

# ASSESSING THE EFFECTIVENESS OF AUTHENTIC LEADERSHIP

Biplab Datta

Vinod Gupta School of Management, Indian Institute of Technology, Kharagpur, India

The effectiveness of authentic leadership (AL) has been empirically evaluated in this paper. It has been found that authentic leadership has been understood as a three dimensional, second order construct by Indian respondents. The study indicates that AL, as measured by the 16 items of the Authentic Leadership Questionnaire (ALQ), leads to seven different dimensions of effective management and five different dimensions of effective leadership as measured by 42 variables. The paper concludes that AL leads to effective management and leadership performance.

Leadership is the process of influencing a group of individuals to achieve shared objectives (Northouse, 2013; Yukl, 2011). The primary function of leadership is to produce change and movement, while the primary function of management is to provide order and consistency to organisations (Northouse, 2013). As both leadership and management are processes, anybody can execute leadership or managerial functions at different times. Leaders cannot be called as leaders simply by virtue of the position they hold in organizations (Kellerman, 2012). The execution of management and leadership functions by leaders situated in organizations has been examined in this paper.

Driven by concerns of ethical conduct of today's leaders, several authors have studied one form of ethical leadership, called authentic leadership (AL) (Gardner et al., 2011) with diverse results. In their study, Clapp-Smith, Vogelgesang & Avey (2009) found that AL leads to trust in management and positively affects group performance measured by unit sales growth. Hassan & Ahmed (2011) found that AL promotes subordinates' trust in the leader and contributed to work engagement. Jensen & Luthans (2006) found that employee's perception of leaders' authentic behaviour served as the strongest single predictor of employee job satisfaction, organizational commitment and work happiness. Laschinger, Wong & Grau (2012) found that AL has negative direct effect on workplace bullying and emotional exhaustion and a positive effect on job satisfaction. Peterson et al. (2012) find that authentic leadership behaviour exhibited by leaders is positively related to follower job performance. Peus et al. (2012) found

that followers' satisfaction with supervisor, organisational commitment and extra effort, and perceived team effectiveness were outcomes of AL. Hmieleski, Cole, & Baron (2012) found that shared AL has a positive indirect effect on firm performance. Leroy, Palanski & Simons (2012) found that AL is related to follower affective commitment and work role performance. Rego et al. (2012b) find that AL predicts employees' creativity. Rego et al. (2012c) found that AL predicts team affective commitment and team potency. Walumbwa et al. (2008) found a positive relationship between AL and supervisor-rated performance. Walumbwa et al. (2010) found that AL was positively related to supervisor rated organizational citizenship behaviour and work engagement. Woolley, Casa, & Levy (2011) reported a positive relationship between AL and followers' psychological capital, partially mediated by positive work climate and a significant moderating effect from gender. Walumbwa et al. (2011) found AL to positively affect desired group outcomes like group level performance and citizenship behaviour.

According to Gardner et al. (2011), limited amount of empirical research makes it difficult to assess the validity of assertions regarding the positive effects of AL that are commonly advanced by its proponents. Gardner et al. (2011) further state that having recognised the documented relationships between authenticity, engagement and well being (Deci & Ryan, 1995; Kernis, 2003, Kernis & Goldman, 2006), five recent studies (Gardner et al., 2009; Giallonardo, Wong, & Iwasiw, 2010; Macik-Frey, Quick, & Cooper, 2009; Walumbwa et al., 2010; Wong & Cummins, 2009) have explored the relationship between AL and leader/follower engagement, empowerment and well being. Gardner et al. (2009) have encouraged research on the positive effects of AL on these and related outcomes (e.g., job satisfaction, organizational commitment, and employee and organizational performance). This study has been undertaken to find whether AL can lead to effective management and leadership performance in the Indian context.

# **Authentic Leadership**

According to Harter (2002), authenticity can be defined as "owning one's personal experiences, be they thoughts, emotions, needs, preferences, or beliefs, processes captured by the injunction to know oneself" and behaving in accordance with the true self. Based on the initial definition of AL by Luthans and Avolio (2003), and the underlying dimension of the construct posited by Gardner et al. (2005) and Illies, Morgenson, & Nahrgang (2005), Walumbwa et al. (2008) have defined AL as a pattern of leader behaviour 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. In this definition, 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 cognisant 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 behaviour 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 et al., 2005). 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 behaviour that is consistent with these internalized values (Avolio & Gardner, 2005; Gardner et al., 2005; Walumbwa et al., 2008).

#### Measurement of AL

Based on the above conception of AL, a 16-item Authentic Leadership Questionnaire (ALQ) by Avolio, Gardner, & Walumbwa (2007) is available from www.mindgarden.com. The ALQ consist of four components: Relational Transparency (5 items), Internalized Moral Perspective (4 items), Balanced Processing (3 items) and Self Awareness (4 items). The ALQ, operationalized and validated by Walumbwa, et al. (2008) and derived from Kernis and Goldman's (2006) multi-component conception of authenticity, was found to be the most frequently used measure of AL by Gardner et al. (2011) in their review of AL literature from 1980 till 2010. Neider & Schriesheim (2011) developed an 8-item Authentic Leadership Inventory (ALI) and inferred that it is devoid of some concerns with the ALO, while urging future researchers to test the ALI further. However, the ALO has been used by many other researchers as a measure of AL after 2010 including Hassan & Ahmed (2011); Peterson et al. (2012); Walumbwa et al. (2011); Wooley, Caza & Levy (2011); Hmieleski, Cole & Baron (2012); Laschinger, Wong & Grau (2012); Leroy, Palanski & Simons (2012); Peus et al. (2012); Rego et al. (2012 a, b & c). The ALO has been used in this study to measure AL after testing the psychometric properties of the scale (whose construct validity requires further assessment according to Gardner et al., 2011).

Although Walumbwa et al., (2008) have confirmed a 4-factor second order structure of the ALQ, Neider & Schriesheim (2011) have raised some concerns with the same. While the ALQ has been used and tested in USA, China, Kenya (Walumbwa, Avolio, Gardner, et al., 2008), Portugal (Rego et al., 2012 a & b), Belgium (Leroy, Palanski, & Simons, 2012), Canada (Laschinger, Wong, & Grau, 2012), New Zealand (Caza, Bagozzi, & Caza, 2010) and Germany (Peus et al., 2012), the survey of literature revealed that no study involving the ALQ has been carried out in India so far.

## Managerial effectiveness

According to Yukl (2011), conceptions of leader effectiveness differ from one writer to another like the definitions of leadership. The criteria selected to evaluate leadership effectiveness reflect a researcher's explicit or implicit conception of leadership. Most researchers evaluate leadership effectiveness in terms of the consequences of influence on a single individual, a team or group, or an organisation.

According to Yukl (2011), the most commonly used measure of leader effectiveness is the extent to which the performance of the team or organizational unit is enhanced and the attainment of goals is facilitated. Examples of objective measures of performance include sales, net profits, profit margin, market share, return on investment, return on assets, productivity, cost per unit of output, costs in relation to budgeted expenditures, and change in the value of corporate stock. Subjective measures of effectiveness include ratings obtained from leader's

superiors, peers and subordinates. As mentioned earlier, the primary function of leadership would be to produce change and movement, while the primary function of management would to provide order and consistency to organisations (Northouse, 2013). Accordingly, the above would be measures of managerial effectiveness rather than leadership effectiveness.

Followers' attitude and behaviour provide an indirect indicator of dissatisfaction and hostility toward the manager. Examples of such indicators include absenteeism, voluntary vacancies, grievances, complaints to higher management, requests for transfer, work slowdowns, and deliberate sabotage of equipment and facilities.

A final type of criterion for managerial effectiveness is the extent to which a person has a successful career as a manager. Is the person promoted rapidly to positions of higher authority? Does the person serve a full term in a managerial position, or is he or she removed or forced to resign? For elected positions in organizations, is a manager who seeks re-election successful?

# Leadership effectiveness

Follower attitudes and perceptions of the leader are common indicator of leader effectiveness (Yukl, 2011). How well does the leader satisfy their needs and expectations? Do followers like, respect, and admire the leader? Do followers trust the leader and perceive him or her to have high integrity? Are followers strongly committed to carrying out the leader's requests, or will they resist, ignore and subvert them? Does the leader improve the quality of work life, build the self-confidence of followers, increase their skills, and contribute to their psychological growth and development?

Leader effectiveness is occasionally measured in terms of the leader's contribution to the quality of group processes, as perceived by followers or by outside observers. Does the leader enhance group cohesiveness, member cooperation, member commitment, and member confidence that the group can achieve its objectives? Does the leader enhance problem solving and decision making by the group, and help to resolve disagreements and conflicts in a constructive way? Does the leader contribute to the efficiency of role specialization, the organization of activities, the accumulation of resources, and the readiness of the group to deal with change and crises?

## Measurement of managerial and leadership effectiveness

In this study 42 items were used to measure 7 dimensions of managerial effectiveness including A. Organisational performance, B. Satisfaction of followers' needs and expectations, C. Improvement of the quality of work life and development of the followers, D. Manager's contribution to absenteeism of followers, E. Manager's contribution to dissatisfaction and hostility of the followers, F. Manager's contribution to quality of group processes of his/her unit or organisation, and G. The extent to which the manager had a successful career, and 5 dimensions of leadership effectiveness including H. Respect for the leader, I. Commitment to carry our leader's requests, J. Leader's contribution to enhancement of problem solving, decision making and conflict resolution skills of his/her unit, K. Leader's contribution to group ability to deal with crises. The detailed questionnaire for measuring managerial and leadership effectiveness is given in the Appendix.

#### Method

In this study, 324 working executives, mainly from Eastern India, were requested to fill in the ALQ along with 42 questions related to 12 dimensions of managerial and leadership effectiveness of the person whom they considered as their leader in their organisations. Respondents were required to rate each item on a Likert scale anchored at Not at all = 0, Once in a while = 1, Sometimes = 2, Fairly often = 3 and Frequently, if not always = 4. A total of 280 valid responses were used for empirical analysis after eliminating obvious cases of 'ya saying' and removing outliers with the help of SPSS 16 boxplots.

### **Results**

Sixteen items of the ALQ were subjected to Principal Axis Factoring suitable for exploring the underlying factors (Hair et al. 2006) and also subjected to rotation by direct oblimin method with Kaiser normalisation using SPSS 16. The pattern matrix is laid out as Table 1.

Table 1: Rotated Factor Solution - Pattern Matrix

	Factor			
Variable	1	2	3	4
1. says_means	0.529			
2. admits_mistakes	0.581			
3. speak_mind	0.575			
4. tell_truth	0.439			
5. emotions_feelings	0.399			
6. beliefs_actions	0.741			
7. decisions_values	0.476			
8. positions_values	0.325			
9. ethical_decisions				-0.874
10. challenge_position				-0.466
11. analyses_data			-0.469	
12. listens_viewpoints			-0.659	
13. feedback_improve		0.405	-0.462	
14. others_capabilities		0.668		
15. reevaluate_positions		0.499		
16. actions_impact		0.353		

It was evident from the pattern matrix that the first 5 variables supposed to measure the Relational Transparency construct got merged with the first 3 variables that are supposed to measure the Internalised Moral Perspective construct. It was concluded that respondents could not differentiate the above two constructs as separate ones. The merged factors were renamed as Transparent and Moral Perspective (TMP). The ALQ was then subjected to confirmatory factor analysis using AMOS 18. Although variable no. 9 and variable no. 10 loaded on a fourth factor, variable no. 9 was clubbed with TMP and variable no. 10 was clubbed with the Balanced Processing (BP) construct as per the loading of the original ALQ. Similarly, although variable

no. 13 cross loaded on 2 factors, it was clubbed with BP as per the original ALO. Following Walumbwa et al. (2008) the second order conceptual model was tested with the first 9 variables loading onto the first factor, i.e. Transparent and Moral Perspective (TMP), the next three variables loading onto the second factor i.e. Balanced Processing (BP) and the remaining four variables loading onto the third factor i.e. Self Awareness (SA). The result of the confirmatory factor analysis of the second order 3-factor model using Maximum Likelihood method indicated reasonable fit of the data with the conceptual model with CMIN/DF = 2.183, CFI = .889 and RMSEA = .065, laid out as Table 2. Acceptable model fit values are CMIN/DF <= 2 (Byrne, 1989), CFI close to 1 (Bentler, 1990) and RMSEA <= .05 (Browne and Cudeck, 1993). In contrast, the second order, 4-factor model of the original ALO indicated worse fit with CMIN/DF = 2.256, CFI = .883 and RMSEA = .067. The difference between the chi square values of the three and four factor models was 5.146 and the difference in degrees of freedom was 1, thereby indicating that the difference between the 3-factor and 4-factor models was significant at P = .05. The results confirmed the construct validity of the three dimensions of the ALQ scale in the Indian context. The Cronbach's Alpha values for the three dimensions ranged from .634 to .807. According to Hair et al. (2006), reliability between .6 and .7 may be acceptable provided that other indicators of a model's construct validity are good. Since the standardised regression weights of the three dimensions of the ALO were high and significant and these have been reported to be internally consistent by Walumbwa et al. (2008), all the items making up the 3 dimensions were retained for further analysis.

Table 2: Confirmatory factor analysis of the ALQ

Path	SRW	Path	SRW
AL -> Transparent and Moral Perspective (TMP)	.839	TMP -> says_means	.610
Cronbach's Alpha = .807		TMP -> admits_mistakes	.588
		TMP -> speak_mind	.592
		TMP -> tells_truth	.589
		TMP -> emotions_feelings	.316
		TMP -> beliefs_actions	.590
		TMP -> decisions_values	.572
		TMP -> positions_values	.595
		TMP -> ethical_decisions	.629
AL -> Balanced Processing (BP)	.959	BP -> challenge_position	.491
Cronbach's Alpha = .653		BP -> analyses_data	.711
		BP -> listens_viewpoints	.727
AL -> Self Awareness (SA)	.777	SA -> feedback_improve	.630
Cronbach's Alpha = .634		SA -> others_capabilities	.503
		SA -> reevaluate_positions	.469
		SA -> actions_impact	.550

SRW = Standardized Regression Weights, P = .001.

Seven structural equation models (A through G) were tested for relationship between managerial effectiveness and the three-factor, second order ALQ. Similarly, four structural equation models (H through L) were tested for relationship between leadership effectiveness and the ALQ. The model fit measures and the standardized regression weights of the paths are laid out as Tables 3 and 4. All the models indicated reasonable fit with the data as indicated by the

CMIN/DF, CFI and RMSEA values. The results indicated the construct validity of the 12 dimensions of effective management and leadership performance tested in this study. The Cronbach's Alpha values of the 12 dimensions of effective management and leadership ranged from .641 to .895. These were within the acceptable range as suggested by Hair et al. (2006) and were indicative of the internal consistency of the 12 latent constructs.

Table 3: Fit of 8 structural equation models indicating relationship between AL and managerial effectiveness

Model	CMIN/DF	CFI	RMSEA	Path	SRW	Path	SRW
A.	1.928	.904	.058	AL -> Organizational	.565	OP -> Sales	.793
				Performance (OP)		OP -> Profit	.846
				Cronbach's Alpha =		OP -> Market	.813
				.864		Share	.547
						OP -> ROI	.487
						OP -> Stock	
						Value	
B.	2.007	.905	.060	AL -> Satisfaction of	.738	SFN -> Follower	.815
				Follower Needs (SFN)		Needs	.861
				Cronbach's Alpha =		SFN -> Follower	
				.807		Expectations	
C.	1.965	.916	.059	AL -> Improved	.773	IQWL ->	.779
				Quality of Work Life		Improved QWL	.890
				(IQWL)		IQWL -> Builds	.766
				Cronbach's Alpha =		Self-Confidence	.690
				.859		IQWL ->	
						Enhances Skills	
						IQWL -> Helps	
						Psychological	
						Growth	
D	2.039	.902	.061	AL -> Contribution to	666	CA ->	.878
				Absenteeism (CA)		Absenteeism of	.924
				Cronbach's Alpha =		Self	
				.895		CA ->	
						Absenteeism of	
						Others	
E.	2.171	.897	.065	AL -> Contribution to	445	CFDH ->	.797
				Follower		Complained	.833
				Dissatisfaction &		against the	.811
				Hostility (CFDH)		Manager	.803
				Cronbach's Alpha =		CFDH ->	
				.889		Requested	
						Transfer	
						CFDH -> Slowed	
						Work	
						CFDH ->	
						Sabotaged	

						Equipment	
F.	2.060	.887	.062	AL -> Contribution to	.647	CQGAB ->	.544
				Quality of Group		Increased	.713
				Attitudes and		Cohesiveness	.861
				Behavior (CQGAB)		CQGAB ->	.727
				Cronbach's Alpha =		Increased	
				.811		Cooperation	
						CQGAB ->	
						Increased	
						Commitment	
						CQGAB ->	
						Increased	
						Confidence	
G.	1.993	.884	.060	AL -> Successful	.679	SCM ->	.721
				Career of Manager		Successful	.640
				(SCM) Cronbach's		Career	.439
				Alpha = .641		SCM ->	
						Promoted Higher	
						SCM ->	
						Reelected	

SRW = Standardized Regression Weights, P = .001.

Table 4: Fit of 4 structural equation models indicating relationship between AL and leadership effectiveness

Model	CMIN/DF	CFI	RMSEA	Path	SRW	Path	SRW
H.	2.096	.914	.063	AL -> Respect for	.841	RM -> Like	.796
				the Leader (RM)		Leader	.837
				Cronbach's Alpha =		RM -> Respect	.857
				.826		Leader	.857
						RM -> Admire	.725
						Leader	
						RM -> Trust	
						Leader	
						RM -> Leader	
						Integrity	
I.	1.967	.896	.059	AL -> Uncommitted	-	ULR -> Resist	.390
				to Leader's Requests	.156*	requests	.866
				(ULR)		ULR -> Ignore	.853
				Cronbach's Alpha =		requests	
				.741		ULR -> Subvert	
						requests	
J.	2.001	.890	.060	AL -> Problem	.512	PSSE -> Problem	.734
				Solving Skill		Solving Skills	.844
				Enhancement		PSSE -> Decision	.538
				(PSSE)		Making skills	
				Cronbach's Alpha =		PSSE -> Resolving	

				.726		Disagreements	
K.	1.867	.905	.056	AL -> Helps Deal	.583	HDCH ->	.677
				with Change		Enhancing Role	.789
				(HDCH) Cronbach's		Specialization	.719
				Alpha = .820		HDCH ->	.739
						Enhancing	
						Organization of	
						Activities	
						HDCH ->	
						Accumulation of	
						Resources	
						HDCH -> Group	
						Readiness	
L.	1.935	.903	.058	AL -> Helps Deal	.636	HDC -> Enhancing	.735
				with Crises (HDC)		Role	.789
				Cronbach's Alpha =		Specialization	.806
				.832		HDC -> Enhancing	.689
						Organization of	
						Activities	
						HDC ->	
						Accumulation of	
						Resources	
						HDC -> Group	
						Readiness	

SRW = Standardized Regression Weights, P = .001. \*P = .047

#### Conclusion

The results indicate that AL leads to various dimensions of managerial effectiveness including organisational performance, satisfaction of follower needs, and improvement in the quality of work life. AL leads to decrease in negative attitudes and behaviour of followers like absenteeism, dissatisfaction and hostility. AL leads to enhancement in positive group attitudes and behaviour. Finally, managers practising AL achieve personal success as perceived by their followers.

AL leads to various dimensions of leadership effectiveness including respect for the leader, commitment to leader's requests, enhancement of problem solving skills and group ability to deal with change and crises.

## **Discussion**

This study indicates that AL is a three-factor second order construct according to Indian respondents. The Relational Transparency and Internalized Moral Perspective factors of the original ALQ get merged into a new factor which may be called Transparent and Moral Perspective. The results of the study indicate that AL improves both managerial and leadership performance.

An important limitation of this paper is that the study might be suffering from common method bias as data has been collected from a single source of respondents. Common method bias includes factors such as item ambiguity, the measurement context, transient mood states, social desirability, consistency motif, implicit theories, demand effects, scale anchors and formats, leniency bias and demand characteristics (Williams, Hartman, & Cavazotte, 2010). Future research studies should consider collecting data about followers from the leader and vice versa as one of the ex ante measures of avoiding common method bias (Chang, van Witteloostuijn, & Eden, 2010). Alternatively, ex post methods (Williams, Hartman, & Cavazotte, 2010) may be used as remedy for common method bias.

It might appear that, it has been assumed that a person in a position is a leader. It must be reiterated that the AL behaviour of leaders situated in organisations have been examined in this paper. Such leaders can execute managerial functions at certain times and leadership functions at other and could be perceived as either leaders or managers by their followers.

### **About the Author**

Biplab Datta is associate professor at Vinod Gupta School of Management, Indian Institute of Technology, Kharagpur, India. He received his Ph.D. degree in Service Quality Management from Indian Institute of Technology Delhi in 2004. His current teaching and research interests include organizational leadership, service quality management and customer relationship management. He has published several papers in Indian and international journals. He has organized and taught a number of management development programmes on leadership and teamwork for executives and faculty members of other management institutes.

Email: bd@vgsom.iitkgp.ernet.in

## References

- 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.
- Avolio, B. J., Gardner, W. L., & Walumbwa, F. O. (2007). Authentic leadership questionnaire (ALQ). http://www.mindgarden.com
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246
- Browne, M. W., & Cudeck, R. (1993). Alternate ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models*. Newbury Park, CA: Sage, 136-162.
- Byrne, B. M. (1989). A primer of LISREL: Basic applications and programming for confirmatory factor analytic models. New York: Springer-Verlag.
- Chang, S., van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research, *Journal of International Business Studies*, 41, 178-184.
- Clapp-Smith, R., Vogelgesang, G. R., & Avey, J. B. (2009). Authentic leadership and positive psychological capital: The mediating role of trust at the group level of analysis, *Journal of Leadership and Organizational Studies*, 15(3), 227-240.

- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31-49). New York: Plenum Press.
- 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.
- Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic leadership: A review of literature and research agenda. *The Leadership Quarterly*, 22, 1120-1145.
- Gardner, W. L., Fisher, D., & Hunt, J. G. (2009). Emotional labor and leadership: A threat to authenticity? *The Leadership Quarterly*, 20, 466-482.
- Giallonardo, L. M., Wong, C. A., & Iwasiw, C. L. (2010). Authentic leadership of preceptors: Predictor of graduate nurses' work engagement and job satisfaction, *Journal of Nursing Management*, 18, 993-1003.
- Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. New Delhi: Pearson Education Inc.
- Harter, S. (2002). Authenticity. In C. R. Cnyder & S. J. Lopez (Eds.), *Handbook of positive psychology*: 382-394. London: Oxford University Press.
- Hassan, A., & Ahmed, F. (2011). Authentic leadership, trust and work engagement. International *Journal of Human and Social Sciences*, 6(3), 164-170.
- Hmieleski, K. M., Cole, M. S., & Baron, R. A. (2012). Shared authentic leadership and new venture performance. *Journal of Management*, 38(5), 1476-1499.
- Illies, R., Morgenson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, *16*, 373-394.
- Jensen, S. M., & Luthans, F. (2006). Entrepreneurs as authentic leaders: Impact on employees' attitudes, *Leadership and Organization Development Journal*, 27(8), 646-666.
- Kellerman, B. (2012). The end of leadership. New York: HarperCollins.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*, 1-26.
- Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. In M. P. Zannah (Ed.), *Advances in experimental social psychology*, (Vol. *38*, pp. 283-357), San Diego: Academic Press.
- Laschinger, H. K. S., Wong, C. A., & Grau, A. L. (2012). The influence of authentic leadership on newly graduated nurses' experiences of workplace bullying, burnout and retention outcomes: A cross-sectional study. *International Journal of Nursing Studies*, 49, 1266-1276.
- Leroy, H., Palanski, M. E., & Simons, T. (2012). Authentic leadership and behavioral integrity as drivers of follower commitment and performance. *Journal of Business Ethics*, 107, 255-264.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship*, 241-258. San Francisco: Barrett-Koehler.
- Macik-Frey, M., Quick, J. C., & Cooper, C. L. (2009). Authentic leadership as a pathway to positive health. *Journal of Organizational Behavior*, *30*, 453-458.
- Neider, L. L., & Schriesheim, C. A. (2011). The authentic leadership inventory (ALI): Development and empirical tests. *The Leadership Quaterly*, http://dx.doi.org/10.1016/j.leaqua.2011.09.008

- Northouse, P. G. (2013). Leadership: theory and practice. New Delhi: Sage.
- Peterson, S. J., Walumbwa, F. O., Avolio, B. J., & Hannah, S. T. (2012). The relationship between authentic leadership and follower job performance: The mediating role of follower positivity in extreme contexts. *The Leadership Quarterly*, 23, 502-516.
- Peus, C., Wesche, J. S., Streicher, B., Braun, S., & Frey, D. (2012). Authentic leadership: An empirical test of its antecedents, consequences and mediating mechanisms. *Journal of Business Ethics*, 107, 331-348.
- Rego, A., Sousa, F., Marques, C., & e Cunha, M. P. (2012a). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65, 429-437
- Rego, A., Sousa, F., Marques, C., & e Cunha, M. P. (2012b). Hope and positive affect mediating the authentic leadership and creativity relationship. *Journal of Business Research*, http://dx.doi.org/10.1016/j.jbusres.2012.10.003
- Rego, A., Vitoria, A., Magalhaes, A., Ribeiro, N., & e Cunha, M. P. (2012c). Are authentic leaders associated with more virtuous, committed and potent teams? *The Leadership Quarterly*, http://dx.doi.org/10.1016/j.leaqua.2012.08.002
- 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*: 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(1), 89-126.
- Walumbwa, F. O., Luthans, F., Avey, J. B., & Okey, A. (2011). Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 32, 4-24.
- Walumbwa, F. O., Wang, P., Wang, H., Schaubroeck, J., & Avolio, B. J. (2010). Psychological processes linkingauthentic leadership to follower behaviors. *The Leadership Quarterly*, 21, 901-914.
- Williams, L. J., Hartman, N., & Cavazotte, F. (2010). Method variance and marker variables: A review and comprehensive marker technique, *Organisational Research Methods*, *13*(3), 477-514.
- Wong, C., & Cummins, G. (2009). Authentic leadership: A new theory for nursing or back to basics? *Journal of Health Organization and Management*, 23, 522-538.
- Wooley, L., Caza, A., & Levy, L. (2011). Authentic leadership and follower development: Psychological capital, positive work climate, and gender. *Journal of Leadership and Organizational Studies*, 18(4), 438-448.
- Yukl, G. (2011). Leadership in organizations. New Delhi: Dorling Kindersley (India).

## **Appendix**

# Questionnaire for Measuring Leader's Managerial and Leadership Effectiveness

# A. Organisational performance

- 1. To what extent have the sales or output of your unit or organization increased due to the activities of your leader?
- 2. To what extent has the profit of your unit or organization increased due to the activities of your leader?
- 3. To what extent has the market share of the products of your organization or unit increased due to the activities of your leader?
- 4. To what extent has the return on investment of your organization or unit increased due to the activities of your leader?
- 5. To what extent has the value of your corporate stock increased due to the activities of your leader?

## B. Satisfaction of followers' needs and expectations

- 1. To what extent does your leader satisfy your needs?
- 2. To what extent does your leader satisfy your expectations?
- C. Improvement of the quality of work life and development of the followers
  - 1. To what extent has your leader improved the quality of your work life?
  - 2. To what extent has your leader been instrumental in building your self-confidence?
  - 3. To what extent has your leader been instrumental in increasing your skills?
  - 4. To what extent has your leader contributed to your psychological growth and development?

## D. Leader's contribution to absenteeism of followers

- 1. To what extent has your leader been responsible for your absenteeism?
- 2. To what extent has your leader been responsible for the absenteeism of other followers?
- E. Leader's contribution to dissatisfaction and hostility of the followers (negatively coded)
  - 1. To what extent have you complained against your leader to his supervisor or higher management?
  - 2. To what extent have you requested for transfer to another unit in the past?
  - 3. To what extent have you ever slowed down the work in reaction to your leader's behaviour towards you?
  - 4. To what extent have you ever deliberately sabotaged equipment and facilities in reaction to your leader's behaviour towards you?
- F. Leader's contribution to quality of group processes of his/her unit or organisation
  - 1. To what extent has the cohesiveness of the members of your unit or organization increased due to the activities of your leader?
  - 2. To what extent has the cooperation among the members of your unit or organization increased due to the activities of your leader?
  - 3. To what extent has the commitment of the members of your unit or organization towards your unit or organization increased as a result of the activities of your leader?
  - 4. To what extent has the confidence of the members of your unit or organization increased as a result of the activities of your leader?
- G. The extent to which the leader had a successful career

- 1. To what extent does your leader have a successful career?
- 2. How rapidly has your leader been promoted to positions of higher authority?
- 3. Has your leader been re-elected for the position in which he is in, if the position is filled by election?

# H. Respect for the leader

- 1. To what extent do you like your leader?
- 2. To what extent do you respect your leader?
- 3. To what extent do you admire your leader?
- 4. To what extent do you trust your leader?
- 5. To what extent do you perceive your leader to be having high integrity?
- I. Leader's contribution to enhancement of problem solving, decision making and conflict resolution skills of his/her unit
  - 1. To what extent is your leader instrumental in enhancing the problem solving skills of your unit or organization?
  - 2. To what extent is your leader instrumental in enhancing decision making skills of your unit or organization?
  - 3. To what extent is your leader instrumental in resolving disagreements and conflicts in your unit or organization?
- J. Commitment to carry our leader's requests (negatively coded)
  - 1. To what extent do other followers try to resist your leader's requests?
  - 2. To what extent do other followers try to ignore your leader's requests?
  - 3. To what extent do other followers try to subvert your leader's requests?
- K. Leader's contribution to group ability to deal with change
  - 1. To what extent does your leader contribute to enhancing the efficiency of role specialization to deal with change?
  - 2. To what extent does your leader contribute to the organization of activities to deal with change?
  - 3. To what extent does your leader contribute to the accumulation of resources to deal with change?
  - 4. To what extent does your leader contribute to the readiness of your group to deal with change?
- L. Leader's contribution to group ability to deal with crises
  - 1. To what extent does your leader contribute to enhancing the efficiency of role specialization to deal with crises?
  - 2. To what extent does your leader contribute to the organization of activities to deal with crises?
  - 3. To what extent does your leader contribute to the accumulation of resources to deal with crises?
  - 4. To what extent does your leader contribute to the readiness of your group to deal with crises?