



Authentic leadership—is it more than emotional intelligence?

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Abstract

One of the newest theories to gain widespread interest is authentic leadership. Part of the rationale for developing a model and subsequent instrument to measure authentic leadership was a concern that the more popular theory, the full range model of leadership and its instrument, the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1985), did not sufficiently emphasize aspects of leader emotional intelligence (EI), such as self-awareness (Avolio & Gardner, 2005).

In its current configuration, the Authentic Leadership Questionnaire (ALQ) (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008) measures four dimensions of leadership: relational transparency, internal moral perspective, balanced processing, and self-awareness. In a recent meta-analysis of authentic leadership, Banks, McCauley, Davis, Gardner, and Guler (2016) found that, overall, authentic leadership is highly correlated with transformational leadership ($k = 23$, $N = 5,414$, $\rho = .72$). The Banks et al. study, however, reported no meta-analytic analyses between emotional intelligence and authentic leadership. In a meta-analysis performed in 2010 by Harms and Crede, self-ratings of emotional intelligence and transformational leadership were highly correlated ($k = 47$, $N = 4,994$, $\rho = .56$). Given that a) EI is strongly related to transformational leadership, b) authentic leadership is very strongly related to transformational leadership, and c) part of the original rationale for creating a model and instrument to measure authentic leadership included a need to include more self-awareness in a leadership model, exploring the degree to which emotional intelligence is related to authentic leadership is important.

In this study, 1,028 working adults completed the Schutte Self-Report Emotional Intelligence Test (SSEIT) (Schutte, 2009) and the Authentic Leadership Questionnaire (Walumbwa et al., 2008). The sample was 61% female, 30% held a college degree or higher, and the mean age was 29.6 years. An exploratory factor analysis using the principal components method with varimax rotation resulted in a 2-factor solution. While exploratory in nature, this study indicates that the components of the Authentic Leadership Questionnaire seem to be measuring something different than emotional intelligence measured by the Schutte Self-Report Emotional Intelligence Test.

Keywords: authentic leadership, authenticity, emotional intelligence, EI

One of the newest theories to gain widespread interest is authentic leadership. Part of the rationale for developing a model and subsequent instrument to measure authentic leadership was a concern that the more popular theory, the full range model of leadership, and its instrument, the *Multifactor Leadership Questionnaire* (MLQ) (Bass & Avolio, 1985) did not sufficiently emphasize aspects of leader emotional intelligence (EI), such as self-awareness (Avolio & Gardner, 2005).

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The Banks et al. and Hoch et al. studies, however, reported no meta-analytic analyses between emotional intelligence and authentic leadership. In a meta-analysis performed in 2010 by Harms and Crede, self-ratings of emotional intelligence and transformational leadership were highly correlated ($k = 47, N = 4,994, rho = .56$).

Given that a) EI is strongly related to transformational leadership, b) authentic leadership is very strongly related to transformational leadership and c) part of the original rationale for creating a model and instrument to measure authentic leadership included a need to include more self-awareness in a leadership model, exploring the degree to which emotional intelligence is related to authentic leadership is important.

Previous Research on Emotional Intelligence

Ability Models of Emotional Intelligence

One approach to emotional intelligence (EI) envisions EI as either a form of intelligence or overlapping with intelligence. The predominant ability model is that of Mayer, Salovey, and Caruso. Their model posits EI as “the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought” (Mayer, Roberts, & Barsade, 2008, p. 515). Their test to measure EI ability is the *MSCEIT 2*. The *MSCEIT 2* uses “correct and incorrect” answers. The correct answers have been determined by expert judges.

Because the *MSCEIT 2* is a test rather than an inventory, it is typically more highly correlated with traditional measures of intelligence than are other types of EI assessments. Likewise, it is typically less correlated with traditional measures of personality than are other types of EI assessments.

Mixed Models of Emotional Intelligence

A different approach to EI is often called a mixed models approach. This approach envisions EI as a combination of factors. The predominant mixed model approach is that of Bar-On. Bar-On envisions EI as cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others, relate with them, and cope with daily demands. (Bar-On, 2006, p. 15). This study used the *Schutte Self-Report Emotional Intelligence* instrument. The instrument is considered a mixed models approach to emotional intelligence.

Research on Leader Emotional Intelligence

Table 1 illustrates leader self-reported ratings related to leader emotional intelligence (EI) as well as leader self-reported ratings of EI and ratings of the criterion variable provided by others.

The top portion of Table 1 reflects research from studies ($k = 185$) that included ratings ($N = 19,113$) that indicate when leaders self-assess their EI, those ratings generally have a weak to moderate effect size (ES), with various aspects of the full range model of leadership such as laissez-faire ($ES = -.37$), management by exception-passive ($ES = -.22$), and management by exception-active ($ES = -.10$).

Table 1

Meta-Analytic Findings Related to Leader Emotional Intelligence

Variable	k	N	Effect Size
Leader Self-Ratings of Both EI and Leadership			
Laissez-Faire (H)(3)	13	1,204	-.37
Management by Exception (Passive) (H)(3)	10	871	-.22
Management by Exception (Active) (H)(3)	10	871	-.10
Transformational Leadership (H)(2)	10	1,066	.24
Contingent Reward (H)(1)	12	1,272	.35
Idealized Influence (Attributed) (H)(1)	15	1,576	.38
Intellectual Stimulation (H)(1)	17	1,815	.40
Idealized Influence (Overall) (H)(1)	17	1,815	.42
Inspirational Motivation (H)(1)	17	1,814	.43
Individual Consideration (H)(1)	17	1,815	.45
Transformational Leadership (H)(1)	47	4,994	.56
Leader Self-Ratings of EI and Others' Ratings of Criterion Variable			
Laissez-Faire (H) (2)	8	617	-.17
Transformational Leadership (H)(2)	4	441	.05
Idealized Influence (overall) (H)(1)	7	730	.10
Individual Consideration (H)(1)	7	730	.10
Intellectual Stimulation (H)(1)	7	730	.10
Follower Job Satisfaction (M)(4)	5	732	.11
Transformational Leadership (H)(1)	22	2,661	.12
Contingent Reward (H)(1)	6	622	.13
Inspirational Motivation (H)(1)	7	730	.14
Transformational Leadership (H)(3)	4	267	.20
Constructive Conflict Management Leaders (S)(1)	NP	2,122	.25
Follower Job Satisfaction (M)(1)	20	4,665	.31
Subjective Team Performance (C)(1)	10	3,335	.35
Follower Job Satisfaction (M)(5)	6	1,407	.43

Note. (C) Ceri-Booms, Curşeu, and Oerlemans (2017), the statistic is the population estimate corrected for attenuation due to measurement error, sampling error variance; (H) Harms and Crede (2010), the statistic is the estimated true score correlation; (M) Miao, Humphrey, and Qian (2016), the statistic is the corrected sample-size-weighted mean correlation; (S) Schlaerth, Ensari, and Christian (2013), the statistic is the Fisher's z ; (1) All EI Instruments; (2) MSCEIT; (3) EQ-I; (4) Ability Model; (5) Mixed Model

Additionally, the research illustrated that leader self-reported ratings are moderately positively correlated with contingent reward and the 5 I's of the full range model of leadership (ES ranged from .24 to .45). Most noteworthy is the strong positive finding between leader self-reported ratings and the behavioral facet of transformational leadership ($ES = .56$).

The lower portion of Table 1 reflects research from studies ($k = 113$) that included ratings ($N = 19,789$) that indicate when leaders self-assess their EI and when others rate the criterion variable, the ratings indicate that leader EI is weakly negatively correlated with laissez-faire leadership ($ES = -.17$). The ratings also reflect weak positively correlated ($ES = .05$ to $.20$) relationships with various aspects of the full range model of leadership. Also worth mentioning, the ratings indicate there is a weak positive correlation with constructive conflict management ($ES = .25$) and moderately positive relationships between follower job performance ($ES = .31$ and $.43$) and team performance ($ES = .35$).

Authentic Leadership

Authenticity is not a new concept. It can be traced back to the ancient Greek philosophy, "Know Thyself," which was inscribed in the Temple of Apollo at Delphi (Parke & Wormell, 1956). Authenticity has been shown to influence individual well-being and enduring social relationships (Erickson, 1995; Rogers, 1959). Maslow (1968) suggested that satisfying higher order needs was a precondition to authenticity.

The authentic leadership construct encompasses four dimensions. Self-awareness is a dynamic process and is the degree to which the leader reflects and demonstrates an understanding of how (s)he derives and makes sense of the world and is aware of his or her strengths, limitations, how others see him or her, and how (s)he impacts others (Kernis, 2003; Walumba, Avolio, Gardner, Wernsing, & Peterson, 2008). Balanced processing is the degree to which the leader shows that (s)he objectively analyzes the relevant data and solicits others' views that challenge his or her deeply held beliefs before making a decision (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Walumbwa et al., 2008).

Internalized moral perspective refers to the degree to which the leader sets a high standard for moral and ethical conduct, and lets them consistently guide his or her decisions and actions versus external pressures such as group, organizational, and societal pressures (Avolio & Gardner, 2005; Gardner et al., 2005; Walumbwa et al., 2008). Relational transparency is the degree to which the leader presents his/her true self (as opposed to a false and distorted self) to others, openly shares information, and expresses his/her true thoughts and feelings, reinforcing a level of openness with others that allows others to be comfortable and forthcoming with their ideas, challenges, and opinions (Avolio & Gardner, 2005; Gardner et al., 2005; Walumbwa et al., 2008).

With the incorporation of a moral and ethical perspective, the theory of authentic leadership moves beyond transformational or full-range leadership (Avolio et al., 2005) to serve as a foundation for understanding leadership independent of style (George, 2003; Hughes, 2005; Luthans & Avolio, 2003). Avolio et al. (2005) argue that authentic leadership can be viewed as a "root construct" for other leadership processes.

Research on Authentic Leadership

To date, two meta-analyses have been published analyzing authentic leadership. Table 2 reflects research from studies/analyses ($k = 197$) that included ratings ($N = 48,858$) that indicate authentic leadership is

weakly negatively correlated with employee burnout ($ES = -.27$), deviance ($ES = -.25$), and employee turnover intention ($ES = -.21$).

Table 2 also indicates that authentic leadership is weakly to moderately to strongly positively related to job performance, measures of organizational citizenship and commitment, measures of employee engagement and employee empowerment, and various measures of leadership and trust (ES ranged from .12 to .72).

Table 2

Meta-Analytic Findings Related to Authentic Leadership

Variable	k	N	Effect Size
Burnout/Stress (Bank)	7	1,616	-.27
Employee Deviance (Hoch)	4	1,175	-.25
Turnover Intentions (Bank)	5	1,149	-.21
Job Performance (Hoch)	8	2,101	.12
Task Performance (Bank)	9	2,054	.14
Voice (Bank)	6	1,530	.31
Organizational Citizenship (Hoch)	8	1,256	.33
Engagement (Bank)	11	3,018	.37
Engagement (Hoch)	6	1,182	.47
Organizational Citizenship (Bank)	10	2,309	.48
Job Satisfaction (Hoch)	9	2,129	.48
Organizational Commitment (Hoch)	5	797	.48
Empowerment (Bank)	5	1,394	.51
Organizational Commitment (Bank)	17	4,077	.51
Psychological Capital (Bank)	7	3,134	.53
Job Satisfaction (Bank)	16	4,084	.53
Leader Effectiveness (Bank)	7	1,431	.58
LMX (Bank)	6	2,083	.65
Trust in Leader (Bank)	12	3,210	.65
Satisfaction with Leader (Bank)	6	1,318	.66
Transformational Leadership (Bank)	23	5,414	.72
Transformational Leadership (Hoch)	10	2,397	.75

Note. (Bank) Banks, McCauley, Gardner and Guler (2016), the statistic is the mean true-score correlation corrected for unreliability for both variables; (Hoch) Hoch, Bommer, Dulebohn, and Wu (2016), weighted mean correlations, corrected for measurement and sampling error.

Participants

In this study, 1,028 working adults completed the *Schutte Self-Report Emotional Intelligence Test* (SSEIT) (Schutte, 2009) and the *Authentic Leadership Questionnaire* (Walumbwa et al., 2008). The sample was 61% female, 30% held a college degree or higher, and the mean age was 29.6 years.

Instruments

Schutte Self-Report Emotional Intelligence Test (SSEIT)

Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998) developed the SSEIT with the purpose of assessing trait emotional intelligence in line with Salovey and Mayer's (1990) emotional intelligence abilities and traits model conceptualized by the following branches: appraisal and expression of emotion; regulation of emotion; and utilization of emotion.

Schutte et al. (1998) performed a principal-components, orthogonal-rotation, factor analysis on the instrument's 33 items representing all aspects of Salovey and Mayer's (1990) model of emotional intelligence. Because all items loaded on factor one, a first factor dimension was revealed. An internal consistency analysis revealed a Cronbach's alpha of .90 during the development of the instrument and a cross-check for internal consistency revealed a Cronbach's alpha of .87. A two-week test-retest reliability further revealed a total scale score of .78 (Schutte et al., 1998).

The SSEIT contains 33 self-report items that use a five-point Likert scale. Schutte et al. (2009) notes that the most widely used subscales obtained from the instrument are based on research by Petrides and Fumham (2000), Ciarrochi, Chan, and Bajgar, (2001), and Saklofske, Austin, and Minski, (2003). Some of the items across these three studies loaded on different factors and the authors labeled the four factors slightly differently. The current study used four subscales called, Managing Others' Emotions, Perception of Emotions, Managing Own Emotions, and Utilization of Emotions.

The Authentic Leadership Questionnaire (ALQ)

Walumbwa et al. (2008) developed the *Authentic Leadership* to measure four aspects of authentic leadership: Self-Awareness, Relational Transparency, Internalized Moral Perspective, and Balanced Processing. The ALQ contains 16 self-report items. Internal consistency analysis performed by Walumbwa et al. (2008) revealed the following Cronbach alpha reliability scores: Self-Awareness, .92; Relational Transparency, .87; Internalized Moral Perspective, .76; and Balanced Processing, .81.

Scale Reliabilities

Table 3 provides the Cronbach reliability scores from the current study for the SSEIT and ALQ. The researchers used a standard of .50 as the cut-off for sufficient scale reliability for use in group analysis. Using that standard, all the individual scales, as well as the two composite scales, were deemed sufficient to use in additional analysis (Ree & Carretta, 2006).

Bivariate Results

Table 4 provides the bivariate correlations of the continuous variables age the instrument scales. One of the criticisms of the *Authentic Leadership Questionnaire* is the high inter-correlations among the subscales (Green, 2015, p. 404). The inter-correlations among the four subscales in this study ranged from $r = .49$ to $r = .53$, indicating reasonable levels of both discriminant and convergent validity. The inter-correlations among the four subscales of the SSEIT ranged from $r = .49$ to $r = .63$. The inter-correlations above $r = .6$ are slightly higher than researchers might desire. Since an exploratory factor analysis was run as the second step of the analysis, these inter-correlations were deemed acceptable to proceed.

Table 3*Scale Reliability Scores*

Scale	Cronbach Alpha
Managing Others' Emotions	.63
Perception of Emotions	.72
Managing Own Emotions	.64
Utilization of Emotions	.70
Overall Emotional Intelligence	.87
Balanced Processing	.59
Moral/Ethical	.71
Transparency	.58
Self-Awareness	.69
Overall Authentic Leadership	.85

Table 4*Correlation Matrix Among Instrument Scales*

	1	2	3	4	5	6	7	8	9	10
1 Age										
2 Transparency	.102**									
3 Moral/Ethical	.150**	.549**								
4 Balanced Processing	.189**	.492**	.493**							
5 Self-Awareness	.050	.533**	.484**	.529**						
6 Total ALQ	.175**	.846**	.828**	.770**	.673**					
7 Perception of Emotions	.216**	.319**	.229**	.309**	.374**	.356**				
8 Managing Own Emotions	.161**	.333**	.324**	.289**	.392**	.399**	.592**			
9 Managing Others' Emotions	.063*	.364**	.321**	.304**	.385**	.416**	.634**	.614**		
10 Utilization of Emotions	.066*	.308**	.293**	.214**	.325**	.342**	.490**	.551**	.624**	
11 Total SSEIT	.125**	.403**	.358**	.348**	.455**	.464**	.850**	.842**	.840**	.754**

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

Exploratory Factor Analysis

An exploratory factor analysis using the principal components method with varimax rotation resulted in a 2-factor solution. The first factor had an eigenvalue of 2.76 and accounted for 34.54% of the variance in scores. All four dimensions of the *Schutte Self-Report Emotional Intelligence Test* loaded on this component with factor loadings greater than .75. The second component had an eigenvalue of 2.54 and accounted for 31.82% of the variance in scores. All four dimensions of the *Authentic Leadership*

Questionnaire loaded on this component with factor loadings greater than .75. The component matrix indicated these two components were correlated at .38.

While exploratory in nature, this study indicated that the components of the *Authentic Leadership Questionnaire* seem to be measuring something different from emotional intelligence measured by the *Schutte Self-Report Emotional Intelligence Test*.

Table 5

Exploratory Factor Analysis

Scale	Factor 1 Emotional Intelligence	Factor 2 Authentic Leadership
Managing Others' Emotions	.837	.230
Perception of Emotions	.795	.192
Managing Own Emotions	.795	.233
Utilization of Emotions	.788	.157
Balanced Processing	.137	.786
Moral/Ethical	.156	.784
Transparency	.221	.776
Self-Awareness	.293	.737

Discussion

In a meta-analysis of leading theories of leadership, Rowold, Borgmann, and Diebig (2015) analyzed the inter-relationships among transformational, transactional, and laissez-faire leadership from the *Multifactor Leadership Questionnaire*, consideration and initiating structure from the *Leader Behavior Description Questionnaire*, and leader-member exchange from the *LMX7* or *LMX MDM*.

One of the analyses Rowold et al. conducted was a meta-analytic confirmatory factor analysis (CFA). The CFA found an acceptable correlated two-factor model among the six measures of leadership, $\chi^2 = 723.55$, $df = 7$, GFI = .99, AGFI = .96, SRMR = .07. In the correlated model, one factor was labeled “task behaviors” and consisted of initiating structure, transactional leadership, and inversely related laissez-faire leadership.

The second factor was labeled “relationship behaviors” and consisted of transformational, consideration and leader-member exchange. Rowold et al. reported the correlated two-factor model, but also noted that the correlation between the task behaviors factor and relationship behaviors factor was $r = .94$, which cast doubt on the utility of the two-factor model.

Rowold et al. also found a good fit for a one-factor model that consisted of all six dimensions of leadership: transformational, transactional, laissez-faire, consideration, initiating structure, and leader-member exchange, $\chi^2 = 798.58$, $df = 9$, GFI = .98, AGFI = .96, SRMR = .08. These results pointed to a general factor of leadership that may capture the behaviors measured by all six aspects of leadership.

Currently there has not been a meta-analysis that included the relationship between authentic leadership and emotional intelligence. Figure 1 captures the results of previous meta-analyses juxtaposed with the

results of this study. This single study adds to an aspect of the body of literature that needs more study: the degree to which authentic leadership and emotional intelligence share commonality.

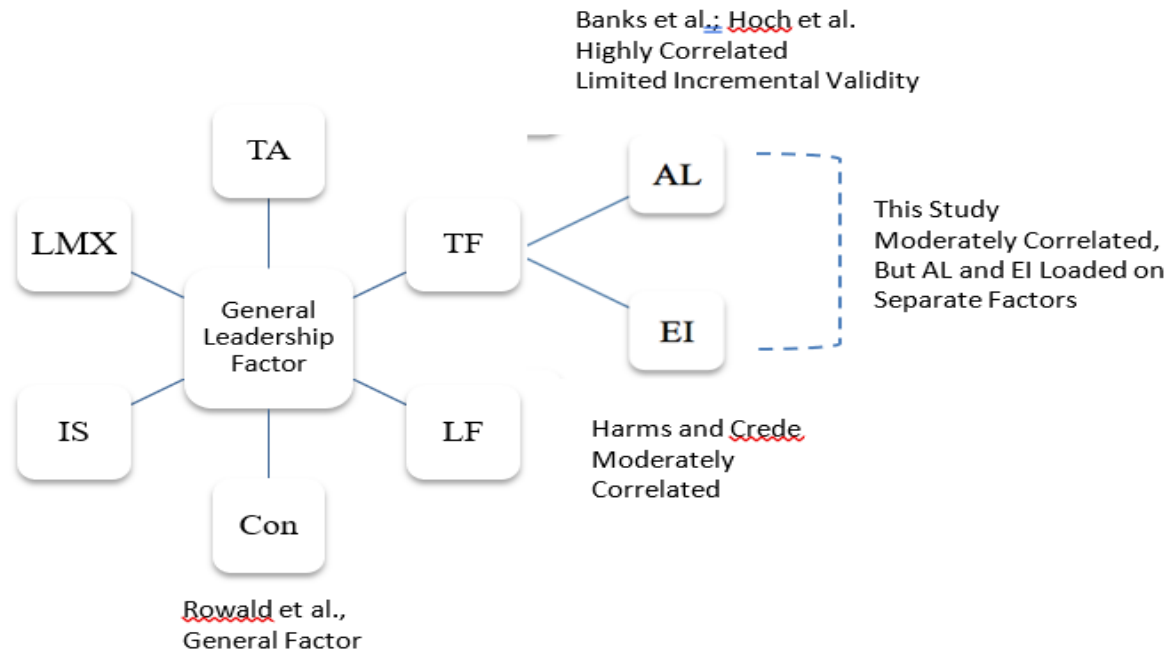


Figure 1. Meta-Analytic results juxtaposed with present study results

Conclusion

As society and methods of work change, new theories of how to lead others typically emerge. The concept of both worker and leader emotional intelligence is beginning to be studied to the point that a body of literature exists. This literature indicates that leader emotional intelligence is moderately correlated with leader transformational ratings using the *Multifactor Leadership Questionnaire 5x*.

The development of the *Authentic Leadership Questionnaire* version 1 (Walumba et al., 2008) was a conscious effort to incorporate an aspect of emotional intelligence called self-awareness into a model of leadership. More studies are needed to ascertain the convergent and discriminant validity of the ALQ in relation to separate measures of emotional intelligence. This study found that for leader self-assessments of the ALQ and SSEIT, the subscales loaded on separate factors, providing one data point in what will eventually become a body of literature related to measurement of authentic leadership and emotional intelligence. This one study indicated that the ALQ version 1 and SSEIT seem to be measuring different constructs.

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