxiety – and redefined self-monitoring to include only sensitivity to other's behavior and usage of social cues to modify self-presentation.

A study of college students in a militarily structured organisation found that high self-monitoring scores were associated with greater leadership effectiveness, as measured by promotions and performance ratings by superiors (Foti & Hauenstein, 2007). Other studies also established a positive association between self-monitoring and leader emergence and leadership perceptions (Day, Schleicher, Unckless, & Hiller, 2002; Ellis, 1988). Day (2014) accounts for this association with two possible explanations: that high self-monitors may be more sensitive to followers' emotional cues and hence can respond more appropriately, or that high self-monitors are skilled at presenting information tailored a particular audience's needs. Either way, the trait of self-monitoring seems to underlie the competencies of emotional and social intelligence, which are deemed vital to leaders for managing social situations (Day, 2014; Goleman, 1995; Zaccaro, Gilbert, Thor, & Mumford, 1991). The exact connections between self-monitoring and these competencies requires further research.

*Assessment of self-monitoring*

Snyder (1974), a pioneer in self-monitoring research, developed the Self-monitoring Scale (SMS), which included assessments of concern for social appropriateness, sensitivity to others' behavior in social situations, and usage of these cues to guide individual behavior. However, the SMS has been criticised on different grounds. Lennox and Wolfe (1984) found through a factor analysis that the concern for appropriateness component is closely related to social anxiety and undermines the construct validity of the SMS. Lennox and Wolfe (1984) thus developed the Revised Self-monitoring Scale (RSMS) to resolve the problems with the SMS. Based on Cronbach's alpha calculations, the RSMS has superior internal consistency to the SMS (.81 > .71 for 25-item SMS; Day, Schleicher, Unckless, & Hiller, 2002). Modest correlations with other constructs such as (positive with extraversion, public self-consciousness, self-deception, openness, and gregariousness; negative with straightforwardness and neuroticism) also supported the RSMS' construct validity (Myszkowski, Storme, Zenasni, & Lubart, 2014). The test-retest correlation coefficient calculated for the RSMS ( $r = .85$ ) also demonstrated good test-retest reliability (Myszkowski, Storme, Zenasni & Lubart, 2014)

Revised Self-monitoring Scale (RSMS; Lennox & Wolfe, 1984):

"A 6-point Likert format was used, with high scores indicating high self-monitoring: 5 = certainly, always true; 4 = generally true; 3 = somewhat true, but with exception; 2 = somewhat false, but with exception; 1 = generally false; 0 = certainly, always false (these weights were reversed for negatively worded items)."; "Items 9 and 12 require reverse scoring."

---

Ability to modify self-presentation

1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.
3. I have the ability to control the way I come across to people, depending on the impression I wish to give them.
7. When I feel that the image I am portraying isn't working, I can readily change it to something that does.
9. I have trouble changing my behavior to suit different people and different situations.
10. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.
12. Even when it might be to my advantage, I have difficulty putting up a good front.
13. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.

Sensitivity to expressive behavior of others

2. I am often able to read people's true emotions correctly through their eyes.
  4. In conversations, I am sensitive to even the slightest change in the facial expression of the person I'm conversing with.
  5. My powers of intuition are quite good when it comes to understanding others' emotions and motives.
  6. I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.
  8. I can usually tell when I've said something inappropriate by reading it in the listener's eyes.
  11. If someone is lying to me, I usually know it at once from that person's manner of expression.
-

### References cited (self-monitoring)

- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York: Oxford University Press.
- Day, D. V., Schleicher, D. J., Unckless, A. L., & Hiller, N. J. (2002). Self-monitoring personality at work: A meta-analytic investigation of construct validity. *Journal of Applied Psychology, 87*(2), 390-401.
- Ellis, R. J. (1988). Self-monitoring and leadership emergence in groups. *Personality and Social Psychology Bulletin, 14*(4), 681-693.
- Foti, R. J., & Hauenstein, N. M. A. (2007). Pattern and variable approaches in leadership emergence and effectiveness. *Journal of Applied Psychology, 92*(2), 347-355.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology, 46*(6), 1349-1364.
- Myszkowski, N., Storme, M., Zenasni, F., & Lubart, T. (2014). Appraising the duality of self-monitoring: Psychometric qualities of the revised self-monitoring scale and the concern for appropriateness scale in French. *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement, 46*(3), 387-396.
- Rawn, C. (2007). Self-monitoring. In R. Baumeister, & K. Vohs (Eds.), *Encyclopedia of social psychology*. (pp. 832-834). Thousand Oaks, CA: SAGE Publications, Inc.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*(4), 526-537.
- Zaccaro, S. J., Gilbert, J. A., Thor, K. K., & Mumford, M. D. (1991). Leadership and social intelligence: Linking social perspectiveness and behavioral flexibility to leader effectiveness. *The Leadership Quarterly, 2*(4), 317-342.

### Mindfulness

Sauer and Kohls (2011) define mindfulness as “keeping one’s attention on what is happening at the moment without cognitively evaluating it” (p. 293). In other words, mindfulness comprises awareness and acceptance. While distraction comes naturally to most people, especially during routine activities, mindfulness training can help to keep attention stable and focused (Sauer & Kohls, 2011). As such, mindfulness can contribute to a host of beneficial outcomes.

Empirical research has supported the benefits of mindfulness on psychological and physiological functioning (Sauer & Kohls, 2011). Studies have found that being mindful helps to reduce distress, anxiety, depression, and pain, while improving sleep quality, immune parameters, and allocation of attention resources (Sauer &

Kohls, 2011, citing Ledesma and Kumano, 2009; Sheridan et al., 2003; Kabat-Zinn, 1982; Kabat-Zinn et al., 1998, 1992; Deyo et al., 2009; Sun et al., 2002; Shapiro et al., 2008; Sephton et al., 2007). All these benefits may contribute to a leader's effective functioning: for example, improved allocation of attention resources helps the leader to attend to the important details in a situation and thus respond appropriately.

Sauer and Kohls (2011) theorise that mindfulness may be specifically beneficial to leadership. The informational, interpersonal, decisional, and moral roles that a leader plays can be bolstered by a keen awareness and objective acceptance of situational factors (Sauer & Kohls, 2011). More precisely, mindfulness may improve "the acquiring of information, the processing of information, and the dissemination of knowledge" (p. 297), "basic understanding of the mindset of his or her subordinates" (p. 298), protect against decision-making biases, and serve to "delay gratification and to reduce impulsivity" in positions of power (p. 300). Further research has to be conducted to investigate the exact benefits of mindfulness on leadership effectiveness.

#### *Assessment of mindfulness*

The Philadelphia Mindfulness Scale (PHLMS; Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008) may be used to assess trait mindfulness in an individual. The PHLMS consists of two subscales, Awareness and Acceptance, corresponding to the two main components of mindfulness (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). Cronbach's alpha calculations indicate high internal consistency for each subscale (>.80; Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). Exploratory and confirmatory factor analyses also support the subscale structure and construct validity (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). Convergent and discriminant validity was also generally supported with regard to other constructs: as expected, the PHLMS Awareness subscale correlated significantly and positively with awareness/attention and reflection, but not with social desirability (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). PHLMS Acceptance correlated positively with acceptance/willingness and negatively with thought suppression and rumination, but also weakly and negatively with social desirability (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). The last result indicates that "higher acceptance is weakly associated with less social desirability" (Cardaciotto, Herbert, Forman, Moitra & Farrow, 2008, p. 213).

Philadelphia Mindfulness Scale (PHLMS; Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008):



	Factor 1 Loading (Awareness)	Factor 2 Loading (Acceptance)
1. I am aware of what thoughts are passing through my mind.	.479	.112
2. I try to distract myself when I feel unpleasant emotions.	-.136	.540
3. When talking with other people, I am aware of their facial and body expressions.	.636	.117
4. There are aspects of myself I don't want to think about.	.020	.614
5. When I shower, I am aware of how the water is running over my body.	.508	.043
6. I try to stay busy to keep thoughts or feelings from coming to mind.	.194	.655
7. When I am startled, I notice what is going on inside my body.	.609	-.036
8. I wish I could control my emotions more easily.	.011	.603
9. When I walk outside, I am aware of smells or how the air feels against my face.	.515	.067
10. I tell myself that I shouldn't have certain thoughts.	-.003	.651
11. When someone asks how I am feeling, I can identify my emotions easily.	.546	.260
12. There are things I try not to think about.	-.061	.660
13. I am aware of thoughts I'm having when my mood changes.	.555	.090
14. I tell myself that I shouldn't feel sad.	-.027	.532
15. I notice changes inside my body, like my heart beating faster or my muscles getting tense.	.580	-.341
16. If there is something I don't want to think about, I'll try many things to get it out of my mind.	-.022	.707
17. Whenever my emotions change, I am conscious of them immediately.	.580	.082
18. I try to put my problems out of mind.	.026	.582
19. When talking with other people, I am aware of the emotions I am experiencing.	.474	.051
20. When I have a bad memory, I try to distract myself to make it go away.	.014	.585

NOTE: All items are rated on a 5-point Likert-type scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often) according to the frequency each item was experienced over the past week. To obtain the Awareness subscale score, all odd items are totaled; higher scores reflect higher levels of awareness. To obtain the Acceptance subscale score, all even items are reverse scored and totaled; higher scores reflect higher levels of acceptance. A copy of the PHILMS can be obtained from the authors. Bold values highlight the subscale on which the items fall.

### References cited (mindfulness)

- Cardaciotto, L., Herbert, J. D., Forman, E. M., Moitra, E., & Farrow, V. (2008). The assessment of present-moment awareness and acceptance: The Philadelphia mindfulness scale. *Assessment, 15*(2), 204-223.
- Deyo, M., Wilson, K. A., Ong, J., & Koopman, C. (2009). Mindfulness and rumination: Does mindfulness training lead to reductions in the ruminative thinking associated with depression? *Explore: The Journal of Science and Healing, 5*(5), 265-271.
- Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry, 4*(1), 33-47.
- Kabat-Zinn, J., Massion, A. O., Kristeller, J., Peterson, L. G., Fletcher, K. E., Pbert, L., Lenderking, W. R., & Santorelli, S. F. (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *The American Journal of Psychiatry, 149*(7), 936-943.
- Kabat-Zinn, J., Wheeler, E., Light, T., Skillings, A., Scharf, M. J., Cropley, T. G., Hosmer, D., & Bernhard, J. D. (1998). Influence of a mindfulness meditation-based stress reduction intervention on rates of skin clearing in patients with moderate to severe psoriasis undergoing phototherapy (UVB) and photochemotherapy (PUVA). *Psychosomatic Medicine, 60*(5), 625-632.
- Ledesma, D., Kumano, H. (2009). Mindfulness-based stress reduction and cancer: a meta-analysis. *Psychooncology, 18*(6), 571-579.
- Sauer, S., & Kohls, N. (2011). Mindfulness in leadership: Does being mindful enhance leaders' business success. In Han, S., & Pöppel, E. (2011). *Culture and neural frames of cognition and communication*. Heidelberg: Springer, 287-307.
- Sephton, S. E., Salmon, P., Weissbecker, I., Ulmer, C., Floyd, A., Hoover, K., & Studts, J. L. (2007). Mindfulness meditation alleviates depressive symptoms in

women with fibromyalgia: Results of a randomized clinical trial. *Arthritis and Rheumatism*, 57(1), 77-85.

Shapiro, S., Oman, D., Thoresen, C. E., Plante, T. G., Flinders, T. (2008). Cultivating mindfulness: Effects on well-being. *Journal of Clinical Psychology*, 64(7), 840–862.

Sheridan, J. F., Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., Saki, F., Urbanowski, F., Harrington, A., & Bonus, K. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 564-570.

Sun, T., Kuo, C., & Chiu, N. (2002). Mindfulness meditation in the control of severe headache. *Chang Gung Medical Journal*, 25(8), 538-541.

### **Need for affiliation**

A need for affiliation may be described as “the tendency to receive gratification from harmonious relationships and from a sense of communion” (Hill, 1987, p. 1009). Yukl (2013, p. 146) suggests that individuals with such a strong need “receive great satisfaction from being liked and accepted by others, and they enjoy working with people who are friendly and cooperative”, but are not predisposed to being particularly effective managers. A strong need for affiliation may cause a leader to prioritise workplace relationships over organisational goals, and preventing work concerns from interfering with these relationships; as a result, affiliative leaders may avoid conflict or confrontation even where necessary, stay away from unpopular decisions that might benefit the organisation, and reward subordinates simply to maintain approval (Yukl, 2013). Affiliative leaders may also grant exceptions to subordinates, even when such exceptions contravene the proper procedures necessary for the organisation’s effective function (McClelland & Burnham, 2003).

Modest evidence from studies bears out this negative correlation between need for affiliation and leadership effectiveness (Yukl, 2013). For example, McClelland and Burnham (2003) found from a survey of over 50 managers that the “affiliative managers” tended to perform more poorly, as judged by subordinate morale. The subordinates of affiliative managers tended to report feeling less personal responsibility in their work, believing that organisational procedures are unclear, and having less pride in their work group (McClelland & Burnham, 2003).

A moderately low – instead of an extremely low – need for affiliation may be more desirable for leadership. Yukl (2013) suggests that an extremely low need for affiliation may lead to a general disengagement from social relationships, resulting in ineffective interpersonal skills or confidence in influencing others. Further research is needed to pinpoint an exact optimal level of need for affiliation in a leader.

### *Assessment of need for affiliation*

Two different scales that assess need for affiliation are discussed here. The first is the Personality Research Form (PRF; Jackson, 1971), which assess need for affiliation under its Affiliation subscale. In addition, the PRF also assesses need for achievement and need for power, two other traits related to leadership effectiveness. Mayes and Ganster (1983) confirmed the construct validity of the PRF using a multitrait-multimethod matrix analysis, and also found acceptable internal

consistency within the scale (Cronbach's alpha = .75 for Affiliation). However, the PRF is not available for free, and must be purchased from a commercial administrator.

Another scale that more specifically targets the need for affiliation is the Interpersonal Orientation Scale (IOS; Hill, 1987). The IOS breaks down the need for affiliation into the four motivations for emotional support, attention, positive stimulation, and social comparison (Hill, 1987). The IOS is available for free online, having been validated through factor analyses, with convergent and discriminant validities both supported (Hill, 1987). The Cronbach's alphas calculated from the subscales (.70 to .86) also support the internal consistency of the IOS (Hill, 1987).

Interpersonal Orientation Scale (IOS; Hill, 1987): "5-point Likert scale ranging from *not at all true* to *slightly true* to *somewhat true* to *mostly true* to *completely true*" (p. 1010)

Emotional support

- 17. If I feel unhappy or kind of depressed, I usually try to be around other people to make me feel better.
- 23. I usually have the greatest need to have other people around me when I feel upset about something.
  - 1. One of my greatest sources of comfort when things get rough is being with other people.
  - 9. When I have not done very well on something that is very important to me, I can get to feeling better simply by being around other people.
- 15. During times when I have to go through something painful, I usually find that having someone with me makes it less painful.
- 4. It seems like whenever something bad or disturbing happens to me I often just want to be with a close, reliable friend.

---

Attention

- 16. I often have a strong need to be around people who are impressed with what I am like and what I do.
- 19. I mainly like to be around others who think I am an important, exciting person.
- 21. I often have a strong desire to get people I am around to notice me and appreciate what I am like.
  - 5. I mainly like people who seem strongly drawn to me and who seem infatuated with me.
  - 8. I like to be around people when I can be the center of attention.
- 22. I don't like being with people who may give me less than positive feedback about myself.

---

Positive stimulation

24. I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favorite and most satisfying pastimes.
10. Just being around others and finding out about them is one of the most interesting things I can think of doing.
13. I feel like I have really accomplished something valuable when I am able to get close to someone.
26. One of the most enjoyable things I can think of that I like to do is just watching people and seeing what they are like.
25. I would find it very satisfying to be able to form new friendships with whomever I liked.
11. I seem to get satisfaction from being with others more than a lot of other people do.
20. I think it would be satisfying if I could have very close friendships with quite a few people.
3. The main thing I like about being around other people is the warm glow I get from contact with them.
6. I think I get satisfaction out of contact with others more than most people realize.

---

Social comparison

7. When I am not certain about how well I am doing at something, I usually like to be around others so I can compare myself to them.
18. I find that I often look to certain other people to see how I compare to others.
12. If I am uncertain about what is expected of me, such as on a task or in a social situation, I usually like to be able to look to certain others for cues.
2. I prefer to participate in activities alongside other people rather than by myself because I like to see how I am doing on the activity.
14. I find that I often have the desire to be around other people who are experiencing the same thing I am when I am unsure of what is going on.

### References cited (*need for affiliation*)

- Jackson, D. N. (1971). The dynamics of structured personality tests: 1971. *Psychological Review*, 78, 229–248.
- Hill, C. A. (1987). Affiliation motivation: People who need people ... but in different ways. *Journal of Personality and Social Psychology*, 52(5), 1008.
- Mayes, B. T., & Ganster, D. C. (1983). A multitrait-multimethod matrix analysis of the PRF and MNQ need scales. *Journal of Management*, 9(2), 113-126.
- McClelland, D. C., & Burnham, D. H. (2003). *Power is the great motivator*. Boston, MA: Harvard Business School Press.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.

### Narcissism

In personality psychology, narcissism refers to a personality trait “encompassing grandiosity, arrogance, self-absorption, entitlement, fragile self-esteem, and hostility” (Rosenthal & Pittinsky, 2006, p. 617). Narcissistic leaders, while common, may be driven more by a distorted need for self-aggrandizement than by a genuine concern for the welfare of the organisation or their subordinates (Rosenthal & Pittinsky, 2006). As such, narcissism in a leader may manifest itself in a variety of negative outcomes. A narcissistic leader may callously exploit others to feed their own inflated self-perception, or even be abusive towards subordinates, leading to lower subordinate satisfaction (Yukl, 2013). A narcissistic leader may also surround himself with uncritical subordinates, experience distortions in professional judgment, or undertake grandiose but risky projects for self-glorification, thus jeopardising organisational progress (Rosenthal & Pittinsky, 2006; Yukl, 2013).

Ironically, narcissism tends to be a common trait among certain leaders, and may even be associated with certain desirable attributes for leadership. For example,

narcissism may be bundled together with other traits such as self-esteem and a strong need for power that are related to leadership effectiveness (Rosenthal & Pittinsky, 2006). However, high self-esteem and a strong need for power do not necessarily indicate a narcissistic personality, especially if also combined with a strong prosocial orientation – a trait that narcissistic individuals tend to lack. Thus, while a moderate level of narcissism may still be compatible with leadership, a higher level of narcissism is likely to predict subordinate dissatisfaction and poor organisational growth. As such, an indication of high narcissism may serve as a check against high self-esteem and high need for power scores.

Overall, research findings suggest that narcissistic leaders, while initially attractive to subordinates, are viewed more negatively in the long run. In one study presented by Rosenthal and Pittinsky (2006), subjects in five-member project-groups reported higher leadership ratings for narcissistic individuals in the first month of the groups' existence, but dismissed these same individuals as leaders toward the end of the project (Rosenthal & Pittinsky, 2006). This finding echoes general research into narcissism, which indicates that "narcissists make positive first impressions because they are outgoing and entertaining, but they are routinely disliked within a short period of time" (Paulhus, 1998, as cited in Rosenthal & Pittinsky, 2006, p. 624)

#### *Assessment of narcissism*

The 16-item Narcissistic Personality Inventory (NPI-16; Ames, Rose, & Anderson, 2006) may be used to assess an individual's level of narcissism. The NPI-16 is a relatively new and quick measure, shortened from the 40-item Narcissistic Personality Inventory that has demonstrated high construct validity (NPI-40; Raskin & Terry, 1988). Cronbach's alpha calculations (.69 and .72 from two studies) and repeated testing for the NPI-16 indicated high internal consistency and test-retest reliability respectively (Ames, Rose, & Anderson, 2006). The NPI-16 also displayed construct validity through patterns of correlations compared with the original NPI-40, and discriminant validity with other theoretically unrelated measures such as belief in a just world (Ames, Rose & Anderson, 2006).

Choose the statement from each pair that more accurately reflects yourself.

16-item pair measure of narcissism

Narcissistic response	Non-narcissistic response
I know that I am good because everybody keeps telling me so	When people compliment me I sometimes get embarrassed
I like to be the center of attention	I prefer to blend in with the crowd
I think I am a special person	I am no better or nor worse than most people
I like having authority over people	I don't mind following orders
I find it easy to manipulate people	I don't like it when I find myself manipulating people
I insist upon getting the respect that is due me	I usually get the respect that I deserve
I am apt to show off if I get the chance	I try not to be a show off
I always know what I am doing	Sometimes I am not sure of what I am doing
Everybody likes to hear my stories	Sometimes I tell good stories
I expect a great deal from other people	I like to do things for other people
I really like to be the center of attention	It makes me uncomfortable to be the center of attention
People always seem to recognize my authority	Being an authority doesn't mean that much to me
I am going to be a great person	I hope I am going to be successful
I can make anybody believe anything I want them to	People sometimes believe what I tell them
I am more capable than other people	There is a lot that I can learn from other people
I am an extraordinary person	I am much like everybody else

**References cited (narcissism)**

- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality, 40*(4), 440-450.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology, 74*(5), 1197-1208.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*, 890-902.
- Rosenthal, S. A., & Pittinsky, T. L. (2006). Narcissistic leadership. *The Leadership Quarterly, 17*(6), 617-633.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.

**Machiavellianism**

Machiavellianism is a personality trait characterized by misanthropy and cynicism towards people, manipulation and duplicity tactics in agenda concealment, and amorality (Rauthmann, 2013). While Niccolò Machiavelli (1513/1981) might have

advocated such qualities in politicians, modern research on Machiavellianism suggests negative to mixed consequences for leadership.

Several redeeming features of Machiavellianism should be noted first. Machiavellianism is associated with leadership emergence and effectiveness at strategically influencing others, being aware of their followers' psychological tendencies (Judge, Piccolo, & Kosalka, 2009) and of how to tailor influential tactics to the specific situation (Drory & Gluskinos, 1980). Mael, Waldman, and Mulqueen (2001, cited in Day, 2014) also found that Machiavellians have a higher motivation to lead and end up in positions of formal authority. Deluga (2001) further found that Machiavellianism predicted charismatic leadership, creativity and rated performance in U.S. presidents.

On the other hand, Machiavellian leaders tend to manipulate and deceive followers to achieve their own goals (Judge, Piccolo, & Kosalka, 2009), which are dissociated from prosocial values or concern for the organization (Becker & O'Hair, 2007). Hence, while Machiavellianism might predict effective influence of followers, this influence would often be directed toward self-beneficial ends instead of organizational benefit.

#### *Assessment of Machiavellianism*

Christie and Gries (1970) developed the MACH-IV to specifically measure Machiavellianism. While widely used, problems such as response biases, questionable reliabilities, and insufficient validity have been noted with the MACH-IV (Rauthmann, 2013). Rauthmann (2013) trimmed the MACH-IV into the five-item MACH\* in an attempt to resolve these problems. However, the MACH\*'s internal consistency was slightly lower than the MACH-IV's (.77 < .82), and was still strongly correlated with a version of the MACH-IV that excluded the MACH\* items, indicating similar reliability and construct validity (Rauthmann, 2013). One notable improvement of the MACH\* was the lower correlation with other "dark triad" traits such as narcissism and psychopathy, indicating better discriminant validity against these constructs (Rauthmann, 2013).

MACH-IV (Christie & Gries, 1970), with MACH\* (Rauthmann, 2013) items labeled with an asterisk \*:

## Leadership Constructs and Assessments

TABLE 1.—MACH-IV items (Christie & Geis, 1970).

No.	Item	Scoring	Specific Content <sup>a</sup>
1	The best way to handle people is to tell them what they want to hear.	+	Manipulation tactic (ingratiation)
2	When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons that might carry more weight.	-	Manipulation tactic (persuasive)
3*	Anyone who completely trusts anyone is asking for trouble.	+	Suspiciousness, misanthropy, cynicism
4	It is hard to get ahead without cutting corners here and there.	+	Rule-bending, immorality, agency-striving
5	Honesty is the best policy in all cases.	-	Duplicity/dishonesty
6*	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	+	Suspiciousness, misanthropy, cynicism
7*	Never tell anyone the real reason you did something unless it is useful to do so.	+	Manipulation tactic (agenda concealment)
8	One should take action only when sure it is morally right.	-	Immorality
9	It is wise to flatter important people.	+	Manipulation tactic (ingratiation)
10	All in all, it is better to be humble and honest than important and dishonest.	-	Immorality, agency-striving
11	Barnam was very wrong when he said there's a sucker born every minute.	-	Misanthropy, cynicism
12	People suffering from incurable diseases should have the choice of being put painlessly to death.	+	Misanthropy, <sup>b</sup> cynicism, pragmatism
13	It is possible to be good in all respects.	-	Immorality, duplicity/dishonesty, misanthropy, cynicism
14*	Most people are basically good and kind.	-	Immorality, duplicity/dishonesty, misanthropy, cynicism
15	There is no excuse for lying to someone else.	-	Duplicity/dishonesty, immorality, misanthropy, cynicism
16	Most men forget more easily the death of their father than the loss of their property.	+	Agency-striving, misanthropy, cynicism
17	Most people who get ahead in the world lead clean, moral lives.	-	Agency-striving, misanthropy, immorality
18	Generally speaking, men won't work hard unless they're forced to do so.	+	Misanthropy
19*	The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.	+	Misanthropy, cynicism
20	Most men are brave.	-	Misanthropy

Note. + = scored positively, - = scored negatively/reversely. Items marked with an asterisk (\*) were used for the trimmed MACH-IV.

<sup>a</sup>Assigned according to the 46 Machiavellianism content areas from Rauthmann and Will (2011) and Rauthmann (2011).

<sup>b</sup>That endorsing (active) euthanasia for people suffering terribly from an incurable disease indicates a cynical, misanthropic standing must not reflect the author's opinion. Rather, this item was designed in 1970 to likely capture content associated with misanthropy and cynicism. No moral judgment of any form of euthanasia is intended here.

### References cited (*Machiavellianism*)

- Becker, J. A. H., & O'Hair, H. D. (2007). Machiavellians' motives in organizational citizenship behavior. *Journal of Applied Communication Research*, 35(3), 246-267.
- Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*. New York: Academic Press.
- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York: Oxford University Press.
- Deluga, R. (2001). American presidential Machiavellianism implications for charismatic leadership and rated performance. *The Leadership Quarterly*, 12(3), 339-363.
- Drory, A., & Gluskinos, U. M. (1980). Machiavellianism and leadership. *Journal of Applied Psychology*, 65(1), 81-86.
- Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. *The Leadership Quarterly*, 20(6), 855-875.
- Mael, F. A., Waldman, D. A., & Mulqueen, C. (2001). From scientific careers to organizational leadership: Predictors of the desire to enter management on the part of technical personnel. *Journal of Vocational Behavior*, 59, 132-148.
- Machiavelli, N. (1981). *The prince*. New York, NY: Bantam Classics. (Original work published in 1513)
- Rauthmann, J. F. (2013). Investigating the MACH-IV with item response theory and proposing the trimmed MACH. *Journal of Personality Assessment*, 95(4), 388-397

### Social dominance orientation

While sounding similar to socialised power orientation, *social dominance orientation* (SDO) refers to a vastly different construct: the desire “that one’s in-group dominate and be superior to out-groups” (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 742).



High SDO is a general attitude towards intergroup relations, reflecting a preference for hierarchical relationships along a superior-inferior dimension, instead of equality (Pratto, Sidanius, Stallworth & Malle, 1994).

SDO appears to be a double-edged trait for leadership. Judge, Piccolo, and Kosalka (2009) suggest the high SDO leaders “prefer to control conversations, put pressure on others, and demand explanations for otherwise normal activities” (p. 867), which may dampen subordinate satisfaction. High SDO leaders “often motivate through fear, and rarely inspire followers with behaviors that are regarded as ethical, supportive, considerate, or fair” (Judge, Piccolo, & Kosalka, 2009, p. 867), which may preclude the effectiveness of inspirational influence tactics or of charismatic or transformational leadership. This perspective is supported by the finding that highly dominating individuals were broadly regarded as prejudiced, power hungry, and manipulative (Altemeyer, 2004), and that dominating influence tactics are regarded as counterproductive (Driskell, Olmstead, & Salas, 1993) in contrast to more considerate and inclusive leader behaviours. Son Hing, Bobocel, Zanna, and McBride (2007) also found that high SDO individuals, while likely to emerge as leaders in a managerial role-playing experimental study, also tended to make unethical decisions in a trade-off between profits and ethics.

On the other hand, socially dominant leaders display a strong desire for achievement and control (Cozzolino & Snyder, 2008), which may explain their initial attraction of followers and propel to them to positions of authority (Judge, Piccolo, Kosalka, 2009; Son Hing, Bobocel, Zanna, & McBride, 2007). SDO’s negative associations with empathy, altruism, communality and tolerance (Pratto, Sidanius, Stallworth & Malle. 1994) may also be perceived as qualities of successful leaders at times (Day. 2014).

#### *Assessment of social dominance orientation*

The Social Dominance Orientation Scale (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) was developed specifically to assess SDO. The SDO exhibits the expected convergent and predictive validity (e.g. negative correlations with empathy, altruism, communality, and tolerance; positive correlations with endorsement of inequalitarian actions) and discriminant validity (e.g. no significant correlation with interpersonal dominance, which is highly similar to need for power; Pratto, Sidanius, Stallworth, & Malle, 1994). Cronbach’s alpha calculations (.91 for 16-item scale below) also indicated good internal consistency (Pratto, Sidanius, Stallworth, & Malle, 1994).

Social Dominance Orientation Scale (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994):

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It's OK if some groups have more of a chance in life than others.
4. To get ahead in life, it is sometimes necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if groups could be equal.
10. Group equality should be our ideal.
11. All groups should be given an equal chance in life.
12. We should do what we can to equalize conditions for different groups.
13. Increased social equality.
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible.
16. No one group should dominate in society.

Items 9–16 should be reverse-coded. The response scale was *very negative* (1) to *very positive* (7).

**References cited (*social dominance orientation*)**

- Altemeyer, B. (2004). Highly dominating, highly authoritarian personalities. *Journal of Social Psychology, 144*, 421–447
- Cozzolino, P. J., & Snyder, M. (2008). Good times, bad times: How personal disadvantage moderates the relationship between social dominance and efforts to win. *Personality and Social Psychology Bulletin, 34*, 1420–1433.
- Driskell, J. E., Olmstead, B., & Salas, E. (1993). Task cues, dominance cues, and influence in task groups. *Journal of Applied Psychology, 93*, 51–60
- Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. *The Leadership Quarterly, 20*(6), 855–875.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*(4), 741–763.
- Son Hing, L. S., Bobocel, D. R., Zanna, M., & McBride, M. V. (2007). Authoritarian dynamics and unethical decision making: High social dominance orientation leaders and high right-wing authoritarianism followers. *Journal of Personality and Social Psychology, 92*, 67–81

### **Emotional intelligence**

Emotional intelligence refers to “a set of interrelated abilities possessed by individuals to deal with emotions” (Wong & Law, 2002, p. 244). Such abilities include being sensitive to others’ emotions, appraising and regulating one’s own emotions, and channelling one’s own emotions towards constructive causes (Wong & Law, 2002; Yukl, 2013). This set of skills thus enables an individual to accurately assess emotional expressions in handling interpersonal situations, to communicate more effectively, and to facilitate work performance (Yukl, 2013). Emotional intelligence may be cultivated through “intensive individual coaching, relevant feedback, and a strong desire for significant personal development” (Goleman, 1995, cited in Yukl, 2013, p. 152). As a function of underlying personality traits, emotional intelligence stems from conscientiousness, cognitive ability, and emotional stability (Joseph & Newman, 2010).

The benefits of emotional intelligence may carry over into effective leadership (Yukl 2013, citing Goleman, 1995; Goleman, Boyatzis, & McKee, 2002; Mayer & Salovey, 1995). Yukl (2013) suggests that emotionally intelligent leaders are “more capable of solving complex problems, planning how to use their time effectively, adapting their behavior to the situation, and managing crises” (p. 152). Specifically, emotionally intelligent leaders may understand their own needs and likely reactions to events, process information clearly and remain optimistic even under stressful situations and develop cooperative interpersonal relationships for subordinate satisfaction and effective influence (Yukl, 2013).

In an integrative meta-analysis, Joseph and Newman (2010) found that the effect of emotional intelligence (as measured by different assessments, including the WLEIS and the MSCEIT) on job performance is moderated by the emotional labour required of the job. Where the leader is required to manage their emotions and emotional expressions towards peers, subordinates, and superiors for the benefit of the organization (as many managerial positions demand), emotional intelligence may be a vital competency for leadership.

#### *Assessment of emotional intelligence*

The Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002) has been developed to assess emotional intelligence, as well as the moderator variable of emotional labour required in the workplace. Four components of emotional intelligence are assessed in different subscales: self-emotion appraisal (SEA), others’ emotion appraisal (OEA), use of emotion (UOE), and regulation of emotion (ROE). The construct validity of the WLEIS was confirmed using a multitrait-multimethod matrix analysis with self- and observer ratings of emotional intelligence (Law, Wong, & Song, 2004). Cronbach’s alpha calculations also revealed acceptable internal consistency (.69 for SEA, .84 for OEA, .72 for UOE, and .78 for ROE in a sample assessed by parents; Law, Wong, & Song, 2004).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2000) is another instrument that may be used to assess emotional intelligence. Convergent validity with other emotional intelligence measures and acceptable reliability scores (.80 to .93 for split-half; .75 to .91 for

Cronbach's alpha) validate the use of the MSCEIT (Mayer, Salovey, & Caruso, 2012). However, unlike the WLEIS, the MSCEIT is not available for free online.

A third alternative assessment of emotional intelligence is the Six Seconds Emotional Intelligence Assessment™ (SEI™; Six Seconds, 2005/2015). The SEI™ is based on the non-profit network Six Seconds' model of emotional intelligence, categorised into three components: knowing oneself, choosing oneself, and giving oneself. Knowing oneself involves being more aware of one's emotions and reactions, choosing oneself involves being intentional in one's responses, and giving oneself involves being purposeful in progressing through life (Six Seconds, 2005/2015). These three components are further subdivided into eight skills/subscales. Knowing oneself consists of enhancing emotional literacy and recognising patterns (of one's own habitual reactions; SEI™; Six Seconds, 2005/2015). Choosing oneself consists of applying consequential thinking (about one's responses), navigating emotions, engaging intrinsic motivation, and exercising optimism. Giving oneself consists of increasing empathy, and pursuing noble goals (Six Seconds, 2005/2015).

Six Seconds analysed the SEI™'s predictive validity with respect to four outcomes for personal effectiveness, relationships, quality of life, and well-being (Six Seconds, 2005/2015). Seven of the eight skills correlate significantly any of these criteria: exercising optimism (highest  $r^2 = .347$  with effectiveness), engaging intrinsic motivation ( $r^2 = .195$  with quality of life), pursuing noble goals ( $r^2 = .158$  with effectiveness), increasing empathy ( $r^2 = .123$  with relationships), applying consequential thinking ( $r^2 = .116$  with effectiveness), enhancing emotional literacy ( $r^2 = .097$  with effectiveness), and navigating emotions ( $r^2 = .082$  with relationships; Six Seconds, 2005/2015). Unfortunately, recognising patterns was not found to correlate significantly with any of the given criteria. On aggregate, the SEI™ predicts .550 of the variation in a composite measure of all four outcome criteria, which generally supports predictive validity (Six Seconds, 2005/2015).

A study by Fiedeldey-Van Dijk and Freedman (2007) suggests that only certain components of the SEI™ model may be specifically useful for leadership. In analysing SEI™ results across different employee groups, the researchers found that skill in emotional literacy and consequential thinking increased up the employment ladder (Fiedeldey-Van Dijk & Freedman, 2007). However, the findings also suggest that intrinsic motivation and optimism are best leveraged by nonmanagerial rather than senior employees, while empathy decreased up the employment ladder as well (Fiedeldey-Van Dijk & Freedman, 2007). Nevertheless, Fiedeldey-Van Dijk and Freedman (2007) conclude that the dominance in the managerial levels of highly emotionally intelligent leaders generally supports the relevance of the SEI™ model to leadership effectiveness.

Cronbach's alpha calculations for the SEI™ subscales generally indicated internal consistency. All were above .7 except for applying consequential thinking (.681) and increasing empathy (.634), which were nevertheless acceptable (Six Seconds, 2005/2015). However, construct validity (including convergent and discriminant) of the SEI™ still requires further validation. Sample items of the SEI™ can be found below.

Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002):

“7-point Likert-type scale (1 = totally disagree to 7 = totally agree)” (Law, Wong, & Song, 2004)

### **A.1. Emotional intelligence items**

#### *Self-emotion appraisal (SEA)*

1. I have a good sense of why I have certain feelings most of the time.
2. I have good understanding of my own emotions.
3. I really understand what I feel.
4. I always know whether or not I am happy.

#### *Others' emotion appraisal (OEA)*

5. I always know my friends' emotions from their behavior.
6. I am a good observer of others' emotions.
7. I am sensitive to the feelings and emotions of others.
8. I have good understanding of the emotions of people around me.

#### *Use of emotion (UOE)*

9. I always set goals for myself and then try my best to achieve them.
10. I always tell myself I am a competent person.
11. I am a self-motivated person.
12. I would always encourage myself to try my best.

#### *Regulation of emotion (ROE)*

13. I am able to control my temper and handle difficulties rationally.
14. I am quite capable of controlling my own emotions.
15. I can always calm down quickly when I am very angry.
16. I have good control of my own emotions.

### **A.2. Emotional labor items**

To perform my job well, it is necessary for me to:

1. spend most of my work time interacting with people (e.g., customers, colleagues, and other workers in this organization).
2. spend a lot of time with every person whom I work with.
3. hide my actual feelings when acting and speaking with people.
4. be considerate and think from the point of view of others.
5. hide my negative feelings (e.g., anger and depression).

Sample items from Six Seconds Emotional Intelligence Assessment™ (SEI™; Six Seconds, 2005/2015):

“The SEI is composed of 77 randomly ordered items answered through a 5-point Likert scale, plus an optional mood question.”

EQ Competence	Example of item
EEL	I am conscious of my emotions even when they are not clear. I can explain the purpose of different feelings.
RP	I can describe my own behavior accurately. After something happens to upset me, I know what I usually think and do.
ACT	I am aware of what makes other people angry. Before I make a decision, I try to understand my emotions.
NE	It can easily face new situations. I can express my opinion even if others disagree with me.
EIM	When I want to achieve something, I can focus effectively. I have what it takes to reach my goals.
EO	I turn obstacles to my advantage. When I commit to a goal, I know I will be successful.
IE	I try not to embarrass people in front of others. I easily talk to people whose point of view is different from mine.
PNG	I have a long-term vision for my life. My sense of purpose helps me make the best decisions.

**References cited (emotional intelligence)**

Fiedeldey-Van Dijk, C., & Freedman, J. (2007). Differentiating emotional intelligence in leadership. *Journal of Leadership Studies*, 1(2), 8-20.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.

Goleman, D., Boyatzis R. E., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston: Harvard Business School Press.

Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, 95(1), 54-78.

Law, K. S., Wong, C., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89(3), 483-496.

Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology*, 4(3), 197-208.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.). *Handbook of Intelligence* (pp. 396-420). Cambridge, UK: Cambridge University Press.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2012). The validity of the MSCEIT: Additional analyses and evidence. *Emotion Review*, 4(4), 403-408.

Six Seconds (2015). *SEI Technical Manual v4.0*. Retrieved August 6, 2015, from personal communication with Anabel Jensen.

Wong, C., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude an exploratory study. *The Leadership Quarterly*, 13(3), 243-274.

Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.

### **Social intelligence / Political skill**

Social intelligent individuals are able to discern “accurate perceptions of social requirements” and to select “appropriate behavioral responses”, which may be summed up within the two components of *social perceptiveness* and *behavioural flexibility* (Zaccaro, Gilbert, Thor, & Mumford, 1991). According to this definition, social intelligence appears to overlap considerably with emotional intelligence, but emphasises political manipulation – e.g. exerting appropriate influence in different scenarios (Yukl, 2013).

Social perceptiveness, the first proposed component of social intelligence, refers to the “capacity to be particularly aware of and sensitive to needs, goals, demands, and problems at multiple system levels, including individual members, relations among members, relations among organizational subsystems, and interactions among a leader’s constituent organization and other systems in the embedding environment.” (Zaccaro, Gilbert, Thor, & Mumford, 1991). This construct extends beyond the emotional intelligence required at a person-to-person level to a keen awareness of broader frames of reference. Yukl (2013) suggests that such social perceptiveness enables a leader to understand group/organisational requirements and how to pursue these requirements effectively. Social perceptiveness combines interpersonal skills with knowledge of the organisation to result in effective change initiation (Yukl, 2013).

Behavioural flexibility, the second proposed component of social intelligence, refers to the “ability and willingness to respond in significantly different ways to correspondingly different situational requirements” (Zaccaro, Gilbert, Thor, & Mumford, 1991). A behaviourally flexible leader has a variety of different behaviours at their disposal to achieve beneficial outcomes for the organisation in different environments (Yukl, 2013), such as using persuasive or coercive influence tactics when the situation calls for one over the other. Behavioural flexibility must also be coupled with self-monitoring in order for the leader to evaluate their behaviour effectively and to modify it as required (Yukl, 2013).

Despite a number of theorized links between social intelligence and leadership, however, there is a lack of empirical research to verify these links, or whether social intelligence is a useful construct with incremental validity above and beyond other related constructs (e.g. emotional intelligence). Tact, which may be an important component of social intelligence, was reported by Bass and Stogdill (1990) to have positive correlations of .08, .27, and .73 with leadership ratings, according to Drake (1944), Flemming (1935), and Webb (1915) respectively.

A strongly related concept to social intelligence is that of *political skill*, which may lend more readily to individual assessment. Political skill may be defined as “the ability to effectively understand others at work, and to use such knowledge to influence others to act in ways that enhance one’s personal and/or organizational objectives” (Ferris et al., 2005). The four-factor structure of political skill as developed by Ferris et al. (2005) comprises networking ability (which is expected to be associated with networking behaviour), apparent sincerity, social astuteness, and interpersonal influence. In particular, the latter two factors appear to encompass essential aspects of social intelligence. Day (2014) also indicates that the construct of political skill has been statistically related to underlying traits such as self-

monitoring, conscientiousness, self-efficacy, internal locus of control, and extraversion, but is a learnable construct that manifests in different behaviours, going beyond a permutation of intrinsic traits.

Theoretical models suggest that political skill may facilitate leadership effectiveness. Ammeter, Douglas, Gardner, Hochwarter, and Ferris (2002, cited in Day, 2014) suggest that “successful management revolved around the effective manipulation of shared meaning by engaging in political behaviours (e.g., rationality, assertiveness, inspirational appeals, ingratiation, consultation, etc.) that reduced ambiguity in work stimuli and guided followers’ behaviors and perception of future incidents” (p. 512). To this end, “leaders’ interpersonal style, accurate mental map of the power relations between individuals, interest in engaging in political behavior, and social capital all enhance the likelihood that they will select the appropriate combination of political behaviors to proactively engage in at the appropriate organizational level (e.g., individual, dyadic, network, etc.)” (Day, 2014, p. 512). Day (2014) also suggests that political skill enables a leader to project a favourable image to superiors and followers alike, which aid the development of leader-member exchange relationships in both directions (citing Wayne & Liden, 1995; Treadway, Ferris, Duke, Adams, & Thatcher, 2007). In other words, political skill facilitates the dexterous use of influence tactics that advance organisational goals and maintain beneficial relationships.

Empirical support bears out the importance of political skill to leadership. Ferris et al. (2005) found that political skill – and especially the social astuteness dimension – was a significant predictor of subordinate ratings of leader effectiveness. Semadar, Robins, and Ferris (2006, cited in Day, 2014, p. 515) further found that political skill “contributes more to performance than does leadership self-efficacy, emotional intelligence, or self-monitoring as a group”. Based on the extant research, Day (2014) also indicates that subordinates typically prefer having politically skilled leaders, who can communicate appropriately to optimise their reputations (citing Ferris, Blass, Douglas, Kolodinsky, & Treadway, 2003) and exhibit a wide range of effective behaviours (citing Hooijberg, 1996; Zaccaro, Gilbert, Thor, & Mumford, 1991). In particular, politically skilled leaders’ “perceptiveness and welcoming presence lets them excel at communication both with individual subordinates and with the workgroups as a whole” (Day, 2014, p. 516, citing Yammarino & Mumford, 2012). Furthermore, such leaders “are able to ingratiate without appearing ingratious” (Day, 2014, p. 516, citing Treadway, Ferris, Duke, Adams, & Thatcher, 2007), allowing them to subtly influence others. In short, the research indicates that political skill enables political behaviour in different ways (Day, 2014), to fulfill the politically-charged responsibilities of a leader.

While not assessing the exact constructs of social perceptiveness and behavioural flexibility, the Tromsø Social Intelligence Scale – English Version (TSIS-E; Silvera, Martinussen, & Dahl, 2001) purports to measure an individual’s level of social intelligence. The TSIS-E is differentiated into three subscales, measuring social information processing (SP), social skills (SS), and social awareness (SA). Each of these subscales, however, appears to relate closely to emotional intelligence at an interpersonal level, rather than at an organisational level as Zaccaro and colleagues (1991) defines social intelligence. It is thus unclear how useful the TSIS-E



can be to our defined construct of social intelligence. Nevertheless, correlations with political skill on top of emotional intelligence and empathy (Grieve & Mahar, 2013) provide tenuous support for the TSIS-E's construct validity in accordance with Zaccaro and colleagues' definition (1991). Cronbach's alpha calculations for the TSIS-E (.79 for SP, .85 for SS, .72 for SA) also indicate strong internal consistency (Silvera, Martinussen, & Dahl, 2001).

A more comprehensive and constructually valid instrument may be the Political Skill Inventory (PSI; Ferris et al., 2005), which comprises the four factors of networking ability, apparent sincerity, social astuteness, and interpersonal influence, as described above. In Ferris et al.'s (2005) first study of the PSI, Cronbach's alphas for all the four factors were above .78, indicating high internal consistency. In Ferris et al.'s (2005) second study of the PSI, the alphas for networking ability (.87), interpersonal influence (.87), and social astuteness (.80) remained high, but apparent sincerity exhibited a lower internal consistency (.58 < .70). Indeed, factor analysis generally supports the construct validity of the PSI's factors, correlating with expected traits of self-monitoring and emotional intelligence but not redundantly so (Ferris et al., 2005). The PSI also demonstrated discriminant validity against measures of general mental ability (Ferris et al., 2005). However, Ferris et al. (2005) found that apparent sincerity was provided less differential prediction, which they suggest reflects the importance of observer ratings for this particular factor. On the whole, in terms of criterion-related validity, Ferris et al. (2005) found that the PSI significantly predicted subordinate evaluations of leader effectiveness for a group of public school administrators, with social astuteness being the strongest predictive factor of effectiveness. Note, however, that the sample size for this study ( $N = 26$ ; Ferris et al., 2005) is quite limited.

Political Skill Inventory (PSI; Ferris et al., 2005):

---

*Instructions:* Using the following 7-point scale, please place the number on the blank before each item that best describes how much you agree with each statement about yourself.

- 1 = *strongly disagree*
- 2 = *disagree*
- 3 = *slightly disagree*
- 4 = *neutral*
- 5 = *slightly agree*
- 6 = *agree*
- 7 = *strongly agree*

1. \_\_\_\_ I find it easy to envision myself in the position of others.<sup>†</sup>
2. \_\_\_\_ In social situations, it is clear to me just what to say and do.
3. \_\_\_\_ I spend a lot of time and effort at work networking with others. (NA)\*
4. \_\_\_\_ I am good at getting others to work well together.
5. \_\_\_\_ I am able to make most people feel comfortable and at ease around me. (II)<sup>†\*</sup>
6. \_\_\_\_ I am good at making myself visible with influential people in my organization.
7. \_\_\_\_ I am able to adjust my behavior and become the type of person dictated by any situation.
8. \_\_\_\_ I am able to communicate easily and effectively with others. (II)\*
9. \_\_\_\_ It is easy for me to develop good rapport with most people. (II)<sup>†\*</sup>
10. \_\_\_\_ I am good at reading social situations, and determining the most appropriate behavior to demonstrate the proper impression.
11. \_\_\_\_ I am very conscious of how I am perceived by others.
12. \_\_\_\_ I have always prided myself in having good savvy, street smarts, or political skill at work.
13. \_\_\_\_ I understand people very well. (SA)<sup>†\*</sup>
14. \_\_\_\_ I am the one who can get people to work well together.
15. \_\_\_\_ I try to make people feel important by what I say and do.
16. \_\_\_\_ I am good at building relationships with influential people at work. (NA)\*
17. \_\_\_\_ I am good at getting others to respond positively to me.<sup>†</sup>
18. \_\_\_\_ I usually try to find common ground with others.<sup>†</sup>
19. \_\_\_\_ I think a lot about how, as well as what, I say when presenting an idea to others.
20. \_\_\_\_ I size up situations before deciding how to present an idea to others.

Tromsø Social Intelligence Scale – English Version (TSIS-E; Silvera, Martinussen, & Dahl, 2001):

“Respondents were asked the degree to which each statement described them on a scale from 1 (‘Describes me extremely poorly’) to 7 (‘Describes me extremely well’). Only the endpoints of the scale had semantic labels.”

## Leadership Constructs and Assessments

### Factor 1: Social information processing (SP)

1. I can predict other peoples' behavior.
3. I know how my actions will make others feel.
6. I understand other peoples' feelings.
9. I understand others' wishes.
14. I can often understand what others are trying to accomplish without the need for them to say anything.
17. I can predict how others will react to my behavior.
19. I can often understand what others really mean through their expression, body language, etc.

### Factor 2: Social skills (SS)

4. I often feel uncertain around new people who I don't know.
7. I fit in easily in social situations.
10. I am good at entering new situations and meeting people for the first time.
12. I have a hard time getting along with other people.
15. It takes a long time for me to get to know others well.
18. I am good at getting on good terms with new people.
20. I frequently have problems finding good conversation topics.

### Factor 3: Social awareness (SA)

2. I often feel that it is difficult to understand others' choices.
5. People often surprise me with the things they do.
8. Other people become angry with me without me being able to explain why.
11. It seems as though people are often angry or irritated with me when I say what I think.
13. I find people unpredictable.
16. I have often hurt others without realizing it.
21. I am often surprised by others' reactions to what I do.

### References cited (social intelligence/political skill)

- Ammeter, A., Douglas, C., Gardner, W., Hochwarter, W., & Ferris, G. (2002). Toward a political theory of leadership. *The Leadership Quarterly*, 13, 751-796.
- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Day, D. V. (2014). *The Oxford handbook of leadership and organizations*. New York: Oxford University Press.
- Drake, R. M. (1944). A study of leadership. *Journal of Personality*, 12(4), 285-289.
- Ferris, G. R., Blass, R., Douglas, C., Kolodinsky, R. W., & Treadway, D. C. (2003). Personal reputation in organizations. In J. Greenberg (Ed.), *Organizational behaviour: The state of science* (2<sup>nd</sup> ed., pp. 211-246). Mahwah, NJ: Lawrence Erlbaum.
- Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., & Frink, D. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31(1), 126-152.

- Flemming, E. G. (1935). A factor analysis of the personality of high school teachers. *Journal of Applied Psychology, 19*, 596-605.
- Grieve, R., & Mahar, D. (2013). Can social intelligence be measured? Psychometric properties of the Tromsø Social Intelligence Scale – English Version. *The Irish Journal of Psychology, 34*(1), 1-12.
- Hooijberg, R. (1996). A multidirectional approach toward leadership: An extension of the concept of behavioral complexity. *Human Relations, 49*(7), 917-946.
- Semadar, A., Robins, G., & Ferris, G. R. (2006). Comparing the validity of multiple social effectiveness constructs in the prediction of managerial job performance. *Journal of Organizational Behavior, 27*(4), 443-461.
- Silvera, D., Martinussen, M., & Dahl, T. I. (2001). The Tromsø Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology, 42*(4), 313-319.
- Treadway, D. C., Ferris, G. R., Duke, A. B., Adams, G. L., & Thatcher, J. B. (2007). The moderating role of subordinate political skill on supervisors' impressions of subordinate ingratiation and ratings of subordinate interpersonal facilitation. *Journal of Applied Psychology, 92*(3), 848-855.
- Wayne, S., & Liden, R. (1995). A longitudinal study on the effects of impression management on performance ratings. *Academy of Management Journal, 38*, 232-260.
- Webb, U. (1915). Character and intelligence. *British Journal of Psychology Monograph, No. 20*.
- Yammarino, F. J., & Mumford, M. D. (2012). Leadership and organizational politics: A multi-level review and framework for pragmatic deals. In G. R. Ferris & D. C. Treadway, *Politics in organizations: Theory and research considerations* (pp. 323-354). New York: Routledge/Taylor and Francis.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson
- Zaccaro, S. J., Gilbert, J. A., Thor, K. K., & Mumford, M. D. (1991). Leadership and social intelligence: Linking social perspectiveness and behavioral flexibility to leader effectiveness. *The Leadership Quarterly, 2*(4), 317-342.

### **Metacognitive learning ability**

Yukl (2013) defines learning ability as a metacognitive competency of “learning how to learn,” which is the ability to introspectively analyze your own cognitive processes (e.g., the way you define and solve problems) and to find ways to improve them” (p. 153). Metacognitive learning ability appears to be linked to numerous traits, including achievement orientation, emotional stability, self-monitoring, and an internal locus of control (Yukl, 2013).

Dechant (1990) highlights research suggesting that such learning ability enables individuals to “recognise the incongruities in their knowledge, behaviour and attitudes” (p. 40). As such, individuals with high metacognitive learning ability can recognise defunct practices and can change their own perspectives and themselves to adapt to changing conditions (Dechant, 1990). Dechant (1990) further suggests that, because “managers act as catalysts for organisational change and development” (p. 40), a high metacognitive learning ability can enable managers to

“not only improve their own performance” but also to “advance the level of knowledge or alter outmoded assumptions and practices of their organisations” (p. 40). As such, the volatility of the organisational environment may be a modulating variable in the effect of metacognitive learning ability on leadership outcomes. In other words, the importance of having a metacognitive learning ability in a leader depends on how much the leader is expected to change the organisation to adapt to changing circumstances.

A number of studies attest to the importance of metacognitive learning ability in leadership. Zaccaro et al. (1997, cited in Yukl, 2013) found that metacognitive learning ability predicted self-reported career achievements in a study of 1,800 high-level military officers. In civilian organisations, Van Velsor and Leslie (1995) also found this ability was considered an important success factor by American and European executives, when researching derailment. Research studies that depend less on subjective self-reports of success are needed to verify the exact effects of metacognitive learning ability on leadership.

*Assessment of metacognitive learning ability*

Metacognitive learning ability may be assessed by the Reflection Thinking Skills subscale of Metacognitive Thinking Skills Scale (MTSS; Tuncer & Kaysi, 2013). Exploratory and confirmatory factor analyses support the validity of the scale in assessing metacognitive ability; furthermore, the high Cronbach’s alpha of .767 for the subscale attests to its internal consistency (Tuncer & Kaysi, 2013).

Reflection Thinking Skills subscale of Metacognitive Thinking Skills Scale (MTSS; Tuncer & Kaysi, 2013):

“Five point Likert scale... 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree, 1 = strongly disagree”

- 24 After solving a problem, I think if I could find a better way
- 25 While solving problems, I ask questions to myself in order to find different ways of solution.
- 23 When I cannot solve a problem, I ask questions to myself to understand why I cannot solve it.
- 27 After I solve a problem, I compare my results with my friends’ result and evaluate the solution.
- 26 When I read a problem, I think of similar problems that I solved before and make connections concerning the differences between the new problem and the old ones.

**References cited (*metacognitive learning ability*)**

Dechant, K. (1990). Knowing how to learn: The neglected management ability. *Journal of Management Development*, 9(4), 40-49.

- Tuncer, M., & Kaysi, F. (2013). The development of the metacognitive thinking skills scale. *International Journal of Learning and Development*, 3(2), 70-76.
- Van Velsor, E., & Leslie, J. B. (1995). Why executives derail: Perspectives across time and cultures. *The Academy of Management Executive*, 9(4), 62-72.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Zaccaro, S. J., Mumford, M. D., Marks, M. A., Connelly, M. S., Threlfall, K. V., Gilbert, J. A., et al. (1997). *Cognitive and temperament determinants of army leadership*. Technical Report MRI 97-2. Bethesda, MD: Management Research Institute.

### **Influence tactics**

#### *High general effectiveness*

- Rational persuasion
- Inspirational appeal
- Consultation
- Collaboration

#### *Moderate general effectiveness*

- Apprising
- Ingratiation
- Exchange
- Personal appeal

#### *Low general effectiveness*

- Coalition
- Pressure
- Legitimizing

### **Overview**

Leaders often require their subordinates, peers, or superiors to carry out certain tasks. In so doing, these leaders may choose from a repertoire of different tactics to influence their targets. Much of the research in this area examines these influence tactics collectively, instead of studying each tactic in isolation. As such, this overview covers some of the important points relevant to these tactics as a whole (including assessment instruments), but each influence tactic will also be discussed briefly and separately below.

11 main influence tactics are discussed here, categorised according to their level of general effectiveness. Yukl and Tracey (1992) assess such effectiveness in a field study, primarily through the targets' reported level of commitment towards the task, and also through ratings of the influencer's effectiveness. Influence tactics may be used in three different directions: upwards with superiors, laterally with peers, or downwards with subordinates. The influence tactics of high general effectiveness (i.e. rational persuasion, inspirational appeal, consultation, and collaboration) tend to be effective in all three directions (Yukl, 2013; Yukl & Tracey, 1992). In general,

these highly effective tactics aim to change the targets' attitude about the desirability of the request, and also tend to be more socially acceptable (Yukl & Tracey, 1992).

Influence tactics of moderate general effectiveness include apprising, ingratiation, exchange, and personal appeal (Yukl, 2013; Yukl & Tracey, 1992). Influence tactics of low general effectiveness include pressure, coalition, and legitimating (Yukl, 2013; Yukl & Tracey, 1992), which may be seen as more socially undesirable and cause resentment on the target's part.

Several issues with the current influence tactics research must be pointed out. For example, Yukl and Tracey (1992) observe intercorrelations among certain influence tactics, raising questions about whether these tactics are clearly defined. Nevertheless, the tactics below, while often used in combination with one another, may be treated as distinct and explored separately (Yukl & Tracey, 1992). Also, the dependent measures of task commitment and managerial effectiveness rating may not be perfectly valid in assessing leadership effectiveness: the final task outcomes of the influence tactics are ignored. And oftentimes, simple target compliance without strong commitment may already be adequate for certain tasks (Yukl & Tracey, 1992). Targets are also assumed to have accurately reported the influencers' tactics, but certain tactics may be more selectively remembered by certain targets (e.g. managers remembering salient pressure tactics by subordinates), or may have slipped under the targets' explicit awareness (Yukl & Tracey, 1992). Since many of the research studies involve field studies instead of experimental manipulation, the influence of extraneous factors may also be important (Yukl & Tracey, 1992).

Two other important questions must be kept in mind as we examine the influence tactics below. Firstly, what causes certain leaders to choose certain influence tactics? An examination of leadership traits and competencies, as discussed earlier in this report, may be pertinent in answering this question. For example, a leader with a high openness to ideas and high emotional intelligence may be more likely to consult with subordinates, as an influence tactic. Secondly, how do contextual factors affect the outcomes of these tactics? This question will be addressed to some extent in the separate sections on each influence tactic.

#### *Assessment of influence tactics*

The Influence Behavior Questionnaire-G (IBQ-G; Yukl, Seifert, & Chavez, 2008) assesses all 11 influence tactics discussed below. Confirmatory factor analysis supports the convergent and discriminant validity of the IBQ-G. Criterion-related validity was also supported with respect to three different criteria (target commitment, target leader-member exchange, and agent effectiveness; Yukl, Seifert, & Chavez, 2008). Lastly, internal consistency of the IBQ-G is supported: across three different samples of peers and subordinate targets, most of the subscales' Cronbach's alphas were above .8, and almost all above .7 with one exceptional .65 for coalitions in one sample (Yukl, Seifert, & Chavez, 2008).

The Profiles of Organizational Influence Strategies (POIS; Kipnis, Schmidt, & Wilkinson, 1980) was also considered as a possible instrument in assessing influence tactics. The POIS breaks down the IBQ-G's pressure tactic into three subcategories of assertiveness, sanctions, and blocking, and the IBQ-G's coalition tactic into two subcategories: upward appeal, and other coalition tactics. However,

the POIS fails to consider the tactics of inspirational appeal, consultation, collaboration, apprising, personal appeal, and legitimating. Furthermore, Schriesheim and Hinkin's analysis (1990) of the POIS indicates several flaws and recommended the deletion of several items. While the subcategories of pressure and coalition tactics will be discussed briefly below, the POIS is not recommended as an alternative instrument to the IBQ-G to assess influence tactics.

### **Rational persuasion**

Rational persuasion involves using “explanations, logical arguments, and factual evidence to explain why a request or proposal will benefit the organization or help to achieve an important task objective” (Yukl, 2013, p. 203). The influencer may also rationally persuade the target about the likely success of a certain project or change (Yukl, 2013).

Rational persuasion can be used flexibly with different types of influence attempts, aimed at different types of targets – peers, subordinates, or superiors. This tactic is particularly useful when the target person shares the influencer's objectives but does not initially recognise that the influencer's request is the best way to attain the shared objective (Yukl, 2013). If the target perceives the influencer as having high expertise and credibility, a rational appeal involving evidence and predicted outcomes would be more effective (Yukl, 2013). If the influencer lacks expertise and credibility, or has incompatible objectives with the target, then effectiveness is compromised (Yukl, 2013).

### **Inspirational appeal**

Inspirational appeals aim “to develop enthusiasm and commitment by arousing strong emotions and linking a request or proposal to a person's needs, values, hopes, and ideals” (Yukl, 2013, p. 203). Inspirational appeals are thus “emotional or value-based”, but may be used in combination with the “logical arguments used in rational persuasion and apprising” (Yukl, 2013, p. 203). These appeals may be based on the target's “desire to be important, to feel useful, to support their values, to accomplish something worthwhile, to perform an exceptional feat, to be a member of the best team, or to participate in an exciting effort to make things better” (Yukl, 2013, p. 203).

While inspirational appeals may be directed at superiors, they are more commonly made with subordinates or peers. Inspirational appeals are appropriate for “gaining commitment to work on a new project”, or for garnering “support for a proposed change that involves values and ideas” (Yukl, 2013, p. 203).

### **Consultation**

Consultation involves “inviting the target person to participate in planning how to carry out a request, revise a strategy, or implement a proposed change”, in order “to help determine how the objective should be attained, not to help decide what the objective should be” (Yukl, 2013, p. 204). As such, effectiveness is enhanced when the influencer and the target share the same objective (Yukl, 2013). The influencer may consult with the target to unearth any “concerns about the feasibility of a proposal or likely adverse consequences” (Yukl, 2013, p. 204).



Consultation may be used in any direction, but is particularly appropriate for an influencer who possesses the authority to pursue a certain objective, but requires a peer or subordinate target's contribution to help meet that objective (Yukl, 2013). With peers, consultation "is very useful to elicit concerns and suggestions" to enhance commitment to the proposal (Yukl, 2013, p. 204). With superiors, consultation can help to gain approval or support for a proposal, although superiors seldom need such invitation to contribute their input (Yukl, 2013).

### **Collaboration**

Collaboration refers to "an offer to provide necessary resources and/or assistance if the target person agrees to carry out a request or approve a proposal" (Yukl, 2013, p. 204). Collaboration is primarily concerned with "reducing the difficulty or costs of carrying out a request, and it is especially appropriate when compliance would be difficult for the target person" (Yukl, 2013, p. 205).

Collaboration is more effective with peers or subordinates, since the influencer would have more "control over discretionary resources" to provide assistance to the target (Yukl, 2013, p. 205)

### **Apprising**

Apprising involves explaining "how a request or proposal is likely to benefit the target person as an individual", with regards to the target's "career advancement, job satisfaction, or compensation" (Yukl, 2013, p. 203). In other words, the influencer makes clear to the target the personal benefits to be reaped from successfully executing a proposal. Apprising is distinct from exchange, where the influencer provides the personal benefits as a reward for executing the proposal.

Apprising is more effective when the influencer is a credible source of knowledge about the likely personal benefits associated with executing the proposal, and thus is more likely used with peers or subordinates (Yukl, 2013). However, an experienced member of the organisation may credibly use this tactic with a relatively new superior (Yukl, 2013).

### **Ingratiation**

Ingratiation involves making the target feel better about the influencer on a personal level, and may include "giving compliments, doing unsolicited favors, acting deferential and respectful, and acting especially friendly and helpful before making a request" (Yukl, 2013, p. 205). When perceived to be sincere, ingratiation "tends to strengthen positive regard and make a target person more willing to consider a request" (Yukl, 2013, p. 205).

Ingratiation tends to be seen as "more credible and meaningful when the [influencer] agent has higher status and expertise than the target" (Yukl, 2013, p. 205). Hence, ingratiation may be perceived as less sincere with a superior, and hence be less effective (Yukl, 2013). For sincerity concerns, ingratiation is also "more useful as part of a long-term strategy for building cooperative relations" than used as a sudden, ad hoc tactic (Yukl, 2013, p. 205).

### **Exchange**

Exchange involves “the explicit or implicit offer to reward a person” for accomplishing a request (Yukl, 2013, p. 204). Exchange tactics are appropriate for requests that otherwise offer “no important benefits for the target person and would involve considerable effort and inconvenience” (Yukl, 2013, p. 204). In exchange, the influencer may offer rewards such as “scarce resources, information, advice or assistance on another task, career support, or political support” (Yukl, 2013, p. 204). When directed at subordinates, the influencer may even offer “a pay increase, bonus, promotion, better assignments, or a better work schedule” (Yukl, 2013, p. 204). Exchange is distinct from apprising, where the personal benefits come as a direct result of accomplishing the proposal, and not as a reward provided by the influencer.

Exchange tactics are more effective when the target perceives the influencer as a trustworthy, credible provider of the promised benefits (Yukl, 2013). As such, exchange is more likely to be used with subordinates or peers. With peers, the influencer is more likely to offer task-related benefits (e.g. resources, assistance, information, political support), which would be more credible than offering personal benefits (Yukl, 2013). Exchange tactics used with superiors, on the other hand, tend to lack credibility regardless, or may even be socially unacceptable (Yukl, 2013).

### **Personal appeal**

Personal appeals involve “asking someone to do a favor based on friendship or loyalty” or “an appeal to the person’s kindness and generosity” (Yukl, 2013, p. 205). Personal appeals are more effective for “getting assistance or information or for requesting a personal favor unrelated to the work”, and are unfeasible when the target dislikes the influencer or is indifferent to what happens to the influencer (Yukl, 2013, p. 205).

Personal appeals may be more socially acceptable with peers than with subordinates or bosses, with whom issues of equity or perceived favouritism may surface (Yukl, 2013).

### **Coalition**

Coalition tactics involve obtaining help from other people, including peers, subordinates, superiors, to influence the target person (Yukl, 2013). An upward appeal is where the influencer specifically enlists the help of the target’s superior (Kipnis, Schmidt, & Wilkinson, 1980), but still falls under the umbrella of coalition tactics. According to Yukl (2013), “coalition partners may actively participate in influence attempts with the target person, or the [influencer] agent may only use their endorsement of a request” (p. 206). Generally, influence attempts infused primarily with coalition tactics may be seen as socially undesirable, or may incur the target’s resentment (Yukl & Tracey, 1992). Other tactics, such as rational persuasion, may be combined in an active coalition to enhance the effectiveness of the influence attempt (Yukl, 2013). Pressure tactics, which can be naturally paired with coalition tactics, may end up aggravating the situation.

Since leaders seldom need coalition tactics to influence their subordinates, coalition tactics are more commonly used on peers or superiors to garner support for a proposed change (Yukl, 2013).

### **Pressure**

Pressure tactics “include threats, warnings, and assertive behavior such as repeated demands or frequent checking to see if the person has complied with a request” (Yukl, 2013, p. 206). Kipnis, Schmidt and Wilkinson (1980) defined three types of tactics that fall under this category: assertiveness, sanctions, and blocking. Assertiveness includes “demanding, ordering, and setting deadlines”, sanctions involves “administrative sanctions to induce compliance” through such means as preventing salary increases and threatening job security, while blocking involves “attempts to stop the target person from carrying out some action” through such means as “engaging in a work slowdown’ and ‘threatening to stop working with the target person” (Kipnis, Schmidt, & Wilkinson, 1980, p. 447).

In general, all these tactics fall under the umbrella of pressure tactics, and may sometimes be “successful in eliciting compliance with a request, particularly if the target person is just lazy or apathetic rather than strongly opposed to it” (Yukl, 2013, p. 206). Softer forms of pressure tactics (e.g. persistent requests, reminders) may induce compliance without undermining the influencer-target relationship, which may come in useful when compliance instead of full commitment suffices (Yukl, 2013). However, harder pressure tactics (e.g. severe sanctions or blocking) may cause resentment on the part of the target, who may react negatively to the influence attempt (Yukl, 2013). Pressure tactics are most likely used with subordinates, since the influencer be in some position of authority or power as a credible source of punishment (Yukl, 2013).

### **Legitimizing**

Legitimizing refers to “attempts to establish one’s legitimate authority or right to make a particular type of request” (Yukl, 2013, p. 205). Such tactics may be employed when the influencer’s legitimacy is likely to be questioned, such as when the request “is unusual, when the request clearly exceeds your authority, or when the target person does not know who you are or what authority you have” (Yukl, 2013, p. 205).

Legitimizing tactics hold most relevance when influencing “peers or outsiders, where role relationships are often ambiguous and agent authority less well defined” (Yukl, 2013, p. 205). In influencing subordinates, “legitimizing may be used when implementing major changes or for dealing with an unusual crisis” which stray far beyond the boundaries of routine requests (Yukl, 2013, p. 205). In influencing superiors, legitimizing can be employed in “requests involving personnel matters, especially if the superior is new and unfamiliar with relevant policies, contract agreements, and standard practices” (Yukl, 2013, p. 205).

### **References cited (*influence tactics*)**

- Kipnis, D., Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology, 65*(4), 440-452.
- Schriesheim, C. A., & Hinkin, T. R. (1990). Influence tactics used by subordinates: A theoretical and empirical analysis and refinement of the Kipnis, Schmidt, and Wilkinson subscales. *Journal of Applied Psychology, 75*(3), 246-257.

- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., Seifert, C. F., & Chavez, C. (2008). Validation of the extended influence behavior questionnaire. *The Leadership Quarterly*, 19(5), 609-621.
- Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology*, 77(4), 525-535)

## **General behaviours**

### *Task-oriented*

Task-oriented behaviours are concerned with organisational task objectives, including short-term planning and organising, clarifying roles and objectives, and monitoring operations and performance (Yukl, Gordon, & Taber, 2002). The details and exact effects of each task-oriented behaviour will be discussed separately below. This present overview discusses these task-oriented behaviours as a whole.

Research suggests that task-oriented behaviours are vital for leadership, although the findings are not always consistent. While some studies found that subordinates were more satisfied with a task-oriented leader, other studies found the opposite or no significant relationship (Yukl, 2013). Based on this inconsistency, Yukl (2013) suggests a possible curvilinear relationship, such that a moderate (instead of a low or a high) amount of task-oriented behaviour optimises subordinate satisfaction. This hypothesis offers a plausible explanation for the inconsistent pattern of results, but demands further research.

In survey studies, measures of leadership effectiveness had an inconsistent but generally weak, positive correlation with task-oriented behaviour (Yukl, 2013). Yukl (2013) reports that “the weakest results were found in studies with an independent, objective measure of effectiveness such as group performance” (p. 57), as opposed to subjective ratings. This trend across survey studies suggests that task-oriented behaviour may influence perceptions of effective leadership more than measurable, objective outcomes. Other studies involving experiments, critical incidents, diaries and interviews more consistently substantiate the importance of task-oriented behaviour, which enables leaders to effectively “guide and facilitate the work to accomplish task objectives” (Yukl, 2013, p. 57). Both task- and relations-oriented behaviours are likely vital in leadership to some extent (Yukl, 2013).

### *Assessment of task-oriented behaviours*

Three different instruments may be used to assess task-oriented behaviours in leaders. The Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953) and the Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963) assess task-oriented behaviour as a whole category, under the Initiating Structure and the Initiation of Structure subscales respectively. On the other hand, the Managerial Practices Survey (MPS; Yukl, Wall, & Lepsinger, 1990) assesses three different types of task-oriented behaviour separately: Planning and Organising, Clarifying Roles and Objectives, and Monitoring Operations and Environment. While the last subscale assesses performance monitoring, it

simultaneously assesses *external monitoring* of the environment, which is classified within this report as more of a *change-oriented behaviour*. Nevertheless, for a more fine-grained examination of specific task-oriented behaviours, the MPS may be recommended. The Monitoring Operations and Environment subscale may be split if need be to assess internal monitoring and external monitoring separately.

To assess the task-oriented behaviour of monitoring, the Sensitivity to the Environment subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) may also be used, although this subscale appears to assess internal and external monitoring simultaneously. Cronbach's alpha calculations support the internal consistency of the CKS subscales: .86 for strategic vision and articulation, .72 for sensitivity to the environment, .75 for sensitivity to member needs, .85 for personal risk, .81 for unconventional behavior, and .87 for the whole 20-item scale (Conger & Kanungo, 1998). Construct validity for the CKS was substantiated specifically for the construct of charismatic leadership through factor analysis (Conger & Kanungo, 1998). As an extra option, the Monitoring subscale of the Leadership Agility Profile 360 (Agility Consulting and Training LLC, 2014) may be considered as well. The LAP 360, however, is a commercial tool with little validation information available. Similar to the MPS and CKS subscales discussed above, the LAP 360's Monitoring subscale conflates internal and external monitoring as well. For more information on the LAP 360 and the construct of agility assessed, refer to the Agility section.

Schriesheim and Kerr (1974) analysed the reliability and validity of the SBDQ and LBDQ. With regards to reliability, the authors note that "although the internal consistency reliabilities of the scales seem acceptable, test-retest reliability data are sparse" (Schriesheim & Kerr, 1974). With regards to internal consistency, for example, Szilagyi and Keller (1976) report that the split-half reliability scores corrected by the Spearman-Brown formula were high for the SBDQ (.90 for Consideration, .86 for Initiating Structure) and the LBDQ (.89 for Consideration, .87 for Initiation of Structure). Stogdill, Goode, and Day (1963) also report in their study that the internal consistency reliability score for the LBDQ Initiating Structure subscale was .72. However, both scales may also suffer from other problems, including halo effects from the intercorrelations of the subscales, scaling problems from the insufficient number of reflected Structure items, and the possibility that ordinal instead of interval data is captured (Schriesheim & Kerr, 1974). However, Schriesheim and Kerr (1974) also note that the LBDQ is superior, suffering from fewer "serious shortcomings that plague the other versions", having been subjected to more successful construct validation from experimentation, and "does not confound frequency of behavior with magnitude" (p. 764). Furthermore, the phrasing of certain SBDQ items may not be familiar to most readers (e.g. "He 'needles' foremen under him for greater effort."), limiting the use of the SBDQ.

Yukl, Wall, and Lepsinger (1990) developed and preliminarily validated by the MPS, although the exact results of the validation process are not available online. Nevertheless, Yukl, Gordon, and Taber (2002, citing Yukl, Wall, & Lepsinger, 1990) report that positive correlations exist between each of the task-oriented behaviours and effective leadership outcomes. For example, planning and "an independent criterion of managing effectiveness" are related, clarifying and "managerial

effectiveness” are related in certain situations, while monitoring and “leader effectiveness” are related in certain samples (Yukl, Gordon, & Taber, 2002, p. 19, citing Yukl, Wall, & Lepsinger, 1990). These findings partially support the criterion validity of the MPS’ task-oriented behaviours in predicting leadership outcomes.

Initiating Structure subscale of Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953):

<sup>1</sup> Items not starred used the format: 1. always; 2. often; 3. occasionally; 4. seldom; 5. never. Items preceded by an asterisk (\*) used the format: 1. often; 2. fairly often; 3. occasionally; 4. once in awhile; 5. very seldom. Items preceded by a double asterisk (\*\*) used the format: 1. a great deal; 2. fairly much; 3. to some degree; 4. comparatively little; 5. not at all.

<b>“Initiating Structure” Revised Key</b>		
<b>**He encourages overtime work.</b>	.20	.40
<b>*He tries out his new ideas.</b>	-.10	.42
<b>He rules with an iron hand.</b>	-.20	.58
<b>He criticizes poor work.</b>	-.18	.59
<b>**He talks about how much should be done.</b>	-.20	.60
<b>*He encourages slow-working foremen to greater effort.</b>	.17	.33
<b>He waits for his foremen to push new ideas before he does.</b>	-.07	-.28
<b>He assigns people under him to particular tasks.</b>	.00	.26
<b>He asks for sacrifices from his foremen for the good of the entire department.</b>	.00	.46
<b>He insists that his foremen follow standard ways of doing things in every detail.</b>	.25	.72
<b>He sees to it that people under him are working up to their limits.</b>	-.17	.87
<b>*He offers new approaches to problems.</b>	.36	.72
<b>He insists that he be informed on decisions made by foremen under him.</b>	.13	.51
<b>He lets others do their work the way they think best.</b>	-.17	-.33

	Orthogonal Factor Loading	
	"Consideration"	"Initiating Structure"
<b>"Initiating Structure" Revised Key</b>		
**He stresses being ahead of competing work groups.	.03	.34
**He "needles" foremen under him for greater effort.	-.17	.50
He decides in detail what shall be done and how it shall be done.	.37	.63
**He emphasizes meeting of deadlines.	.10	.68
*He asks foremen who have slow groups to get more out of their groups.	-.22	.40
**He emphasizes the quantity of work.	.17	.51

Initiation of Structure subscale of Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963):

**DIRECTIONS:**

- a. **READ** each item carefully.
- b. **THINK** about how frequently the leader engages in the behavior described by the item.
- c. **DECIDE** whether he/she (A) Always, (B) Often, (C) Occasionally, (D) Seldom, or (E) Never acts as described by the item.
- d. **DRAW A CIRCLE** around one of the five letters (A B C D E) following the item to show the answer you selected.

- 4. Lets group members know what is expected of them
- 14. Encourages the use of uniform procedures
- 24. Tries out his/her ideas in the group
- 34. Makes his/her attitudes clear to the group
- 44. Decides what shall be done and how it shall be done

- 54. Assigns group members to particular tasks
- 64. Makes sure that his/her part in the group is understood by the group members
- 74. Schedules the work to be done
- 84. Maintains definite standards of performance
- 94. Asks that group members follow standard rules and regulations

### **Planning and organising**

With regards to task-oriented behaviours in the workplace, short-term *planning* involves “deciding what to do, how to do it, who will do it, and when it will be done” (Yukl, 2013, p. 58). Such planning is often followed up by *organising*, ensuring “efficient organization of the work unit, coordination of activities, and effective utilization of resources” (Yukl, 2013, p. 58). A variety of different behaviours fall under the umbrella of planning, including “making decisions about objectives, priorities, strategies, organization of the work, assignment of responsibilities, scheduling of activities, and allocation of resources among different activities according to their relative importance” (Yukl, 2013, p. 58). These activities tend to be informal, implicit, and highly cognitive, involving information processing, analysis, and decision-making, and are seldom observable in a single discrete episode (Yukl, 2013; Snyder & Glueck, 1980). Planning is more observable as a “prolonged process that occurs over a period of weeks or months” and when “a manager takes action to implement plans by communicating them to others and making specific task assignments” (Yukl, 2013, p. 58).

The intuitive benefits of proper planning and organising for leadership effectiveness is supported by empirical research. Carroll and Gillen (1987) review several studies that demonstrate benefits based on objective and subjective markers of leadership, across different management levels. For instance, Stagner (1969, cited in Carroll & Gillen, 1987) found that the time 109 chief executives spent in organisational planning was related to the firm’s profitability. A General Electric Company study (1957, cited in Carroll & Gillen, 1987) also revealed that foremen with higher production records spent more time in long-range planning and organizing.

### **Clarifying roles and objectives**

Clarifying involves the “communication of plans, policies, and role expectations”, including “defining job responsibilities”, “setting performance goals”, and “assigning specific tasks” (Yukl, 2013, p. 59). Clarifying serves to “guide and coordinate work activity and make sure people know what to do and how to do it” (Yukl, 2013, p. 59), ensuring that followers abide by plans previously made. Clarifying prevents confusion, “misdirected effort and neglect of important responsibilities in favor of less important ones” (Yukl, 2013, p. 59).

Certain contexts call for more clarifying behaviour than others. Clarifying becomes more important when the job is complex and multifaceted, when there is substantial role ambiguity, or when there exists role conflict for members of the work



unit (Yukl, 2013). Less clarifying is required when “the organization has elaborate rules and regulations dictating how the work should be done and subordinates understand them, or if subordinates are highly trained professionals who have the expertise to do their jobs without much direction from superiors” (Yukl, 2013, p. 59).

Empirical research bears out the link between clarifying behaviour and leadership effectiveness (Yukl, 2013). For instance, Kim and Yukl (1995) found that self-reports of clarifying behaviour well predicted the leader’s rate of advancement within the organisation. However, results are not so consistent across other studies. The varying importance of clarifying behaviour with context may account for the inconsistent findings about managerial effectiveness (Yukl, Gordon, & Taber, 2002).

### **Monitoring operations and performance**

Monitoring involves “gathering information about the operations of the manager’s organizational unit, including the progress of the work, the performance of individual subordinates, the quality of products or services, and the success of projects or programs” (Yukl, 2013, p. 61). Leaders may monitor through a variety of different means, including direct observation of work operations, inspecting samples of the work, reviewing the progress of team members, or even orchestrating a mock customer visit to assess service quality (Yukl, 2013). Leaders may choose which form of monitoring to conduct based on the nature of the task and other situational factors (Yukl, 2013).

Monitoring serves to provide information that feeds into other vital managerial behaviours. Monitoring informs proper “planning and problem-solving” (Yukl, 2013, citing Meredith & Mandel, 1985), evaluating subordinate performance, recognising achievements, identifying performance deficiencies, assessing training needs, providing coaching and assistance, and allocating rewards (Yukl, 2013). Insufficient monitoring may lead to problems going undetected and unresolved, such as declining quality of work or employee dissatisfaction (Yukl, 2013).

Clearly some monitoring is required of leaders, but the appropriate degree would depend on the subordinates’ competence and the nature of the work (Yukl, 2013). When subordinates are inexperienced or insecure, when the mistakes have serious consequences, and when the subordinates’ tasks are highly interdependent and require close coordination, monitoring may be especially vital (Yukl, 2013).

However, excessively close monitoring may telegraph distrust to subordinates, undermining subordinate self-confidence and reduce intrinsic motivation (Yukl, 2013).

Empirical research supports the view that monitoring effectiveness depends on context (Yukl, 2013). For example, a study by Amabile, Schatzel, Moneta, and Kramer (2004) indicates that monitoring behaviour was associated with both positive and negative outcomes in different situations. The authors suggest that monitoring of work progress instead of micro-managing of personal activities was favourable, and that constructive monitoring improved subordinate ratings of leader support. However, when the leader “monitors work details too closely, that employee is not only likely to perceive the leader as nonsupportive of independent creativity, but is also likely to feel upset and angry” (Amabile, Schatzel, Moneta, & Kramer, 2004, p. 8). A moderate approach to monitoring is recommended for effective leadership.

**References cited (task-oriented behaviours)**

- Agility Consulting and Training, LLC (2014). Leadership Agility Profile™. Retrieved from <http://agilityconsulting.com/leadership-agility-profile-360-assessment/>
- Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15(1), 5-32.
- Carroll, S. J., & Gillen, D. J. (1987). Are the classical management functions useful in describing managerial work? *The Academy of Management Review*, 12(1), 38-51.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic leadership: Measurement and empirical validity. In *Charismatic leadership in organizations*. (pp. 71-119). Thousand Oaks, CA: SAGE Publications, Inc.
- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37, 1-6.
- General Electric Company (1957). *The effective manufacturing foreman*. Schenectady, NY: General Electric Co.
- Kim, H., & Yukl, G. (1995). Relationships of managerial effectiveness and advancement to self-reported and subordinate-reported leadership behaviors from the multiple-linkage mode. *The Leadership Quarterly*, 6(3), 361-377.
- Meredith, J. R., & Mantel, S. J. (1985). *Project management: A managerial approach*. New York: Wiley.
- Schriesheim, C., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. *Psychological Bulletin*, 81(11), 756-765.
- Snyder, N., & Glueck, W. F. (1980). How managers plan—the analysis of managers' activities. *Long Range Planning*, 13(1), 70-76.
- Stagner, R. (1969) Corporate decision making. *Journal of Applied Psychology*, 53, 1-13
- Stogdill, R. M. (1963). *Manual for the leader behavior description questionnaire - Form XII: An experimental revision*. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Stogdill, R. M., Goode, O. S., & Day, D. R. (1963). The leader behavior of United States senators. *The Journal of Psychology*, 56(1), 3-8.
- Szilagyi, A. D., & Keller, R. T. (1976). A comparative investigation of the supervisory behavior description questionnaire (SBDQ) and the revised leader behavior description questionnaire (LBDQ-form XII). *Academy of Management Journal (Pre-1986)*, 19(4), 642-649.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of managerial practices survey. In K.E. Clark & M.B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

### **Relations-oriented**

*Relations-oriented behaviours* involve concern for relationships in the workplace, including such behaviours as supporting, developing, and recognising and rewarding (Yukl, Gordon, & Taber, 2002). *Consulting* and *empowering* are often categorised as relations-oriented, but will be discussed under *participative behaviour* in this report. The details and exact effects of each relations-oriented behaviour will be discussed separately below. This present overview discusses these relations-oriented behaviours as a whole.

Research suggests that relations-oriented behaviours are vital for leadership, although the findings are not always consistent. Nevertheless, one consistent finding that pops out of the survey research is that relations-oriented behaviours and subordinate satisfaction are positively related (Yukl, 2013).

In survey studies, measures of leadership effectiveness had an inconsistent but generally weak, positive correlation with relations-oriented behaviour (Yukl, 2013).

Yukl (2013) reports that “the weakest results were found in studies with an independent, objective measure of effectiveness such as group performance” (p. 57), as opposed to subjective ratings. This trend across survey studies suggests that relations-oriented behaviour may influence perceptions of effective leadership more than measurable, objective outcomes. Other studies involving experiments, critical incidents, diaries and interviews more consistently substantiate the importance of relations-oriented behaviour, which enables leaders to maintain “cooperative relationships and teamwork” (Yukl, 2013, p. 57). Both task- and relations-oriented behaviours are likely vital in leadership to some extent (Yukl, 2013).

### *Assessment of relations-oriented behaviours*

Three different instruments may be used to assess relations-oriented behaviours in leaders. The Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953) and the Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963) assess relations-oriented behaviour as a whole category, under the Consideration subscales. On the other hand, the Managerial Practices Survey (MPS; Yukl, Wall, & Lepsinger, 1990) includes two separate subscales: Supporting and Mentoring (which assesses supporting and developing behaviours together) and Recognizing and Rewarding. For a more fine-grained examination of specific task-oriented behaviours, the MPS may be recommended.

Schriesheim and Kerr (1974) analysed the reliability and validity of the SBDQ and LBDQ. With regards to reliability, the authors note that “although the internal consistency reliabilities of the scales seem acceptable, test-retest reliability data are sparse” (Schriesheim & Kerr, 1974). With regards to internal consistency, for example, Szilagyi and Keller (1976) report that the split-half reliability scores corrected by the Spearman-Brown formula were high for the SBDQ (.90 for Consideration, .86 for Initiating Structure) and the LBDQ (.89 for Consideration, .87 for Initiation of Structure). Stogdill, Goode, and Day (1963) also report in their study that the internal consistency reliability score for the LBDQ Consideration subscale is .85. However, both scales may also suffer from other problems, including halo effects from the intercorrelations of the subscales, scaling problems from the insufficient number of reflected Structure items, and the possibility that ordinal instead of interval

data is captured (Schriesheim & Kerr, 1974). However, Schriesheim and Kerr (1974) also note that the LBDQ is superior, suffering from less “serious shortcomings that plague the other versions”, having been subjected to more successful construct validation from experimentation, and “does not confound frequency of behavior with magnitude” (p. 764). Furthermore, the phrasing of certain SBDQ items may not be familiar to most readers (e.g. “He ‘rides’ the foreman who makes a mistake.”), which limits the use of the SBDQ.

Yukl, Wall, and Lepsinger (1990) developed and preliminarily validated by the MPS, although the exact results of the validation process are not available online. Nevertheless, Yukl, Gordon, and Taber (2002, citing Yukl, Wall, & Lepsinger, 1990) report that positive correlations exist between each of the relations-oriented behaviours and effective leadership outcomes, based on a review of several relations-oriented behaviour studies. For example, supporting and recognising/rewarding behaviours were positively associated with subordinate satisfaction as mentioned above, and active development of subordinate skills and confidence was associated with leader efficiency (Yukl, Gordon, & Taber, 2002). However, all three types of relations-oriented behaviour were weakly and inconsistently associated with measures of subordinate performance (Yukl, Gordon, & Taber, 2002). These findings partially support the criterion validity of the MPS’ task-oriented behaviours in predicting leadership outcomes, but mostly for subordinate satisfaction.

Consideration subscale of Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953):

	Orthogonal Factor Loading	
	"Consideration"	"Initiating Structure"
"Consideration" Revised Key		
He refuses to give in when people disagree with him.	-.68	.06
*He does personal favors for the foremen under him.	.40	.06
He expresses appreciation when one of us does a good job.	.70	.19
He is easy to understand.	.70	.13
*He demands more than we can do.	-.40	-.08
*He helps his foremen with their personal problems.	.32	.05
*He criticizes his foremen in front of others.	-.49	.03
He stands up for his foremen even though it makes him unpopular.	.54	.08
He insists that everything be done his way.	-.52	-.01
He sees that a foreman is rewarded for a job well done.	.70	.05
He rejects suggestions for changes.	-.62	-.06
*He changes the duties of people under him without first talking it over with them.	-.69	.09
He treats people under him without considering their feelings.	-.72	.41
He tries to keep the foremen under him in good standing with those in higher authority.	.68	.17
He resists changes in ways of doing things.	-.57	.19
*He "rides" the foreman who makes a mistake.	-.61	.37

*He refuses to explain his actions.	-.72	.23
*He acts without consulting his foremen first.	-.73	.01
**He stresses the importance of high morale among those under him.	.73	-.11
He backs up his foremen in their actions.	.62	.16
He is slow to accept new ideas.	-.66	-.06
He treats all his foremen as his equal.	.66	.28
He criticizes a specific act rather than a particular individual.	.63	.14
He is willing to make changes.	.78	.09
He makes those under him feel at ease when talking with him.	.86	.17
He is friendly and can be easily approached.	.82	-.02
He puts suggestions that are made by foremen under him into operation.	.87	.11
He gets the approval of his foremen on important matters before going ahead.	.65	-.02

<sup>1</sup> Items not starred used the format: 1. always; 2. often; 3. occasionally; 4. seldom; 5. never. Items preceded by an asterisk (\*) used the format: 1. often; 2. fairly often; 3. occasionally; 4. once in awhile; 5. very seldom. Items preceded by a double asterisk (\*\*) used the format: 1. a great deal; 2. fairly much; 3. to some degree; 4. comparatively little; 5. not at all.

Consideration subscale of Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963):

**DIRECTIONS:**

- a. **READ** each item carefully.
  - b. **THINK** about how frequently the leader engages in the behavior described by the item.
  - c. **DECIDE** whether he/she (A) Always, (B) Often, (C) Occasionally, (D) Seldom, or (E) Never acts as described by the item.
  - d. **DRAW A CIRCLE** around one of the five letters (A B C D E) following the item to show the answer you selected.
7. Is friendly and approachable  
17. Does little things to make it pleasant to be a member of the group

- 27. Puts suggestions made by the group into operation
  - 37. Treats all group members as his/her equals
  - 47. Gives advance notice of changes
  - 57. Keeps to himself/herself
  - 67. Looks out for the personal welfare of group members
  - 77. Is willing to make changes
  - \*87. Refuses to explain his/her actions
  - \*97. Acts without consulting the group
- (\*reverse coded)

### **Supporting**

Supporting refers to behaviours “that show consideration, acceptance, and concern for the needs and feelings of other people”, which “helps to build and maintain effective interpersonal relationships” (Yukl, 2013, p. 63). Supporting thus constitutes the core component of relations-oriented behaviours. In strengthening such emotional ties, leaders may more easily obtain cooperation in accomplishing organizational goals as well (Yukl, 2013). Followers are also more likely to accept, trust, and put in more effort the leader (Yukl, 2013), and to be more satisfied in the organization, which reduces rates of absenteeism, turnover, alcoholism, and drug abuse (Yukl, 2013, citing Brief, Schuler, & Van Sell, 1981; Ganster, Fusilier, & Mayes, 1986; Kessler, Price, & Wortman, 1985).

Yukl (2013) suggests that forms of supporting such as “showing appreciation, listening to problems and complaints, providing assistance when necessary, expressing confidence in the person, doing things to make the environment more enjoyable, and buffering the person from unnecessary demands by outsiders” may also “increase subordinate self-confidence and reduce the amount of stress in the job” (Yukl, 2013, p. 64). Indeed, evidence strongly indicates that supporting is related to follower satisfaction with the leader (Bass, 1990). Follower performance, on the other hand, only appears to have a weak, inconsistent relationship with supporting behaviour (Yukl, Gordon, & Taber, 2002, citing Fisher & Edwards, 1988; Kim & Yukl, 1995; Yukl, Wall, & Lepsinger, 1990). In accounting for these findings, Yukl, Gordon, and Taber (2002) suggest that “supporting is more likely to be effective when combined with other relevant leadership behaviors” (p. 20).

### **Developing**

Developing refers to practices “used to increase a subordinate’s skills and facilitate job adjustment and career advancement” (Yukl, 2013, p. 65). Such practices include “mentoring, coaching, and providing developmental opportunities” such as workshops, and are usually directed at subordinates, but also at peers, colleagues, and inexperienced superiors (Yukl, 2013, p. 65). A leader develop the target directly, or may delegate developing behaviours to other members of the work unit who are competent and experienced (Yukl, 2013).

Yukl (2013) suggests that developing offers potential benefits for all parties involved, i.e. the leader, the follower, and the organisation as a whole. For example, developing fosters a mutually cooperative relationship between the leader and the follower. The follower may experience “better job adjustment, more skill learning, greater self-confidence, and faster career advancement” (Yukl, 2013, p. 65). The leader can “gain a sense of satisfaction from helping others grow” (Yukl, 2013, p. 65).

The organisation can also benefit from “higher employee commitment, higher performance, and better preparation of people to fill positions of greater responsibility” (Yukl, 2013, p. 65).

Indeed, descriptive research indicates that effective managers take a more active role in developing subordinate skills and confidence (Yukl, Gordon, & Taber, 2002, citing Bradford & Cohen, 1984; McCauley, 1986). However, findings from survey research are inconsistent in suggesting that developing correlates with follower performance (Yukl, Gordon, & Taber, 2002, citing Javidan, 1992; Kim & Yukl, 1995; Yukl, Wall, & Lepsinger, 1990). This inconsistency may reflect the variation of developing effectiveness with context.

### **Recognising and rewarding**

Recognising involves “giving praise and showing appreciation to others for effective performance, significant achievements, and important contributions to other organization” (Yukl, 2013, p. 68). *Rewarding*, a more tangible form of behaviour that similarly seeks to “strengthen desirable behaviour and task commitment” (Yukl, 2013, p. 68), often goes hand in hand with recognising – the two behaviours and their effects are difficult to tease apart (Yukl, Gordon, & Taber, 2002). However, recognition is often more personal, easier to provide, and relatively independent of the organisation’s formal reward system (Yukl, Gordon, & Taber, 2002). Recognising may also be used with peers, superiors, and outsiders, and may take different forms such as praise, awards and recognition ceremonies (Yukl, 2013).

Research evidence bears out the notion that recognising/rewarding benefits organisational goals. Descriptive research suggests that “effective leaders provide extensive praise and recognition to subordinates for their achievements and contributions” (Yukl, Gordon, & Taber, 2002, citing Kouzes & Posner, 1995; Peters & Austin, 1985). Survey studies also indicate that recognising was positively correlated with subordinate satisfaction, but less consistently associated with subordinate performance (Yukl, Gordon, & Taber, 2002, citing Kim & Yukl, 1995; Lowe, Kroeck, & Sivasubramaniam, 1996; Podsakoff & Todor, 1985; Podsakoff, Todor, Grover, & Huber, 1984; Yukl, Wall, & Lepsinger, 1990). Wikoff, Anderson, and Crowell’s (1983) rare field experiment also concluded that supervisor praise significantly increased subordinate performance.

### **References cited (for relations-oriented behaviours)**

- Bradford, D. L., & Cohen, A. R. (1984). *Managing for excellence: The guide to developing high performance organizations*. New York: John Wiley.
- Brief, A. P., Schuler, R. S., & Van Sell, M. (1981). *Managing job stress*. Boston: Little Brown.
- Fisher, B. M., & Edwards, J. E. (1988). Consideration and initiating structure and their relationships with leader effectiveness: A meta-analysis. *Academy of Management Best Papers Proceedings*, 201-205.
- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37, 1-6.
- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology*, 71(1), 102-110.



- Javidan, M. (1992). Managers as leaders: Developing a profile of effective leadership in top management. In K. Clark, M. B. Clark, & D. P. Campbell (Eds.), *Impact of Leadership* (pp. 47-58). Greensboro, NC: Center For Creative Leadership.
- Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology*, 36(1), 531-572.
- Kim, H., & Yukl, G. (1995). Relationships of managerial effectiveness and advancement to self-reported and subordinate-reported leadership behaviors from the multiple-linkage mode. *The Leadership Quarterly*, 6(3), 361-377.
- Kouzes, J. M., & Posner, B. Z. (1995). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco: Jossey-Bass.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7, 385-425.
- McCauley, C. D. (1986). *Developmental experiences in managerial work* (Tech. Rep. No. 26). Greensboro, NC: Center For Creative Leadership.
- Peters, T. J., & Austin, N. (1985). *A passion for excellence: The leadership difference*. New York: Random House.
- Podsakoff, P. M., & Todor, W. D. (1985). Relationships between leader reward and punishment behavior and group processes and productivity. *Journal of Management*, 11, 55-73.
- Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behavior: Fact or fiction? *Organizational Behavior and Human Performance*, 34, 21-63.
- Schriesheim, C., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. *Psychological Bulletin*, 81(11), 756-765.
- Stogdill, R. M. (1963). *Manual for the leader behavior description questionnaire - Form XII: An experimental revision*. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Stogdill, R. M., Goode, O. S., & Day, D. R. (1963). The leader behavior of united states senators. *The Journal of Psychology*, 56(1), 3-8.
- Szilagyi, A. D., & Keller, R. T. (1976). A comparative investigation of the supervisory behavior description questionnaire (SBDQ) and the revised leader behavior description questionnaire (LBDQ-form XII). *Academy of Management Journal (Pre-1986)*, 19(4), 642-649.
- Wikoff, M., Anderson, D. C., & Crowell, C. R. (1983). Behavior management in factory setting: Increasing work efficiency. *Journal of Organizational Behavior Management*, 4, 97-128.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K.E. Clark & M.B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

### **Change-oriented**

Change-oriented behaviour is “primarily concerned with understanding the environment, finding innovative ways to adapt to it, and implementing major changes in strategies, products, or processes” (Yukl, 2013, p. 51). Five different forms of change-oriented behaviour will be discussed here: external monitoring, envisioning change, encouraging innovative thinking, encouraging collective learning, and taking personal risks.

Leaders often have to go beyond the managing of fixed tasks and relationships. Leading change is one of the most important and difficult responsibilities required of managers and administrators (Yukl, 2013). As such, change-oriented behavior is pertinent for leadership, but its importance may be accentuated for higher-level leaders with more room and power for effecting change, and in complex, volatile environments where organisational change is imperative (Yukl, 2013).

### **External monitoring**

Monitoring the external environment and identifying threats and opportunities for the organization is an important activity for executives (Yukl, Gordon, & Taber, 2002). Many business organizations, in particular, must be sensitive to a wide range of information, including customers’ and clients’ concerns, the availability of suppliers and vendors, competitors’ actions, market trends, economic conditions, government policies, and technological developments (Yukl, Gordon, & Taber, 2002). Processing the information gathered from such external monitoring is needed to drive appropriate change for the organisation. Indeed, interpreting events and explaining why change is needed is a key behaviour in theories of change management (Yukl, Gordon, & Taber, 2002, citing Kotter, 1996; Nadler, Shaw, & Walton, 1995).

Field studies suggest that external monitoring (and interpretation of external events) leads to effective leadership. A study of 20 companies found that executives with an accurate perception of industry volatility in markets and technology were associated with greater profitability (Bourgeois, 1985). Another study found that leaders in high-performing companies did more external monitoring (e.g. environmental scanning, consultation with key customers), which revealed opportunities that these leaders were then quicker to exploit (Grinyer, Mayes, & McKiernan, 1990). The importance of external monitoring is likely dependent on the complexity and volatility of the environment in which the organisation operates. For example, Ginter and Duncan (1990, p. 93) suggest that external monitoring is more pertinent “when organizations are large, have diverse product lines, require large investments, face complex and turbulent markets, and experience high competitive threats”.

### *Assessment of external monitoring*

The Monitoring Operations and Environment subscale of the Managerial Practices Survey (MPS; Yukl, Wall, & Lepsinger, 1990) may be used to assess the extent of external monitoring practiced by a leader. However, this subscale takes into account the monitoring of both internal and external factors, which should be studied respectively under task-oriented and change-oriented behaviours. This subscale may

be used to assess both forms of monitoring at the same time, although it may also be separated to assess each individually. Yukl, Wall, and Lepsinger (1990) developed and preliminarily validated by the MPS, although the exact results of the validation process are not available online.

Alternatively, the Sensitivity to the Environment subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) may be used, although this subscale also assesses internal and external monitoring simultaneously. Cronbach's alpha calculations support the internal consistency of the CKS subscales: .86 for strategic vision and articulation, .72 for sensitivity to the environment, .75 for sensitivity to member needs, .85 for personal risk, .81 for unconventional behavior, and .87 for the whole 20-item scale (Conger & Kanungo, 1998). Construct validity for the CKS was substantiated specifically for the construct of charismatic leadership through factor analysis (Conger & Kanungo, 1998).

As a third option, the Monitoring subscale of the Leadership Agility Profile 360 (Agility Consulting and Training LLC, 2014) may be considered as well. The LAP 360, however, is a commercial tool with little validation information available. Similar to the MPS and CKS subscales discussed above, the LAP 360's Monitoring subscale conflates internal and external monitoring as well. For more information on the LAP 360 and the construct of agility assessed, refer to the agility section.

Sensitivity to the Environment subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998):

"6-point 'very characteristic to 'very uncharacteristic' response format"

### **Sensitivity to the Environment (SE)**

**Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives**

**Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grassroots support, etc.) that may stand in the way of achieving organizational objectives**

**Recognizes the limitations of other members of the organization**

**Recognizes the abilities and skills of other members of the organization**

### **Envisioning change**

Envisioning change involves “articulating an inspiring vision of a better future”, which is particularly vital for transformational/charismatic leadership (Yukl, Gordon, & Taber, 2002, p. 23). A vision that is “relevant for follower values and ideals... communicated with enthusiasm and confidence, and... perceived as feasible” would be “more effective in influencing follower commitment to a proposed strategy or change” (Yukl, Gordon, & Taber, 2002, p. 23).

Yukl, Gordon, and Taber (2002) review evidence that envisioning change as a core component of transformational/charismatic leadership is relevant for effective leadership, based on survey field studies (Lowe, Kroeck, & Sivasubramaniam, 1996), laboratory experiments (Howell & Frost, 1989; Kirkpatrick & Locke, 1996), and descriptive studies (e.g. Bennis & Naus, 1985; Kouzes & Posner, 1995). For example, Howell and Frost (1989) found in a laboratory experiment that generally “individuals working under a charismatic leader have high task performance, task adjustment, and adjustment to the leader and to the group” compared to their counterparts under structuring (task-oriented) or considerate (relations-oriented) leaders. Further discussion on transformational/charismatic leadership will be discussed under the Transformational/Charismatic section.

### *Assessment of envisioning change*

The Strategic Vision and Articulation subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) assesses the level of envisioning change in a leader. Cronbach’s alpha calculations support the internal consistency of the CKS subscales: .86 for strategic vision and articulation, .72 for sensitivity to the environment, .75 for sensitivity to member needs, .85 for personal risk, .81 for unconventional behavior, and .87 for the whole 20-item scale (Conger & Kanungo, 1998). Construct validity for the CKS was substantiated specifically for the construct of charismatic leadership through factor analysis (Conger & Kanungo, 1998).

Strategic Vision and Articulation subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998):

“6-point ‘very characteristic’ to ‘very uncharacteristic’ response format”

## **Strategic Vision and Articulation (SVA)**

**Has vision; often brings up ideas about possibilities for the future**

**Provides inspiring strategic and organizational goals**

**Consistently generates new ideas for the future of the organization**

**Entrepreneurial; seizes new opportunities in order to achieve goals**

**Readily recognizes new environmental opportunities (favorable physical and social conditions) that may facilitate achievement of organizational objectives**

**Inspirational; able to motivate by articulating effectively the importance of what organizational members are doing**

**Exciting public speaker**

### **Encouraging innovative thinking**

Encouraging others to think innovatively about issues in the organisation is a key component of transformational leadership (Yukl, Gordon, & Taber, 2002).

Specifically, the Intellectual Stimulation subscale of the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1990) may be used to assess the extent to which a leader encourages innovative thinking. Intellectual stimulation, defined as arousing “followers to think in new ways and emphasizes problem solving and the use of reasoning before taking action” is a nearly synonymous construct to encouraging innovative thinking in the workplace. In encouraging followers to invent new ways to tackle work-related problems, innovative thinking can better fulfill organisational goals. Further discussion on transformational/charismatic leadership and on the assessment of Intellectual Stimulation will be discussed under the Transformational/Charismatic section.

Research indicates several positive effects of intellectual stimulation. For example, a meta-analysis of transformational leadership studies by Lowe, Kroeck, and Sivasubramaniam (1996) found that leaders who encouraged intellectual stimulation fostered the perception of effectiveness among subordinates and even improved independent performance measures such as productivity. Even more interestingly, the power of encouraging intellectual stimulation extended across lower-level and higher-level leaders (Lowe, Kroeck, & Sivasubramaniam, 1996). Lowe, Kroeck, and Sivasubramaniam (1996) also found that encouraging intellectual stimulation was more associated with performance in public than private organisations, suggesting that such stimulation was vital in surmounting the more “bureaucratic framework” (p. 415) of public organisations.

### **Encouraging collective learning**

Collective learning involves “learning about effective processes and strategies” which can be shared at “individual, group and organizational levels” (Yukl, 2013, p. 414). To encourage such learning, the leader may import best practices from other parts of the organisation, encourage internal development of new knowledge, provide appropriate recognition/rewards for entrepreneurial activities, and encourage diffusion of new knowledge in the organisation (Yukl, 2013). Collective learning often goes hand in hand with innovation: by expanding the team’s knowledge base, fresher ideas are more likely to develop. Yukl (2013) noted that top executives especially have the power to influence collective learning and innovation in an organisation (citing Damanpour, 1991; Jung, Chow, & Wu, 2003; Popper & Lipshitz, 1998).

### *Assessment of encouraging collective learning*

Currently, there does not appear to be any validated instrument for assessing a leader’s level of collective learning encouragement. However, insofar as the objective of collective learning is to inculcate innovative thinking or intellectual stimulation, the assessment instruments for those constructs may be considered instead.

### **Taking personal risks**

Personal risk-taking may not prima facie appear to be a vital component of change-oriented behaviour. However, as Yukl, Gordon, and Taber (2002) note, “undertaking major change is risky, especially when the need for change is not yet obvious to most people and there is a lot vested interest in maintaining the status quo” (p. 23). The risks of pushing for such major change against strong resistance include “loss of job, diminished reputation, derailed career, and personal rejection by colleagues” (p. 23). Thus, the willingness to take personal risks for the ultimate benefit of the organisation has been examined as an important factor in effecting change.

Indeed, Conger and Kanungo (1998) found that the Personal Risk subscale of their Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) was correlated with the subordinates’ attribution of charisma to the leader. Other empirical research also provides evidence that personal risk-taking and sacrifice are relevant for effective leadership by combat officers (Yukl, Gordon, & Taber, 2002, citing Frost, Fiedler, & Anderson, 1983; Yukl & Van Fleet, 1982). However, the effect of personal risk-taking

on specifically the successful implementation of change requires further research (Yukl, Gordon, & Taber, 2002).

*Assessment of taking personal risks*

The Personal Risk subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) assesses the level of personal risk-taking for the organisation's benefit. Cronbach's alpha calculations support the internal consistency of the CKS subscales: .86 for strategic vision and articulation, .72 for sensitivity to the environment, .75 for sensitivity to member needs, .85 for personal risk, .81 for unconventional behavior, and .87 for the whole 20-item scale (Conger & Kanungo, 1998). Construct validity for the CKS was substantiated specifically for the construct of charismatic leadership through factor analysis (Conger & Kanungo, 1998).

Personal Risk subscale of the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998):

"6-points 'very characteristic' to 'very uncharacteristic' response format"

## **Personal Risk (PR)**

**In pursuing organizational objectives,  
engages in activities involving  
considerable personal risk**

**Takes high personal risks for the sake  
of the organization**

**Often incurs high personal cost for the  
good of the organization**

### **References cited (*change-oriented behaviours*)**

- Agility Consulting and Training, LLC (2014). Leadership Agility Profile™. Retrieved from <http://agilityconsulting.com/leadership-agility-profile-360-assessment/>
- Bass, B. M., & Avolio, B. J. (1990) Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14, 21-27.
- Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Bourgeois, L. J. (1985). Strategic goals, perceived uncertainty, and economic performance in volatile environments. *Academy of Management Journal*, 3, 548-573.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic leadership: Measurement and empirical validity. In *Charismatic leadership in organizations*. (pp. 71-119). Thousand Oaks, CA: SAGE Publications, Inc.

- Damanpour, F. (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34, 555-590.
- Frost, D. E., Fiedler, F. E., & Anderson, J. W. (1983). The role of personal risk taking in effective leadership. *Human Relations*, 36, 185-202.
- Ginter, P. M., & Duncan, W. J. (1990). Macroenvironmental analysis for strategic management. *Long Range Planning*, 23, 91-100.
- Grinyer, P. H., Mayes, D., & McKiernan, P. (1990). The sharpbenders: Achieving a sustained improvement in performance. *Long Range Planning*, 23, 116-125.
- Howell, J. M., & Frost, P. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes*, 43, 243 -269.
- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadership Quarterly*, 14, 525-544.
- Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81, 36-51.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Kouzes, J. M., & Posner, B. Z. (1995). *The leadership challenge: How to get extraordinary things done in organizations*. San Francisco: Jossey-Bass.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7, 385-425.
- Nadler, D. A., Shaw, R. B., Walton, A. E. (1995). *Discontinuous change: Leading organizational transformation*. San Francisco: Jossey-Bass.
- Popper, M., & Lipshitz, R. (1998). Organizational learning mechanisms: A structural and cultural approach to organizational learning. *Journal of Applied Behavioral Science*, 34(2), 161-179.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32.
- Yukl, G., & Van Fleet, D. (1982). Cross-situational, multi-method research on military leader effectiveness. *Organizational Behavior and Human Performance*, 30, 87-108.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K.E. Clark & M.B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

### **External-oriented**

While much of a leader's behaviour is justifiably directed towards the organisation's internal affairs, attention must be paid to the external environment as well. Three broad categories of external-oriented behaviour are discussed here: external monitoring, networking, and representing. External monitoring has been covered in a previous section as a changed-oriented behaviour, being directed mainly at guiding organisational change. For information about the construct and assessment of



external monitoring, refer to the section under Change-oriented.

Less research has been conducted on the benefits of external-oriented behaviour in leaders as compared to task- or relations-oriented behaviour. However, external-oriented behaviours may be more pertinent for leaders whose organisations exist within a volatile environment, where connections with external parties must be maintained.

### **Networking**

Networking involves “building and maintaining favourable relationships with peers, superiors, and outsiders who can provide desired information, resources, and political support” (Yukl, 2013, p. 53). Examples of networking behaviour include “attending professional conferences and ceremonies, joining social networks, socializing informally, doing favors, and using impression management tactics such as ingratiation” (Yukl, 2013, p. 53).

Evidence supports the view that networking helps to maintain links with the external environment, thus helping to attain organisational goals. For example, a study by Johansen and LeRoux (2013) on nonprofit organisations found that political networking increased advocacy effectiveness (measured through self-reported “perceptions of effectiveness with regard to raising public awareness of the organization’s cause and influencing local government’s priorities or agenda” [p. 358]), while community networking increased organisational effectiveness (measured through self-reported “perceptions of effectiveness with regard to making strategic decisions, increasing organizational funding, meeting funders’ performance expectations, and responding timely to client complaints” [p. 358]). Lenz (2013) recommends that networking become a habit for leaders in “building and sustaining a range of relationships within and outside the organization” (p. 364).

#### *Assessment of networking*

The Networking subscale of the Managerial Practices Survey (MPS; Yukl, Wall, & Lepsinger, 1990) may be used to assess a leader’s level of networking. Yukl, Wall, and Lepsinger (1990) developed and preliminarily validated by the MPS, although the exact results of the validation process are not available online.

### **Representing**

Representing the organisation to external parties includes such behaviours as “lobbying for resources and assistance from superiors, promoting and defending the reputation of the leader’s group or organization, negotiating agreements with peers and outsiders such as clients and suppliers, and using political tactics to influence decisions made by superiors or governmental agencies” (Yukl, 2013, p. 53). Although empirical studies about external representation is lacking, representing may be more pertinent for organisations whose support by external parties must be perpetually sustained, or where external perceptions of the organisation are particularly important.

*Assessment of representing*

The Representation subscale of the Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963) may be used to assess a leader's level of organisational representation to external parties, but does not account for specific forms of representation such as resources lobbying. Schriesheim and Kerr (1974) analysed the reliability and validity of the LBDQ in comparison with other questionnaires including the Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953). With regards to reliability, the authors note that "although the internal consistency reliabilities of the scales seem acceptable, test-retest reliability data are sparse" (Schriesheim & Kerr, 1974). For instance, Stogdill, Goode, and Day (1963) report that the internal consistency reliability coefficient of the LBDQ Representation subscale is .80. Both the LBDQ and the SBDQ may also suffer from other problems, including halo effects from the intercorrelations of the subscales, scaling problems from the insufficient number of reflected Structure items, and the possibility that ordinal instead of interval data is captured (Schriesheim & Kerr, 1974). However, Schriesheim and Kerr (1974) also note that the LBDQ is superior, suffering from less "serious shortcomings that plague the other versions", having been subjected to more successful construct validation from experimentation, and "does not confound frequency of behavior with magnitude" (p. 764).

Representation subscale of Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963):

DIRECTIONS:

- a. READ each item carefully.
- b. THINK about how frequently the leader engages in the behavior described by the item.
- c. DECIDE whether he/she (A) Always, (B) Often, (C) Occasionally, (D) Seldom, or (E) Never acts as described by the item.
- d. DRAW A CIRCLE around one of the five letters (A B C D E) following the item to show the answer you selected.
  1. Acts as the spokesperson of the group
  11. Publicizes the activities of the group
  21. Speaks as a representative of the group
  31. Speaks for the group when visitors are present
  41. Represents the group at outside meetings

**References cited (*external-oriented behaviours*)**

- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37, 1-6.
- Johansen, M., & LeRoux, K. (2013). Managerial networking in nonprofit organizations: The impact of networking on organizational and advocacy effectiveness. *Public Administration Review*, 73(2), 355-363.
- Lenz, T. (2013). Networking as a leadership habit. *Public Administration Review*, 73(2), 364-365.

- Schriesheim, C., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. *Psychological Bulletin*, 81(11), 756-765.
- Stogdill, R. M. (1963). *Manual for the leader behavior description questionnaire - Form XII: An experimental revision*. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Stogdill, R. M., Goode, O. S., & Day, D. R. (1963). The leader behavior of united states senators. *The Journal of Psychology*, 56(1), 3-8.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K.E. Clark & M.B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

### **Participative**

Participative leadership involves “the use of various *decision procedures* that allow other people some influence over the leader’s decisions” (Yukl, 2013, p. 106). According to Yukl (2013), four such decision procedures may be ordered along a continuum from *no influence by others* to *high influence by others*:

- *Autocratic Decision*

The manager makes a decision alone without asking for the opinions or suggestions of other people, and these people have no direct influence on the decision; there is no participation.

- *Consultation*

The manager asks other people for their opinions and ideas and then makes the decision alone after seriously considering their suggestions and concerns.

- *Joint Decision*

The manager meets with others to discuss the decision problem and make a decision together; the manager has no more influence over the final decision than any other participant.

- *Delegation*

The manager gives an individual or group the authority and responsibility for making a decision; the manager usually specifies limits within which the final choice must fall, and prior approval may or may not be required before the decision can be implemented. (p. 106)

Yukl (2013) also discusses four potential benefits that can arise out of participative leadership: high decision quality, high decision acceptance, high participant satisfaction, and participant development. Participation may improve decision quality when the “participants have information and knowledge lacked by the leader and are willing to cooperate in finding a good solution to a decision problem” (p. 108). Participation may also cause the participants to accept and identify more deeply with the decision, leading to a greater sense of ownership and motivation to implement the decision successfully. Furthermore, participants may feel like they have a “voice” in

the decision procedure, regardless of their actual influence over the final decision, leading to greater satisfaction. But as Yukl (2013) warns, “absence of real influence... may not result in strong commitment to implement the decision” and “the process may reduce rather than increase satisfaction if the participants perceive that the leader is attempting to manipulate them into supporting an undesirable decision” (p. 108). Lastly, participants may develop skill and confidence through complex decision-making, dependent on their extent of participation and coaching received.

Empirical research has generally not found a strong, consistent relationship between participative leadership and the purported benefits, although a few studies did reveal highly positive results. This inconsistency may result from the high variation of situational factors across studies. For example, Bragg and Andrews (1973) found from a quasi-experimental study that participative leadership relatively and significantly improved worker attitudes, productivity, and attendance rates in a hospital laundry department. Neither worker nor supervisor wished to return to the old autocratic style of management after three years of participative leadership. The introduction of participative leadership in the hospital’s medical records section also “resulted in the elimination of grievances and a sharp reduction in turnover” (Yukl, 2013, p. 110, citing Bragg & Andrews, 1973). However, the introduction of a similar participation program in the nursing group met with far less success, owing to unfavourable factors such as “lack of support by the head nurse and resistance by administrative medical personnel” (Yukl, 2013, p. 110, citing Bragg & Andrews, 1973).

Yukl (2013) surveyed several literatures reviews and meta-analyses of quantitative research on the effects of participative leadership, which similarly indicated a lack of consistent strong results (citing Cotton et al., 1988; Leana, Locke, & Schweiger, 1990; Miller & Monge, 1986; Sagie & Koslowsky, 2000; Spector, 1986; Wagner & Gooding, 1987). Survey studies in this area tested the generic hypothesis that “more is better when it comes to participation”, finding generally positive effects from subordinates’ responses, but weaker, less consistent results from independent measures of outcomes (Yukl, 2013, p. 110). Laboratory experiments failed to demonstrate significant results for the effectiveness of participative leadership. And while most field experiments and quasi-experiments showed positive results for new participation programmes (e.g. Bragg & Andrews, 1973 above), these studies are often confounded by other types of interventions that accompanied the participation programme, complicating the interpretation of the results. Descriptive studies mostly support the benefits of participative leadership, finding that effective managers consulted with and delegated decision-making to subordinates substantially, in order to empower them and instill a sense of ownership (Yukl, 2013, citing Bradford & Cohen, 1984; Kanter, 1983; Kouzes & Posner, 1987; Peters & Austin, 1985; Peters & Waterman, 1982). Overall, the effectiveness of participative leadership is only inconsistently and weakly supported by the current empirical research. This inconsistency may be due

to the dependence of such effectiveness on situational variables, which have not been extensively explored thus far (Yukl, 2013).

Vroom and Yetton (1973, cited in Vroom & Jago, 1978; Yukl, 2013) developed a theoretical model that linked the efficacy of different decision procedures to situational factors. This *normative decision model* is based on five different decision procedures described in the Assessment section below, “including two varieties of *autocratic* decision (A-I and A-II), two varieties of *consultation* (C-I and C-II), and one variety of joint decision making by the leader and subordinates as a *group* (G-II)” (Yukl, 2013, emphases mine). According to the normative decision model, the level of subordinate acceptance and quality of the decision depends on decision procedure chosen by the leader, and moderated by the situational variables, including the subordinates’ relevant knowledge and the subordinates’ concern for task goals (Yukl, 2013). Subsequently, the decision quality and acceptance jointly determine how the decision affects the work unit’s performance (Yukl, 2013). The list of decision rules below guides the choice of decision procedure based on situational variables, the importance of decision quality, and the importance subordinate acceptance of the decision:

1. When the decision is important and subordinates possess relevant information lacked by the leader, an autocratic decision (A-I, A-II) is not appropriate because an important decision would be made without all of the relevant, available information.
2. When the decision quality is important and subordinates do not share the leader’s concern for task goals, a group decision (G-II) is not appropriate because these procedures would give too much influence over an important decision to uncooperative or even hostile people.
3. When decision quality is important, the decision problem is unstructured, and the leader does not possess the necessary information and expertise to make a good decision, the decision should be made by interaction among the people who have the relevant information (C-II, G-II).
4. When decision acceptance is important and subordinates are unlikely to accept an autocratic decision, an autocratic decision (A-I, A-II) is not appropriate because the decision may not be implemented effectively.
5. When decision acceptance is important and subordinates are likely to disagree among themselves about the best solution to an important problem, autocratic procedures (A-I, A-II) and individual consultation (C-I) are not appropriate because they do not provide the opportunity to resolve differences through discussion and negotiation among subordinates and between subordinates and the leader.
6. When decision quality is not important but acceptance is important and unlikely to result from an autocratic decision, the only appropriate procedure is a group decision (G-II) because acceptance is maximized without risking quality.

7. When decision acceptance is important and not likely to result from an autocratic decision, and subordinates share the leader’s task objectives, subordinates should be given equal partnership in the decision process Q

While the inclusion of situational variables allows for a more fine-grained examination of participative leadership, the complexity of the model may make it difficult for leaders to apply (Yukl, 2013). To resolve this complexity, Yukl (1990, cited in Yukl, 2013) developed a simplified set of rules based on the normative decision model, recommending the appropriate decision procedure based on the importance of subordinate acceptance and quality of the decision:

		Subordinate acceptance of decision	
		Not important / Assured with autocratic decision	Important / Not assured with autocratic decision
<b>Decision quality</b>	Not important	Autocratic	Group
	Important, but leader has sufficient information; members share leader’s goals	Autocratic	Group
	Important, but leader has sufficient information; members do not share leader’s goals	Autocratic	Consultation
	Important, but leader lacks essential information; members share leader’s goals	Consultation	Group
	Important, but leader lacks essential information; members do not share leader’s goals	Consultation	Consultation

*Assessment of participative behaviour*

No validated instrument appears to sensitively assess participative leadership. The Tolerance of Freedom subscale of the Leadership Behavior Description Questionnaire Form XII (LBDQ; Stogdill, 1963) measures participative leadership as rated by subordinates, but appears to mostly assess higher levels of subordinate participation (i.e. delegation), running the risk of leaving out lower levels of participation (i.e. consultation). On the other hand, the Consulting and Delegating subscale of the Managerial Practices Survey (MPS; Yukl, Wall, & Lepsinger, 1990) assesses the entire spectrum of participative leadership conflated into a single construct. This subscale might be separated into distinct decision procedures to enable a more fine-grained assessment of the leader’s participative behaviours.

Schriesheim and Kerr (1974) analysed the reliability and validity of the LBDQ in comparison with other questionnaires including the Supervisory Behavior Description Questionnaire (SBDQ; Fleishman, 1953). With regards to reliability, the authors note

that “although the internal consistency reliabilities of the scales seem acceptable, test-retest reliability data are sparse” (Schriesheim & Kerr, 1974). For instance, Stogdill, Goode, and Day (1963) report that the internal consistency reliability coefficient of the LBDQ Tolerance of Freedom subscale is .64. Both the LBDQ and the SBDQ may also suffer from other problems, including halo effects from the intercorrelations of the subscales, scaling problems from the insufficient number of reflected Structure items, and the possibility that ordinal instead of interval data is captured (Schriesheim & Kerr, 1974). However, Schriesheim and Kerr (1974) also note that the LBDQ is superior, suffering from less “serious shortcomings that plague the other versions”, having been subjected to more successful construct validation from experimentation, and “does not confound frequency of behavior with magnitude” (p. 764). On the other hand, the MPS was developed and preliminarily validated by Yukl, Wall, and Lepsinger (1990), although the exact results of the validation process are not available online.

As mentioned above, Vroom and Yetton’s normative decision model (1973) lists out five different procedures that map to different varieties of autocratic decision-making, consultation, and joint decision-making. Although not officially developed as a scale, the descriptions of the decision procedures lend readily to scale development, both for self- and observer-ratings. Vroom and Jago (1978) demonstrated the model’s concurrent validity, based on correlations between managers’ self-reported participative behaviours and outcomes such as the final solution’s technical quality, overall effectiveness, and especially “subordinate acceptance of or commitment to decisions” (p. 151). In the same way, Yukl’s theoretical taxonomy (2013) of the four decision procedures (autocratic decision-making, consultation, joint decision-making, and delegation) may be developed into an assessment instrument as well, if future research evidence supports this taxonomy.

Initiation of Structure subscale of Leadership Behavior Description  
Questionnaire Form XII (LBDQ; Stogdill, 1963):

**DIRECTIONS:**

- a. **READ** each item carefully.
  - b. **THINK** about how frequently the leader engages in the behavior described by the item.
  - c. **DECIDE** whether he/she (A) Always, (B) Often, (C) Occasionally, (D) Seldom, or (E) Never acts as described by the item.
  - d. **DRAW A CIRCLE** around one of the five letters (A B C D E) following the item to show the answer you selected.
5. Allows the members complete freedom in their work  
15. Permits the members to use their own judgment in solving problems

- 25. Encourages initiative in the group members
  - 35. Lets the members do their work the way they think best
  - 45. Assigns a task, then lets the members handle it
  - 55. Turns the members loose on a job, and lets them go to it
  - \*65. Is reluctant to allow the members any freedom of action
  - 75. Allows the group a high degree of initiative
  - 85. Trusts members to exercise good judgment.
  - 95. Permits the group to set its own pace.
- (\* reverse coded)

Vroom & Yetton's decision procedures (1973, cited in Vroom & Jago, 1978):

---

AI	You solve the problem or make the decision yourself using the information available to you at the present time.
AII	You obtain any necessary information from subordinates, then decide on a solution to the problem yourself. You may or may not tell subordinates the purpose of your questions or give information about the problem or decision you are working on. The input provided by them is clearly in response to your request for specific information. They do not play a role in the definition of the problem or in generating or evaluating alternative solutions.
CI	You share the problem with the relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then you make the decision. This decision may or may not reflect your subordinates' influence.
CII	You share the problem with your subordinates in a group meeting. In this meeting you obtain their ideas and suggestions. Then, you make the decision, which may or may not reflect your subordinates' influence.
GII	You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of chairman, coordinating the discussion, keeping it focused on the problem, and making sure that the critical issues are discussed. You can provide the group with information or ideas that you have but you do not try to "press" them to adopt "your" solution and are willing to accept and implement any solution that has the support of the entire group.

---

**References cited (*participative behaviour*)**

- Bradford, D. L., & Cohen, A. R. (1984). *Managing for excellence: The guide to developing high performance organizations*. New York: John Wiley.
- Bragg, J., & Andrews, I. R. (1973). Participative decision making: An experimental study in a hospital. *Journal of Applied Behavioral Science*, 9, 727-735.
- Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R.



- (1988). Employee participation: Diverse forms and different outcomes. *Academy of Management Review*, 13, 8-22.
- Fleishman, E. A. (1953). The description of supervisory behavior. *Journal of Applied Psychology*, 37, 1-6.
- Kanter, R. M. (1983). *The change masters*. New York: Simon & Schuster.
- Kouzes, J. M., & Posner, B. Z. (1993). *Credibility: How leaders gain and lose it, why people demand it*. San Francisco: Jossey-Bass.
- Leana, C. R., Locke, E. A., & Schweiger, D. M. (1990). Fact and fiction in analyzing research on participative decision making: A critique of Cotton, Vollrath, Froggatt, Lengnick-Hall, and Jennings. *Academy of Management Review*, 15(1), 137-146.
- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29(4), 727-753.
- Peters, T. J., & Austin, N. (1985). *A passion for excellence: The leadership difference*. New York: Random House.
- Peters, T. J., & Waterman, R. H., Jr. (1982). *In search of excellence: Lessons from America's best-run companies*. New York: Harper & Row.
- Sagie, A., & Koslowsky, M. (2000). *Participation and empowerment in organizations*. Thousand Oaks, CA: Sage.
- Schriesheim, C., & Kerr, S. (1974). Psychometric properties of the Ohio State leadership scales. *Psychological Bulletin*, 81(11), 756-765.
- Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39(11), 1005-1016.
- Stogdill, R. M. (1963). *Manual for the leader behavior description questionnaire - Form XII: An experimental revision*. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Stogdill, R. M., Goode, O. S., & Day, D. R. (1963). The leader behavior of United States senators. *The Journal of Psychology*, 56(1), 3-8.
- Vroom, V. H., & Jago, A. G. (1978). On the validity of the Vroom-Yetton model. *Journal of Applied Psychology*, 63(2), 151-162.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision making*. Pittsburgh: University of Pittsburgh Press.
- Wagner, J. A., & Gooding, R. Z. (1987). Shared influence and organizational behavior: A meta-analysis of situational variables expected to moderate participation-outcome relationships. *Academy of Management Journal*, 30(3), 524-541.
- Yukl, G. (1990). *Skills for managers and leaders*. Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K.E. Clark & M.B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

### **Transformational/Charismatic**

Theories of transformational leadership and of charismatic leadership seek to explain the emotional and symbolic aspects of leadership, communicated through an inspiring vision (Yukl, 2013). There is no consensus on what exactly constitutes a transformational or a charismatic leadership process. And although some theorists maintain that these two leadership processes are distinct but overlapping, other theorists treat the two as essentially equivalent (Yukl, 2013). In this section, we will discuss the theoretical conceptions and assessment of transformational/charismatic leadership separately. However, in the research literature about the effects on leadership outcomes, it is often unclear whether transformational or charismatic processes are specifically explored (Yukl, 2013). Hence, the two processes will be conflated in examining the research findings. For all intents and purposes, the vast similarities between transformational and charismatic processes allow us to study them as one construct here: transformational/charismatic leadership.

Charismatic leadership, as conceived in Conger and Kanungo's attribution model (1998), consists of five components: strategic vision and articulation, sensitivity to the environment, sensitivity of member needs, personal risk-taking, and engaging in unconventional behaviour. Followers attribute such qualities and behaviours to charismatic leaders, which may be assessed through observer ratings. Other self-concept theories of charismatic leadership tend to incorporate similar attributes, but include other non-attributional factors such as social identification with the organisation (Yukl, 2013, citing Shamir, House, & Arthur, 1993). In assessing the effectiveness attributed to a particular leader, however, such factors may not lend as readily to assessment, and still require further validation.

Transformational leadership, according to Burns (1978), is contrasted with transactional leadership. While the former appeals personally to followers to effect change, the latter "motivates followers by appealing to their self-interest and exchanging benefits" (Yukl, 2013, p. 321). In light of this contrast, Bass (1996) highlights specific components of transformational and transactional leadership behaviours. Transformational leadership consists of four main components: idealised influence ("a vision and sense of mission" that gains "respect, trust, and confidence; and... strong individual identification from followers"), individual consideration (for "the needs and capabilities of followers"), intellectual stimulation (with regards to innovation, creativity, and re-examining assumptions), and inspirational motivation (Bass & Avolio, 1990). Transactional leadership or passive leadership, on the other hand, are concerned more with contingent rewarding, managing followers only when exceptions to the norm arise, or a laissez-faire approach (Bass & Avolio, 1990).

As we can observe, certain components of charismatic and transformational leadership overlap considerably. For instance, Conger and Kanungo's (1998) proposed component of *strategic vision and articulation* parallels Bass's (1996) *idealised influence* and *inspirational motivation*. Conger and Kanungo's (1998) *unconventional behaviour* may also encompass Bass's (1996) *intellectual stimulation*, although the latter is more specifically tied to such ends as creativity and innovation. While an examination of both theories in concert may cover more important attributes than any one alone, a clearer benefit of Bass' transformational

leadership theory (1996) seems to be that transactional leadership serves as a useful contrast against which transformational/charismatic leadership may be compared.

Empirical research modestly supports the effect of transformational/charismatic leadership on leadership outcomes. Meta-analyses of survey studies found a significant positive relationship between composite ratings of transformational/charismatic leadership and measures of leadership effectiveness (Yukl, 2013, citing DeGroot, Kiker, & Cross, 2000; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996; Wang, Oh, Courtright, & Colbert, 2011). Measures of subordinate satisfaction and self-rated effort had stronger relationships with transformational/charismatic ratings than did independent criteria of effectiveness, such as ratings of leaders by supervisors or objective performance measures of the work unit (Yukl, 2013).

Laboratory and field experiments tended to demonstrate positive outcomes for transformational/charismatic leadership as well, in terms of both subordinate satisfaction and unit performance (Yukl, 2013). Intensive case studies, on the other hand, reveal a more complicated picture of transformational/charismatic leadership: that the effectiveness of these processes depends greatly on situational factors (Yukl, 2013). In particular, a study by Roberts (1985) found that a perceived crisis can help to heighten a leader's attribution of charismatic leadership when competently dealing with the situation. A recent meta-analysis of leadership studies by Do and Minbashian (2014) also reveals a strong correlation of  $r = .61$  between transformational/charismatic behaviours and leadership effectiveness, as measured by observer ratings, attesting to the power of transformational/charismatic leadership.

#### *Assessment of transformational/charismatic behaviour*

The Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) may be used to assess charismatic leadership. Cronbach's alpha calculations support the internal consistency of the CKS subscales: .86 for strategic vision and articulation, .72 for sensitivity to the environment, .75 for sensitivity to member needs, .85 for personal risk, .81 for unconventional behavior, and .87 for the whole 20-item scale (Conger & Kanungo, 1998). Construct validity for the CKS was substantiated specifically for the construct of charismatic leadership through factor analysis (Conger & Kanungo, 1998).

The Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1990) can also be used to assess transformational leadership. Antonakis, Avolio, and Sivasubramaniam (2003) applied confirmatory factor analysis to the MLQ and supported its construct validity. High internal consistency was also reported for the MLQ (Antonakis, Anotnio, & Subramaniam, 2003, citing Avolio, Bass, & Jung, 1995). However, unlike the CKS, the MLQ is not available freely in its entirety.

Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998):

"6-point 'very characteristic' to 'very uncharacteristic' response format"

<b>Strategic Vision and Articulation (SVA)</b>
<ul style="list-style-type: none"><li>• 1. Provides inspiring strategic and organizational goals.</li><li>• 2. Inspirational; able to motivate by articulating effectively the importance of what organizational members are doing.</li><li>• 3. Consistently generates new ideas for the future of the organization.</li><li>• 4. Exciting public speaker.</li><li>• 5. Has vision; often brings up ideas about possibilities for the future.</li><li>• 6. Entrepreneurial; seizes new opportunities in order to achieve goals.</li><li>• 7. Readily recognizes new environmental opportunities (favorable physical and social conditions) that may facilitate achievement of organizational objectives.</li></ul>
<b>Sensitivity to the Environment (SE)</b>
<ul style="list-style-type: none"><li>• 8. Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives.</li><li>• 9. Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grassroots support, etc.) that may stand in the way of achieving organizational objectives.</li><li>• 10. Recognizes the abilities and skills of other members of the organization.</li><li>• 11. Recognizes the limitations of other members of the organization.</li></ul>
<b>Sensitivity to Member Needs (SMN)</b>
<ul style="list-style-type: none"><li>• 12. Influences others by developing mutual liking and respect.</li><li>• 13. Shows sensitivity for the needs and feelings of the other members in the organization.</li><li>• 14. Often expresses personal concern for the needs and feelings of other members in the organization.</li></ul>
<b>Personal Risk (PR)</b>
<ul style="list-style-type: none"><li>• 15. Takes high personal risks for the sake of the organization.</li><li>• 16. Often incurs high personal cost for the good of the organization.</li><li>• 17. In pursuing organizational objectives, engages in activities involving considerable personal risk.</li></ul>
<b>Unconventional Behavior (UB)</b>
<ul style="list-style-type: none"><li>• 18. Engages in unconventional behavior in order to achieve organizational goals.</li><li>• 19. Uses nontraditional means to achieve organizational goals.</li><li>• 20. Often exhibits very unique behavior that surprises other members of the organization.</li></ul>

**References cited** (*transformational/charismatic behaviour*)

- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the multifactor leadership questionnaire. *The Leadership Quarterly*, 14(3), 261-295.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1995). *MLQ Multifactor Leadership Questionnaire: Technical report*. Redwood City, CA: Mindgarden.
- Bass, B. M. (1996). *A new paradigm of leadership: An inquiry into transformational leadership*. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bass, B. M., & Avolio, B. J. (1990) Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14, 21-27.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic leadership: Measurement and empirical validity. In *Charismatic leadership in organizations*. (pp. 71-119). Thousand Oaks, CA: SAGE Publications, Inc.
- DeGroot, T., Kiker, D. S., & Cross, T. C. (2000). A meta-analysis to review organizational outcomes related to charismatic leadership. *Canadian Journal of Administrative Sciences*, 17(4), 356-371.
- Do, M. H., & Minbashian, A. (2014). A meta-analytic examination of the effects of the agentic and affiliative aspects of extraversion on leadership outcomes. *The Leadership Quarterly*, 25(5), 1040-1053.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755-768.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7, 385-425.
- Roberts, N. C. (1985). Transforming leadership: A process of collective action. *Human Relations*, 38, 1023-1046.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-based theory. *Organization Science*, 4, 1-17.
- Wang, G., Oh, I., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, 36, 223-270.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson

**Leader-member exchange**

A leader-member exchange (LMX) refers to a dyadic relationship between a leader and a subordinate involving mutually beneficial exchanges, where the leader and subordinate jointly define the subordinate's roles (Dansereau, Graen, & Haga, 1975). High-exchange relationships are characterised by personal compatibility, subordinate competence and dependability, increasing mutual dependence, loyalty, and support (Yukl, 2013). The leaders provides desirable outcomes to the subordinate, such as "assignment to interesting and desirable tasks, delegation of greater responsibility

and authority, more sharing of information, involvement in making some of the leader's decisions, tangible rewards such as a pay increase, special benefits (e.g. better work schedule, bigger office), personal support and approval, and facilitation of the subordinate's career" (Yukl, 2013, p. 222). In exchange, the subordinate "is usually expected to work harder, to be more committed to task objectives, to be loyal to the leader, and to carry out additional responsibilities" (Yukl, 2013, p. 222). Although it is common for leaders to develop high-exchange relationships with only a handful of subordinates, a leader may foster high-exchange relationships with most – if not all – of his subordinates (Yukl, 2013).

LMX is closely related to relations-oriented leadership, in that the leader supports, empowers, and recognises the follower for his/her work. However, the notion of a reciprocal exchange is central to LMX theories, where the leader or the organization derives benefits as a result of such relations-oriented behaviours. Also, a crucial point highlighted by LMX theories is that the leader may not have the same quality of high-exchange relationships with every single follower. In assessing the LMX quality in each leader-follower dyad, one may discern low-exchange relationships that need to be nurtured.

Empirical research bears out the notion that high-quality LMX relationships result in beneficial outcomes. Detailed reviews of research indicate correlations of LMX with outcomes such as subordinate attitudes and performance (Yukl, 2013, citing Erdogan & Liden, 2002; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Liden, Sparrowe, & Wayne, 1997; Schriesheim et al., 1999). In particular, high-exchange relationships were found to correlate with higher role clarity, higher satisfaction, stronger organisational commitment, lower role conflict, and better subordinate performance (Gerstner & Day, 1997; Yukl, 2013). While much of this research involved survey field studies, a field experiment by Graen, Novak, and Sommerkamp (1982) also found that LMX development interventions resulted in significant satisfaction and productivity gains, as opposed to other control interventions.

#### *Assessment of leader-member exchange behaviour*

The 7-item Leader-member Exchange Scale (LMX-7; Graen & Uhl-Bien, 1995) may be used to assess the quality of leader-member exchange within each dyadic relationship. The LMX-7 items may be adapted for use by either leader or member, and "expected agreement between leader and member reports is positive and strong" (Graen & Uhl-Bien, 1995, p. 237).

Gerstner and Day (1997) reviewed the LMX-7 scale, obtaining high Cronbach's alpha scores (mean sample-weighted was .85 for members and .77 for leaders in their study), which indicated high internal consistency. Their meta-analysis also revealed that the LMX-7 scale "has the soundest psychometric properties of all instruments and that LMX is congruent with numerous empirical relationships associated with transformational leadership" (Gerstner & Day, 1997, p. 827). While the LMX quality measured in LMX-7 demonstrates construct validity in correlating with "job performance, satisfaction with supervision, overall satisfaction, commitment, role conflict, role clarity, member competence, and turnover intentions" (Gerstner &

Day, 1997, p. 827), one drawback may be the lack of discriminant validity with transformational/charismatic leadership.

7-item Leader-member Exchange Scale (LMX-7; Graen & Uhl-Bien, 1995):

**Recommended Measure of LMX (LMX 7)**

1. Do you know where you stand with your leader ... do you usually know how satisfied your leader is with what you do? (Does your member usually know)	Rarely	Occasionally	Sometimes	Fairly Often	Very Often
2. How well does your leader understand your job problems and needs? (How well do you understand)	Not a Bit	A Little	A Fair Amount	Quite a Bit	A Great Deal
3. How well does your leader recognize your potential? (How well do you recognize)	Not at All	A Little	Moderately	Mostly	Fully
4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work? (What are the chances that you would)	None	Small	Moderate	High	Very High
5. Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would "bail you out," at his/her expense? (What are the chances that you would)	None	Small	Moderate	High	Very High
6. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so? (Your member would)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7. How would you characterize your working relationship with your leader? (Your member)	Extremely Ineffective	Worse Than Average	Average	Better Than Average	Extremely Effective

Notes: Continuous scale of sum of 5-point items (1 left to 5 right). Leader's form consists of same seven items asked about member of (leader in parentheses). Expected agreement between leader and member reports is positive and strong and used as index of quality of data.

**References cited (leader-member exchange behaviour)**

- Dansereau, F., Jr., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Decision Processes*, 13, 46-78.
- Erdogan, B., & Liden, R. C. (2002). Social exchanges in the workplace: A review of recent developments and future research directions in leader-member exchange theory. In L. L. Neider & C. A. Schriesheim (Eds.), *Leadership*. Greenwich, CT: Information Age Publishing, pp. 65-114.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827-844.
- Graen, G., Novak, M. A., & Sommerkamp, P. (1982). The effects of leader-member exchange and job design on productivity and satisfaction:

- Testing a dual attachment model. *Organizational Behavior and Human Performance*, 30(1), 109-131.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92(1), 269-277.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resource Management*, 15, 47-119.
- Schriesheim, C. A., Castro, S., & Cogliser, C. C. (1999). Leader-member exchange research: A comprehensive review of theory, measurement, and data-analytic procedures. *The Leadership Quarterly*, 10, 63-113.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.

### **Authentic leadership**

Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) define authentic leadership as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (p. 94). Authentic leadership thus contains four components: self-awareness, relational transparency, balanced processing, and an internalised moral perspective (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008; Neider & Schriesheim, 2011). These four components are as follows:

“Self-awareness refers to demonstrating an understanding of how one derives and makes meaning of the world and how that meaning making process impacts the way one views himself or herself over time. It also refers to 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 cognizant of one’s impact on other people (Kernis, 2003). *Relational transparency* refers to presenting one’s authentic self (as opposed to a fake or distorted self) to others. Such behavior promotes trust through disclosures that involve openly sharing information and expressions of one’s true thoughts and feelings while trying to minimize displays of inappropriate emotions (Kernis, 2003). *Balanced processing* refers to leaders who show that they objectively analyze all relevant data before coming to a decision. Such leaders also solicit views that challenge their deeply held positions (Gardner, Avolio, Luthans, et al., 2005). Finally, *internalized moral perspective* refers to an internalized and integrated form of self-regulation (Ryan & Deci, 2003). This sort of self-regulation is guided by internal



moral standards and values versus group, organizational, and societal pressures, and it results in expressed decision making and behavior that is consistent with these internalized values (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, et al., 2005). (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008, pp. 95-96, emphasizes mine)”

Yukl (2013) suggests that followers of authentic leaders may have more personal identification with the leader and hence more social identification with the organisational unit. Similarly to transformational/charismatic leadership, the leader can then more readily garner “follower commitment and optimism by articulating an appealing vision, modeling appropriate behaviors, and expressing optimism and encouragement when there are setbacks” (Yukl, 2013, p. 352). However, the outcome effectiveness of such leader authenticity depends on the followers’ acceptance of the leaders’ values, no matter how consistent the leader may be (Yukl, 2013). A complete transparency in revealing emotions during inappropriate moments may also have unintended consequences, as such undermining follower confidence in crises (Yukl, 2013). Emotional intelligence in expressing appropriate and genuine emotions is likely a needed skill that must accompany authentic leadership (Yukl, 2013).

Research by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) bear out the general benefits of authentic leadership. Authentic leadership was found to be associated with organisational citizen behaviours, organizational commitment, satisfaction with supervisor, individual follower job satisfaction, and rated job performance (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008).

#### *Assessment of authentic leadership*

The Authentic Leadership Questionnaire (ALQ; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) was developed and validated to assess authentic leadership according to the abovementioned conception of authentic leadership. As also mentioned above, authentic leadership as assessed by the ALQ was found to correlate with criteria of leadership effectiveness (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Internal consistency for the ALQ was supported, with Cronbach’s alphas calculated for each subscale to be consistently  $>.70$ . For the subscales of self-awareness, relational transparency, internalised moral perspective, and balanced processing respectively, the alphas were .92, .87, .76, and .81 for a U.S. sample, and .79, .72, .73, and .76 for a Chinese sample (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Confirmatory factor analysis also supported the construct validity of the ALQ (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). The finding that the ALQ’s measures relate to criterion measures above and beyond ethical and transformational leadership measurements also supports the ALQ’s discriminant validity (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). One drawback of the ALQ is that the full set of items are not available freely online. A sample set of questions is provided below.

The Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011) was developed based on the same sub-constructs of the ALQ, intended for free use. Multitrait-multimethod analyses assessed both convergent and discriminant validity

of the ALI, and supported the overall construct validity (Neider & Schriesheim, 2011). Coefficient alphas for the ALI ( $\geq .70$ , between .74 and .85 in one sample) also indicate high internal consistency (Neider & Schriesheim, 2011). The full set of ALI items are presented below.

Sample items of Authentic Leadership Questionnaire (ALQ; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008):

Respondents were asked to judge how frequently each statement fit his or her supervisor using a 5-point scale ranging from 0 (not at all) to 4 (frequently, if not always).

---

**Authentic Leadership Questionnaire Sample Items**

---

*Self-Awareness*

1. Seeks feedback to improve interactions with others.
2. Accurately describes how others view his or her capabilities.

*Relational Transparency*

3. Says exactly what he or she means.
4. Is willing to admit mistakes when they are made.

*Internalized Moral Perspective*

5. Demonstrates beliefs that are consistent with actions.
6. Makes decisions based on his/her core beliefs.

*Balanced Processing*

7. Solicits views that challenge his or her deeply held positions.
  8. Listens carefully to different points of view before coming to conclusions.
- 

Authentic Leadership Inventory (ALI; Neider & Schriesheim, 2011):

ALI items.

---

1. *My leader solicits feedback for improving his/her dealings with others. (S)*
  2. My leader clearly states what he/she means. (R)
  3. My leader shows consistency between his/her beliefs and actions. (M)
  4. My leader asks for ideas that challenge his/her core beliefs. (B)
  5. My leader describes accurately the way that others view his/her abilities. (S)
  6. *My leader admits mistakes when they occur. (R)*
  7. My leader uses his/her core beliefs to make decisions. (M)
  8. My leader carefully listens to alternative perspectives before reaching a conclusion. (B)
  9. My leader shows that he/she understands his/her strengths and weaknesses. (S)
  10. My leader openly shares information with others. (R)
  11. My leader resists pressures on him/her to do things contrary to his/her beliefs. (M)
  12. My leader objectively analyzes relevant data before making a decision. (B)
  13. My leader is clearly aware of the impact he/she has on others. (S)
  14. My leader expresses his/her ideas and thoughts clearly to others. (R)
  15. My leader is guided in his/her actions by internal moral standards. (M)
  16. *My leader encourages others to voice opposing points of view. (B)*
- 

Note. Items 1 and 6 were subsequently deleted from the final scales and are shown in italics. Response choices are: (1) Disagree strongly; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; and (5) Agree strongly. Abbreviations used are: (S) = Self-Awareness, (R) = Relational Transparency, (M) = Internalized Moral Perspective, and (B) = Balanced Processing. Instructions given respondents in organizations usually include the definitional statement, "Please note that the term 'leader' means your immediate or direct supervisor."

**References cited (authentic leadership)**

- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16, 315-338.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. O. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16, 343-372.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14, 1-26.
- Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, 22(6), 1146-1164.
- Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 253-272). New York: Guilford.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34, 89-126.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.

**Agile leadership**

The term "agile leadership" has risen to prominence recently in discussions of leadership effectiveness. While agile leadership is not precisely defined in the academic literature, Horney, Pasmore, and O'Shea (2010) characterise an agile leader as one who can "dynamically sense and respond to changes in the business environment with actions that are focused, fast and flexible" (p. 38). This working definition stays faithful to the layman conception of *agility*, the ability to move quickly and easily. A similar concept to agility is adaptability, defined by Bass and Stogdill (1990) as "the ability to adjust to situations" (p. 66) and which were found to have slim correlations of .13 and .21 with leadership in two different studies (Bass & Stogdill, 1990, citing Eichler, 1934; Flemming, 1935 respectively).

As the literature on agile leadership is still scattered and nascent, three different constructs related to agile leadership shall be discussed below. These constructs are agility (as defined in the LAP 360 assessment), learning agility, and ambidexterity.

**References cited (agile leadership)**

- Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: Free Press.
- Eichler, G. A. (1934). *Studies in student leadership*. Doctoral dissertation, Pennsylvania State College, State College, PA.
- Flemming, E. G. (1935). A factor analysis of the personality of high school teachers. *Journal of Applied Psychology*, 19, 596-605.

Horney, N., Pasmore, B., & O’Shea, T. (2010). *Leadership agility: A business imperative for a VUCA world*. New York: Human Resource Planning Society.

**Agility (LAP 360)**

As abovementioned, Horney, Pasmore, and O’Shea (2010) characterise an agile leader as one who can “dynamically sense and respond to changes in the business environment with actions that are focused, fast and flexible” (p. 38). Such agility is deemed vital for dealing with a volatile, uncertain, complex, and ambiguous world (Horney, Pasmore, & O’Shea, 2010). In order to define and assess agility, Agility Consulting LLC (which employed both Horney and O’Shea, as of 2010) developed the commercial Agile Model® and a 360-feedback assessment based on the model, the Leadership Agility Profile™ (LAP 360; Agility Consulting LLC, 2014).

The model details 15 different components (visioneering, sensing, monitoring, connecting, aligning, engaging, bias for action, decision making, collaborating, bias for innovation, customer focus, idea diversity, creating expectations, real-time feedback, and fact-based measurement) grouped under five categories (anticipating change, generating confidence, initiating action, liberating thinking, and evaluating results) which are aimed to address the “focused, fast and flexible” requirements of agile leadership. The Agile Model® seems to incorporate a wide variety of different leadership behaviours covered above, but may prove useful above and beyond these other constructs as well. At face value, certain components of the Agile Model® appear to overlap with other leadership constructs as follows:

Agile Model® category	Agile Model® component	Overlapping construct
Anticipating change	Visioneering	Transformational/Charismatic
	Sensing	External monitoring
	Monitoring	External monitoring; Monitoring; Transformational/Charismatic
Generating confidence	Connecting	Transformational/Charismatic
	Aligning	Transformational/Charismatic
	Engaging	Relationship-oriented
Initiating action	<b>Bias for action</b>	-
	<b>Decision making</b>	-
	Collaborating	Collective learning
Liberating thinking	Bias for innovation	Encouraging innovative thinking
	<b>Customer focus</b>	-
	Idea diversity	Consulting; Collaborating; Openness to ideas
Evaluating results	Creating expectations	Task-oriented
	Real time feedback	Developing; Recognising
	<b>Fact-based measures</b>	-

The four components emphasised in bold (bias for action, decision making, customer focus, and fact-based measures) do not appear to overlap strongly with any of the other constructs given above, and may be additionally useful as leadership constructs in their own right. However, note that this comparison between the Agile Model® components and other leadership constructs was only made at face value.

The other 11 components cannot be dismissed offhand – more research into the Agile Model® has to be conducted to evaluate their discriminant validity with respect to the similar leadership constructs.

Horney, Pasmore, and O’Shea (2010) report that the Agile Model® “has been reviewed by an independent third party Industrial/Organizational psychologist” (p. 35), and found to exhibit high internal consistency with each of the five categories having a Cronbach’s alpha of  $>.90$ . However, the exact source of this validation is not cited. Moreover, no data on the construct validity of the Agile Model® was reported. It is recommended that further research be undertaken to validate the Agile Model® and the concomitant LAP 360 before use.

### **References cited (*agility, LAP 360*)**

Agility Consulting and Training, LLC (2014). Leadership Agility Profile™. Retrieved from <http://agilityconsulting.com/leadership-agility-profile-360-assessment/>

Horney, N., Pasmore, B., & O’Shea, T. (2010). *Leadership agility: A business imperative for a VUCA world*. New York: Human Resource Planning Society.

### **Learning agility**

Lombardo and Eichinger (2000) suggest that organisations should identify future leaders with a higher potential in learning from experience, i.e. *learning agility*.

Research suggests that learning ability predicts leadership success in organisations. For example, two studies at the Center for Creative Leadership (McCall, Lombardo, & Morrison, 1988; Morrison, White, & Van Velsor, 1992, cited in Lombardo & Eichinger, 2000) found that having certain powerful on-the-job experiences *and* learning from these experiences contributes to long-term job success. McCall and Lombardo (1983) also found that managerial derailment was often attributed to “being blocked to new learning”, such as when managers “relied on what had gotten them to where they were... got locked into standard ways of thinking and acting that didn’t really meet the new demands” (Lombardo & Eichinger, 2000, p. 322).

Nevertheless, the presence of developmental events during the course of the individual’s career is an important modulator on the impact of learning agility. In long-term AT&T studies (Howard & Bray, 1988; Bray, Campbell, & Grant, 1974, cited in Lombardo & Eichinger, 2000), even individuals assessed to have low potential learning agility became more successful if they had developmental jobs and developmental superiors that provide opportunities for growth. Thus, learning agility would be more predictive of leadership effectiveness if the individual encounters developmental opportunities that appropriately challenge him or her.

### *Assessment of learning agility*

Lombardo and Eichinger’s (2000) factor analysis indicates that learning agility can be structured as four broad components: people agility, results agility, mental agility, and change agility. A detailed description of each component can be found in a snippet of their Learning Agility Scale (LAS; Lombardo & Eichinger, 2000) below.

Reliability alphas for each of the four LAS subscales are all  $>.90$  (.95 for people agility, .96 for results, .93 for mental, .95 for change), indicating high internal

## Leadership Constructs and Assessments

consistency (Lombardo & Eichinger, 2000). Furthermore, the LAS correlates significantly and positively with the criteria of job performance and “staying out of a trouble” (deemed a potential risk for revolutionary individuals), with  $r^2$  reported as at least .30 for both criteria (Lombardo & Eichinger, 2000). This finding, on top of the thorough factor analysis undertaken, supports the LAS’ construct validity. Sample items for each subscale are given below.

Learning Agility Scale (LAS; Lombardo & Eichinger, 2000):

Scored on a 5-point Likert scale (0 = Don’t know, 1 = Low, 5 = High)

Factors	High	Low	Sample Items
1. People Agility	People high on this factor are described as knowing themselves well. They seek feedback and respond to it through personal change. In interactions with others, they are seen as helpful, constructive even in disagreement, and open to a diversity of people and viewpoints. They are described as cool under pressure, and as able to handle the heat and consequences of being in the vanguard of change efforts.	People low on this factor don't know themselves as well—they over or underestimate themselves and their skills, don't know their limits or might mishandle situations that they think they are handling well. Lacking insight into self, they may lack insight into others as well. Perhaps due to this, they might not handle conflict well, misreading or mishandling the situation. Leading change efforts may be a shortcoming due to some combination of inflexibility, lack of clear, calm transactions with others, political missteps, or not being seen as constructive with others.	<ul style="list-style-type: none"> <li>- Understands his/her limits; compensates for what he/she isn't good at.</li> <li>- Can empathize (put him/herself in the shoes of others).</li> <li>- Is more a credit giver and sharer than a taker.</li> <li>- After stating a position and being presented with reasonable counter evidence, can change his/her mind.</li> <li>- Can present ideas and concepts in the language of the target audience.</li> </ul>
2. Results Agility	People high on this factor are described as delivering results under first-time or tough conditions, building high-performing teams, and managing innovation well. They do so partially by personal drive and adaptability.	People low on this factor are described as having more trouble getting results in first-time or difficult situations. They may have problems inspiring others, lack personal drive or presence, or have trouble shifting from one thing to another.	<ul style="list-style-type: none"> <li>- Performs well under first-time conditions; isn't thrown by changing circumstances.</li> <li>- Has often pulled off things with limited resources.</li> <li>- Has a significant, noticeable presence.</li> </ul>
3. Mental Agility	People high on this factor are described as attracted to newness and complexity and as mentally quick. They like to delve deeply into problems thoroughly analyzing them through contrasts, parallels, and searching for meaning. In contrast, they are also good at simplifying. They are clear in presenting viewpoints to others, and are good at explaining their thinking and that of others.	People low on this factor are described as not being comfortable with ambiguity, complexity or being mentally quick. They may not search for relevant parallels, combine the best parts of others' ideas, look hard at the why of problems, or rely on many data/idea sources. They are not described as reexamining issues, so they may rely on conventional wisdom. They may have trouble explaining how they arrived at a position.	<ul style="list-style-type: none"> <li>- Looks for the why and how of events and experiences more than the what; searches for meaning.</li> <li>- Is intellectually quick; picks up on things in a hurry.</li> <li>- Uses history and biography to find common truths, rules and how things work.</li> <li>- Is a curious person; is intellectually adventuresome.</li> </ul>
4. Change Agility	People high on this factor are described as liking to tinker and change things. They are seen as curious and creative. They are highly interested in work improvements and skill building.	People low on this factor are not described as interested in the new. They may be uncomfortable with experiments, whether with self or with issues or processes on the job.	<ul style="list-style-type: none"> <li>- Is an inveterate tinkerer; can't leave things alone for long without seeking a new way.</li> <li>- Knows that change is unsettling; can take a lot of heat, even when it gets personal.</li> <li>- Introduces a different slant into almost any discussion.</li> </ul>

### References cited (*learning & agility*)

- Bray, D., Campbell, R., & Grant D. (1974). *Formative years in business: A long-term AT&T study of managerial lives*. New York: Wiley.
- Howard, A., and Bray, D. (1988). *Managerial lives in transition: Advancing age and changing times*. New York: Guilford Press.
- Lombardo, M. M., & Eichinger, R. W. (2000). High potentials as high learners. *Human Resource Management*, 39(4), 321-329.
- McCall, M., Lombardo, M. & Morrison, A. (1988). *The lessons of experience*. Lexington, MS: Lexington Books.
- McCall, M., & Lombardo, M. (1983). What makes a top executive? *Psychology Today*, 17(2), 26–31.
- Morrison, A., White, R., & Van Velsor, E. (1992). *Breaking the glass ceiling: Can women reach the top of America's largest corporations?*. Reading, MA: Addison Wesley.

### **Ambidexterity**

While leaders would do well to have fine motor control of both hands, ambidexterity in this case more abstractly refers to flexible control over “two complementary sets of leadership behavior that foster exploration and exploitation in individuals and teams – opening and closing leader behaviors, respectively” (Rosing, Frese, Bausch, 2011, p. 956). According to March (1991, cited by Rosing, Frese, Bausch, 2011, p. 957), opening involves “increasing variance, experimentation, searching for alternatives, and risk taking”, while closing involves “reducing variance, adherence to rules, alignment, and risk avoidance”. Opening is exemplified by such behaviours as experimenting with creative uses of new technologies, and closing by implementing concrete measures to optimize the organisation’s performance. Rosing, Frese, and Bausch (2011) suggest that, in order to promote organizational innovation, a leader must flexibly exercise opening or closing behaviours when the situation calls for it, “dependent not only on the individual follower and the specifics of the situation, but also on the timing within the innovation cycle” (Rosing, Frese, Bausch, 2011, p. 957). Innovation would be vital to advancing the organisation’s goals, especially where the external environment or the relevance of the organisation’s products and services are volatile.

Recent empirical research has also found support for the association between ambidextrous leadership and innovation. Zacher and Rosing (2015) found from a survey of 33 team leaders and their 90 employees that an interaction of high opening behaviours and high closing behaviours predicts high innovation. The findings suggest that training to improve leaders’ ambidexterity can facilitate innovative outcomes for the organization, above and beyond transformational/charismatic leadership behaviour (Zacher & Rosing, 2015).

Despite the successful empirical test of the ambidextrous theory of leadership (Rosing, Frese, Bausch, 2011), the opening and closing components of ambidexterity may not have discriminant validity with respect to other leadership behaviours detailed in this report. *Prima facie*, opening behaviours appear to be closely related to encouraging innovative thinking, while closing behaviours to task-oriented behaviours. Further research needs to be undertaken to establish the construct validity of leadership ambidexterity against other leadership behaviours.

#### *Assessment of ambidexterity*

Zacher and Rosing (2015) developed a scale to assess an individual leader’s opening and closing behaviours, based on Rosing, Frese, and Bausch’s (2011) ambidextrous theory of leadership. Cronbach’s alpha calculations for the opening and closing subscales were high (.89 and .85 respectively), indicating good internal consistency (Zacher & Rosing, 2015). An exploratory factor analysis with varimax rotation also indicated that the 14 items on the scale had their highest factor loadings on their theoretically relevant factor, supporting construct validity (Zacher & Rosing, 2015). High mean  $r_{wg(i)}$  indices (James et al., 1984) for the two subscales (.95 for opening, .87 for closing) also indicate high inter-rater reliability (Zacher & Rosing, 2015). However, as mentioned, further effort must be made to determine the discrimination of ambidexterity from other possibly related behaviours, such as encouraging innovative thinking and task-oriented behaviours.

Zacher and Rosing's (2015) ambidexterity scale, with items adapted from Rosing, Frese, and Bausch (2011):

"Employees were asked to rate their team leader's opening and closing leadership behaviors using two sets of seven items each... The items were answered on five-point scales ranging from 1 (not at all) to 5 (frequently, if not always)."

---

**Opening leader behaviors**

---

- ◆ Allowing different ways of accomplishing a task
  - ◆ Encouraging experimentation with different ideas
  - ◆ Motivating to take risks
  - ◆ Giving possibilities for independent thinking and acting
  - ◆ Giving room for own ideas
  - ◆ Allowing errors
  - ◆ Encouraging error learning
- 

---

**Closing leader behaviors**

---

- ◆ Monitoring and controlling goal attainment
  - ◆ Establishing routines
  - ◆ Taking corrective action
  - ◆ Controlling adherence to rules
  - ◆ Paying attention to uniform task accomplishment
  - ◆ Sanctioning errors
  - ◆ Sticking to plans
- 

**References cited (*ambidexterity*)**

- James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within group interrater reliability with and without response bias. *Journal of Applied Psychology*, 69(1), 85-98.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22(5), 956-974.
- Zacher, H., & Rosing, K. (2015). Ambidextrous leadership and team innovation. *Leadership & Organization Development Journal*, 36(1), 54-68.



**Acknowledgement**

The author wishes to acknowledge the invaluable inputs and comments by Ms Madeline Ong, Researcher at The HEAD Foundation.

**Note**

*The HEAD Foundation Working Paper Series*© are preliminary papers subject to further revisions, and are circulated to solicit comments and suggestions for improvements. The *Working Papers* are unedited and unreviewed. The views and opinions expressed are those of the author(s) and do not necessarily reflect those of The HEAD Foundation. No part of the article may be cited without permission from the author(s).