

Faculty & Research Working Paper

Emotional Intelligence and Leadership Effectiveness: The Mediating Influence of Collaborative Behaviors Emotional Intelligence and Leadership Effectiveness:

The Mediating Influence of Collaborative Behaviors

Laura Guillén *

Elizabeth Florent-Treacy**

sent for review to *Journal of Organizational Behavior* February 2011

- * Assistant Professor at ESMT European School of Technology and Management, Schlossplatz 1 10178 Berlin, Germany. Ph: +49 (0) 30 212 31-1535; Email: laura.guillen@esmt.org
- ** Associate Director, Research INSEAD Global Leadership Centre (IGLC) at INSEAD Boulevard de Constance 77305 Fontainebleau, France. Ph: +33 (0)1 60 72 41 32; Email: elizabeth.florent@insead.edu

A Working Paper is the author's intellectual property. It is intended as a means to promote research to interested readers. Its content should not be copied or hosted on any server without written permission from publications.fb@insead.edu

Click here to access the INSEAD Working Paper collection

ABSTRACT

Leadership effectiveness can be divided into two broad categories that include *getting* along behaviors (teamwork and empowerment of others) and/or *getting* ahead behaviors (visioning, energizing, designing and rewarding). This study examines the effects of emotional intelligence on getting along and getting ahead leadership behaviors at work. Results from an analysis of a dataset derived from a 360° leadership behavior survey completed by 929 managers indicated that emotional intelligence has a significant effect on collaborative behaviors at work, and collaborative behaviors directly affect the inspirational side of leadership performance. Further, getting along behaviors were found to fully mediate the relationship between emotional intelligence and getting ahead behaviors. Theoretical and practical implications are discussed.

INTRODUCTION

The concept of emotional intelligence (EI) has been conceptualized as an important predictor for success at work (Goleman, 1995). Though some elements of the concept are controversial (e.g., Matthews, Zeidner and Roberts, 2002), the theme of EI still resonates for practitioners and theorists in the business world (Domagalski, 1999; Grandey, 2000; Law, Wong & Song, 2004, Mayer, Roberts & Barsade, 2008). The appeal of EI has been continuously fueled by claims stating that it is a key foundation of successful job performance (Joseph & Newman, 2010).

EI has been defined as an individual's capacity to appropriately regulate his or her emotions, and involves the "ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey and Mayer, 1990). Results linking EI and job performance have been inconclusive. Bachman, Stein, Campbell and Sitarenios (2000) and Wong, Law and Wong (2004) found support for the notion that EI positively influences performance. However, Feyerherm and Rice (2002) found that only one of six measures of EI related to team performance, and Sosik and Megerian (1999) showed that EI was not related to supervisor ratings of job performance. One possible explanation for the non-significant relationships reported lies in the difficulty of identifying variables mediating the links between EI and performance (e.g., Côté & Miners, 2006).

In this study we framed job performance as leadership effectiveness. Classic dichotomies such as intimacy versus power (McAdams, 1985), social interests versus superiority strivings (Adler, 1939), communion versus agency (Bakan, 1966), and other-oriented versus self-interested values (Purcell, 1967) suggested that there were

two factors connected to the effectiveness of leaders. The first reflects social desirability and the socialization processes at work, and the second reflects personal surgency and the desire to have an impact on others (Digman, 1997). More recently, the socioanalytic theory literature picked up this conceptual legacy and applied it to the work context (Hogan & Shelton, 1998; Hogan & Holland, 2003), by proposing that interactions in work settings can be categorized as attempts to *get along with others* (feeling liked and supported) and *to get ahead of others* (by gaining power and control of resources). Previous empirical research examined the relation between EI and subsequent leadership performance, but no research examined how specifically EI translates into these two broad categories of behaviors at work. This study examines these relationships and evaluates the extent to which getting along behavior in organizational settings mediates the influence of EI and getting ahead behavior.

Emotional Intelligence

There are different theoretical approaches to EI accepted by the academic community (Fernández-Berrocal and Extremera, 2006) and, subsequently, the high-order dimensions they proposed differ. Establishing the validity of EI is beyond the scope of this article, but its potential effect on leadership outcomes warrants further research exploration. Via content analysis of four EI approaches (Salovey & Mayer, 1997; Bar-On, 2007; Goleman, Boyatzis & McKee, 2002; Petrides & Furnham, 2000) we identified three emotional responses that may serve to infer the level of EI at work: awareness of emotions, management of emotions, and psychological well-being and motivation.

Awareness relates to an individual's ability to understand his or her emotions and those of other people, and the ability to express emotions, accordingly. People who are accomplished at this acknowledge their emotions better than most, are highly sensitive to the emotions of others, and able to predict others' emotional responses (Law, Wong and Song, 2004). Management of emotions refers to an individual's capacity to regulate his or her emotions and to create a holding environment in which to direct them towards constructive activities (Law, Wong & Song, 2004). Finally, psychological well-being and motivation include various concepts such as happiness, self-regard, self-esteem or self-motivation (Bar-On, 1997; Petrides & Furnham, 2000, 2001). Since this last component does not fit into the original EI definition by Salovey and Mayer (1997) and has been criticized for being a "grab bag" of concepts poorly defined (Joseph & Newman, 2010), we chose not to include it in our study.

Most would agree that self-awareness is the keystone to EI (Shipper & Davy, 2002). Self-awareness serves as the foundation for the emotional and psychological development necessary to achieve success (Goleman, 1995). Individual leaders who are able to regulate their own emotions are better equipped to provide a "holding environment" for the people who work for and with them, creating a culture where people feel at ease. Thus, EI serves to create an appropriate, trusting environment for work interactions, which positively affects job performance outcomes (Law, Wong & Song, 2004, Joseph & Newman, 2010). For these reasons, EI is examined in this study as an important influence on leadership behavior.

Getting along behaviors at work

A critical attribute of leaders is their ability to act as team players (e.g. Conger & Laler, 2009). Getting along at work is reflected in the ability to work well in teams, and empowering others (Alvesson & Wilmott, 1992; Conger & Kanungo, 1992; Burke, Stagl, Klein, Goodwin, Salas & Halpin, 2006). When successful in showing these behaviors, individuals build their reputation for being good team players, organizational citizens, and service providers (Moon, 2001; Mount, Barrick, & Stewart, 1998). Teamwork and empowerment facilitate the behavioral interactions and attitudes needed for effective outcomes related to the team's objectives. Therefore, in this study, we examined getting along behaviors in order to (1) determine how EI contributes to their formation and (2) to determine if such getting along behaviors subsequently lead to getting ahead leadership behaviors.

Getting ahead behaviors

The second block of leadership behaviors that is considered in this study is related to the directive and inspirational side of leadership, whereby to accomplish their organizational endeavors, leaders communicate and implement their vision, effectively, control task processes, and reward people, accordingly (Kirkpatrick and Locke, 1996). When successful in displaying these behaviors at work, individuals are described as achieving results, providing leadership, communicating a vision, and motivating and influencing others (Conway, 1999; Borman & Brush, 1993; Conway, 2000; Bartram, 2005, Goleman, Boyatzis and McKee, 2002; McCauley et al., 1998).

HYPOTHESES DEVELOPMENT

Emotional intelligence and getting along behaviors at work

Several studies have shown that EI affects teamwork and interpersonal relationships at work (Barsade, 2002; McGregor, 1960, Pérez et al., 2004; Rafaeli & Sutton, 1987; Wolff, Pescosolido & Druskat, 2002). Understanding and regulating one's emotions as well as those of others enable one to work cooperatively (Levasseur, 1991) and share positive feelings with work colleagues (Sosik, 2001), thus promoting a bond between individuals at work. People with high EI are socially perceptive at recognizing and understanding the feelings and emotions in their team (e.g., Steiner, 1972), and induce positive emotions and attitudes in others (Bono & Ilies, 2006). If EI facilitates effective interpersonal exchanges at work (e.g., Blau), it may be considered a prerequisite for group task coordination and leadership emergence (Wolff et al., 2002). Thus, it is reasonable to hypothesize that EI will be associated with leaders' getting along behaviors in organizational settings. Therefore, we propose the following hypothesis:

Hypothesis 1: EI has a direct, positive effect on getting along behaviors at work.

Getting along and getting ahead behaviors at work

Empirical research on teamwork and collaboration indicates a strong and consistent link between the effectiveness of interpersonal processes and subsequent job outcomes (e.g., Johnson, 2008; Tasi et al., 2007; Burke, Stagl, Salas, Pierce and

Kendall, in press). For example, Christakis and Fowler (2009) showed that network contagion is a powerful tool of influence at work. Other studies showed that followers' perceptions of empowerment and team cohesion are related to work performance (e.g., Gutty, Devine & Whitney, 1995; Jung & Sosik, 2002; Mullen & Cooper, 1995). More concretely, the positive impact of getting along behaviors on inspirational leadership (referred to in this study as getting ahead leadership behaviors) has been documented by previous studies (e.g., Wolff et al., 2002). Thus, we propose the following hypothesis:

Hypothesis 2: Getting along behaviors at work have a positive effect on getting ahead leadership behaviors.

Emotional Intelligence—getting along behaviors—getting ahead behaviors

EI allows individuals to create and maintain positive affective states which have been suggested to benefit work behavior (George, 1991) by broadening behavioral repertoires at work (Fredrickson, 2001). Thus, EI is an individual characteristic (Salovey & Mayer, 1990) and it impacts job and life outcomes mainly due to an individual's capacity to transform this internal ability into an effective use of emotions in interactions with others. A person with high EI is able to interpret his or her own mood as well as others' moods, correctly, and therefore has a higher chance of forming good relationships and getting social support in general (Law, Wong & Song, 2004). Because interpersonal interactions are a basic component of managerial jobs, we can hypothesize that EI needs to crystallize into helping and collaborative behaviors at work that can be perceived by others, and that these types of behaviors will moderate the EI-inspirational leadership link as assessed by observer ratings of leadership performance

in work settings. Thus, we draw on the emotional intelligence and job performance literature (Joseph & Newman, 2010; Hogan & Shelton, 1989; Conway, 2000) to propose that EI allows individuals to engage in interpersonal processes, thus promoting getting along behaviors at work, which in turn impact getting ahead leadership behaviors. We believe that followers who experience a positive, trusting relationship with a leader will also be more likely to have a positive impression of their own effectiveness as inspirational leaders.

In the current study, we used a wide range of observers per participant (e.g., direct reports, superiors, and peers) in order to assess the importance of displaying getting along behaviors in translating EI into getting ahead leadership behaviors. We claim that since social interactions constitute a key piece of managerial work, raters occupying different positions within professional contexts may value the capacity of establishing bonds with colleagues and displaying helping and collaborative behaviors at work. In sum, EI may affect perceived getting ahead leadership behaviors through interpersonal processes that facilitate the creation of a holding environment (i.e., Joseph & Newman, 2010). We propose the following hypothesis:

Hypothesis 3: Getting along behaviors at work mediate the relationship between EI and getting ahead leadership behaviors.

The relationships proposed in the hypotheses were tested using structural equations models. We first assessed the reliability of the measures to take measurement error into account in further steps of our analyses. Then, we followed Anderson and Gerbing's (1998) two-stage process: the measurement model was examined as a first step, and then, structural verification of the variable relationships was conducted.

Competing measurement specifications and misspecifications in the structural model were examined.

METHOD

Sample and procedure

Data were obtained from 929 managers enrolled in executive education programs at an elite European business school. The data was collected through the administration of a proprietary 360° leadership behavior instrument, the Global Executive Leadership Inventory (Kets de Vries et al, 2004). This instrument was used to operationalize and measure all the variables considered in this study.

The questionnaire was administered on-line to the participants and their observers at the beginning of the advanced management program to obtain information about their leadership behaviors in preparation for a group coaching intervention and to help them to reflect about their leadership styles and how they were perceived by others at work. Respondents' ages ranged from 32 to 60, and the average age was 44 years. Most of the respondents were men (90.6 percent). Each participant was rated on 12 leadership behavior dimensions by an average of 8.34 observers from their professional environment (7771 observers in total).

Measures

Getting along and getting ahead behaviors. Six scales (dimensions) of the GELI were developed specifically to capture leadership behaviors. The dimensions Teamwork and Empowerment were used in this study to assess getting along behaviors because they actively imply cooperation with others and striving for an atmosphere of trust. Getting ahead behaviors included GELI dimensions that relate to giving direction and guidance as well as mobilizing and motivating around a vision (Envisioning, Designing and Aligning, Energizing, and Rewarding). Rewarding was considered to form part of this second block because it specifically deals with putting rewards systems in place – stock options, bonuses, perks and profit-sharing plans, for example – to motivate employees and ensure that work systems are fair. Thus, it was considered to form part of giving direction and building a motivational structure for subordinates to implement the leader's vision.

All dimensions were measured on a 7-point Likert scale. The six scales, comprised of a total of 49 items, map onto the two leadership blocks considered in this study. (See the Appendix for a listing of the scales, their definitions, and sample items.) Envisioning was comprised of eight items, similar to the statement "I actively encourage new business opportunities." Energizing was composed of eight items similar to "I show my enthusiasm for projects." Designing and Aligning was composed by seven items similar to "I set clear performance standards and goals." Rewarding included eight items similar to "I make sure that compensation for my employees is fair and reflects individual effort." Team-building included 11 items similar to "I encourage team members to build collaborative relationships with each other." Finally,

Empowering was comprised of eight items similar to "I encourage people to share information within the organization."

Emotional Intelligence. EI was measured by twelve items on a 7-point Likert scale, included as a dimension of the GELI, with items similar to "When someone is talking to me, I give them my full attention."

Analysis

Reliability and Intercorrelations._The reliability of the dimensions was calculated using the Ω coefficient as suggested by Carmines and Zeller (1979) and McDonald (1999). Alpha is a lower bound for the reliability of multi-item scales, whereas the omega coefficient is the closest estimate to true reliability of the measure and is calculated as follows:

$$\Omega_{i} = 1 - (ErrorVar_{i}/Var_{i})$$

$$ErrorVar_{j} = \sum_{k=1}^{K} \operatorname{var}_{kj} \times error_{kj}$$

The error variance of a dimension j (ErrorVar $_j$) was calculated by the summation of the multiplication of the k items' variances that form that dimension (varkj) by the items' standardized error variances (errorkj). The reliability (Ωj) of a dimension j was computed by subtracting the division of the error variance (ErrorVar $_j$) from the variance of the dimension scale (Var $_j$) to 1. The reliability values ranged from .79 ('empowering') to .96 ('emotional intelligence'). The unweighted summated scales for the dimensions were calculated, and their correlations and composite reliabilities are shown in Table 1.

insert Table 1 about here

Model Analysis. Running structural equations models (SEM) with LISREL provided various global diagnostic indices. We used the normal theory weighted least squares Chi-square, the root mean square error of approximation (RMSEA), and the comparative fit index (CFI). Browne and Cudeck (1992) suggested that RMSEA values less than .05 indicate a close fit between the model and the data, even if RMSEA values less than .08 indicate a reasonable fit. Bentler (1990) suggested that CFI values lower than .95 indicate a poor adjustment. We also used standardized RMR (SRMR) and the expected parameter change (EPC) indicators suggested by Saris, Satorra and Sörbom (1987) in order to assess for misspecifications in our models.

In Stage 1, the two-factor measurement model was fitted to the data. This confirmatory factor analysis provides an indication of the convergent validity of the leadership behaviors used to represent the two latent constructs of this study: getting along and getting ahead behaviors (Bentler, 1989). An alternative nested model which combines the two leadership constructs into a single one was contrasted to the original model (by specifying perfect correlation among the two latent variables). This evaluation indicates the discriminant validity of the two hypothetical leadership latent constructs (Brooke, Russel and Price, 1998). The differences in the global diagnostic indicators used in the study served to interpret which of the two models (one- or two-factors solutions) fit the data better.

The structural model was examined in a second step. The same global diagnostic indicators as in the previous stage were tested for significance. Then, we also examined to what extent the getting along behaviors mediate the relationship between EI and getting ahead behaviors. The structural models were used to evaluate three conditions to establish mediation: (1) EI significantly affects getting ahead behaviors, (2) EI significantly influences getting along behaviors, and (3) getting along behaviors significantly affect getting ahead behaviors (Baron and Kenny, 1986). In addition to these three conditions, we added another one to assess complete mediation: test the assumption that EI has no direct effect on the getting ahead behaviors when the mediator, getting along behaviors, is held constant (Hom, Griffeth, Palich and Bracker, 1995).

Correlations between the latent constructs, corrected for measurement error, were used to evaluate the first condition, while parameter estimates using SEM indicated if the second and third conditions were satisfied. Another comparison using second-order factors was used to evaluate the fourth condition for mediation. For doing so, we assessed a model including a direct path from EI to leadership behavior.

Results

The two-factor solution measurement model is presented in Figure 1. Model-fit indexes of the measurement models are presented in Table 2. Results provided in the previous figure show that all standardized factor loadings are significant, thus supporting convergent validity of the indicator variables composing the two latent constructs of this study (Anderson and Gerbing, 1988; Bentler, 1989). The fit indexes of

the single factor model indicated that this model does not fit the data in our sample (Model 2 in Table 2). Thus, combining the two latent constructs into a single one reduced the model fit (chi-squared (8)=203.25; CFI=97; RMSEA=0.16; SRMR=0.03). The chi-squared difference was significant, indicating the need to maintain the two-factor solution for subsequent analyses. In sum, results of the measurement model evaluation indicate acceptance of the baseline model. Unweighted summated scales corrected for measurement error were calculated using the appropriate indicator variables for each latent construct.

insert Figure 1 about here

insert Table 2 about here

In Stage 2, we evaluated the structural model. The fit indexes for the structural model were: chi-squared (10)=57.76, CFI=.99; RMSEA=.072 and SRMR=.018. Then, we calculated the unweighted summated scales, correcting for measurement error, and used the covariance matrix to estimate the dissatenuated coefficients among the factor variables. The predicted influence of EI on getting along behaviors was supported (.89, p<.05), and the direct path from getting along to inspirational leadership behaviors was significant (.81, p<.05).

To test the fourth mediation condition, we evaluated the degree to which getting along behaviors fully mediated the relationship between EI and getting ahead behaviors considered in this study. Using the covariance matrix of the factor scores corrected for measurement errors, we added a direct path between EI and getting ahead behaviors. The path turned out to be insignificant (0.03, n.s.), whereas the paths between EI and getting along behaviors (0.87, p<0.05) and between getting along and getting ahead behaviors (0.79, p<0.05) remained significant. Results from this analysis indicate that getting along behaviors fully mediate the influence of EI on getting ahead leadership behaviors and provide support for Hypothesis 3.

In sum, these results provide support for the categories used to describe the two types of behaviors at work outlined above, and also indicate support for the structural relations among them. In particular, emotional intelligence influences getting along behaviors, which subsequently impact other behaviors at work related to the inspirational side of leadership. Furthermore, getting along behaviors fully mediated the relationship between emotional intelligence and getting ahead leadership behaviors.

DISCUSSION

This study examined the mediating effects of collaborative behaviors at work between EI and inspirational leadership behaviors. Stage 1 analyses examined the measures used to assess the getting along and getting ahead leadership behaviors. Confirmatory factor analysis supported the operationalization of the two latent constructs. Results also indicated that the two types of leadership behaviors are distinct, thus supporting their discriminant validity.

Stage 2 analyses examined the structural relations among EI and the two leadership constructs. Covariance structure analysis provided strong support for the relations proposed in the model. Specifically, EI significantly affects getting along behaviors. The predicted positive relationship between getting along and getting ahead behaviors was also supported. Displaying collaborative behaviors was significantly related to subsequent getting ahead behaviors, which are associated with the visioning and inspirational side of leadership. This result is consistent with previous research on the positive side of teamwork and collaboration. The nested model comparison examined in this study indicated that getting along behaviors fully mediated the influence of EI on getting ahead behaviors at work.

Despite the contributions of the present study, its limitations must be noted. First, because EI was assessed through a self-report measure, future research should use other measures (e.g., ability questionnaires) to examine the relationships between EI and getting along and getting ahead behaviors at work. The second limitation involves the validity of the EI measure as compared with other well-known measures used in previous research. Future research is needed to further establish the relationship between the EI dimension as measured with the GELI and other accepted EI measures available in the literature. The third limitation involves implications regarding the causal relationships between EI and getting along behaviors. We hypothesized that EI directly affects collaborative behaviors at work, but the methodology used precludes definitive statements regarding causality. However, we provided theoretical rationale for the proposed relationships, and our results indicate that the proposed model is a plausible representation of the relationships between the constructs.

Overall, the results contribute both methodologically and theoretically to the understanding of the mediating effect of teamwork and empowerment on EI and getting ahead leadership behaviors. Methodologically, this study examines EI influences through covariance structure analysis. By utilizing latent variables to assess the constructs of interest, the present study also avoided measurement bias inherent in single indicator models. Furthermore, the structural tests used in this study supported the independence of the hypothesized constructs.

Theoretically, the structural model highlights the importance of the direct and indirect effects of EI and getting along behaviors on the inspirational side of leadership. EI does not directly affect how leaders are perceived in terms of their inspirational skills, but contrarily, their level of EI does have a direct effect on leaders' collaborative capabilities. This means that awareness and regulation of emotions need to crystallize in group processes in order to be effective. Emotional awareness needs to reverberate in teamwork if it is to impact others' perceptions of inspirational leadership behaviors. These findings have practical implications for the design of leadership development interventions, which have been shown to primarily raise self-awareness among the participants (Kets de Vries, Hellwig, Guillen Ramo, Florent-Treacy and Korotov, 2008). Although sensitizing leaders to the importance of a greater self-awareness and an understanding of its impact on others is a good start. Once back in the office their coworkers' perception of their leaders' inspirational leadership skills will not change if the leaders do not demonstrate this capacity in the service of effective team building. The results of this study suggest that it is essential to spend time with others and work cooperatively to impact followers' perceptions of the inspirational side of leadership.

Another theoretical implication is related to the two-factor structure of leadership behaviors proposed in the model. The motivational literature has long noted that at the heart of any debate about professional status was the conflict between getting ahead and getting along behaviors (e.g., Purcell, 1967). Results of this study provided evidence that they are not different poles of the same dimension (and therefore it is not true that one is either self-interested or other-oriented), but that they are two independent dimensions (De Dreu & Nauta, 2009). Leadership development interventions can be designed in order to reflect the two sides of the coin, taking into consideration the importance of both leadership behavior categories.

REFERENCES

- Adler, A. (1939). Social Interest, Putnam, New York, NY.
- Alvesson, M. and Willmott, H. (1992). Critical Management Studies, Sage, London.
- Anderson, J.C. and Gerbin, D.W. (1988). 'Structural equations modeling in practice: A review and recommended two-step approach', *Psychological Bulletin*, 103, 411-423.
- Bachman, J., Stein, S. and Campbell, K. (2000). 'Emotional intelligence in the collection of debt', *International Journal of Selection and Assessment*, 8, 176-182.
- Bakan, D. (1966). The duality of human existence: Isolation and communion in Western man. Allyn & Bacon, Boston, MA.
- Bar-On, R. (1997). The Emotional Quotient Inventory (EQ-i): a test of emotional intelligence. Multi-Health Systems, Toronto.
- Baron, R.M. and Kenny, D.A. (1986). 'The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations', *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barsade, S.G. (2002). 'The ripple effect: Emotional contagion and its influence on group behavior', *Administrative Science Quarterly*, 47, 644-675.
- Bartram, D. (2005). 'The great eight competencies: A criterion-centric approach to validation', *Journal of Applied Psychology*, 90, 1185-1203.
- Bentler, P.M. (1989). EOS Structural Equations Program Manual. BMDP Software, Inc., Los Angeles, CA.
- Bentler, P.M. (1990). 'Comparative fit indexes in structural models', *Psychological Bulletin*, 107, 238-246.
- Blau, P.M. (1970). 'A formal theory of differentiation in organizations', *American Sociological Review*, 35, 201-218.
- Bono, J. E., and Ilies, R. (2006). 'Charisma, positive emotions, and mood contagion', *Leadership Quarterly*, 17, 317-334.
- Borman, W. C. and Brush, D. H. (1993). 'More progress toward a taxonomy of managerial performance requirements', *Human Performance*, 6, 1-21.
- Brooke, P.P., Russell, D.W. and Price, J.L. (1988). 'Discriminant validation of measures of job satisfaction, job involvement, and organizational commitment', *Journal of Applied Psychology*, 73, 139-145.

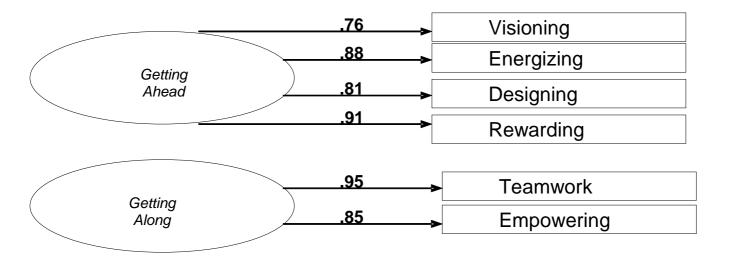
- Browne, M.W., & Cudeck, R. (1992). 'Alternative ways of assessing model fit', Sociological Methods & Research, 21, 230-258
- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E. and Halpin, S.M. (2006). 'What type of leadership behaviors are functional in teams? A meta-analysis', *Leadership Quarterly*, 17, 288-307.
- Burke, C. S., Stagl, K.C., Salas, E., Pierce, L. and Kendall, D. (2006). 'Understanding team adaptation: A conceptual analysis and model', *Journal of Applied Psychology*, 91, 1189 1207
- Carmines, E.G. and Zeller, R.A. (1979). *Reliability and Validity Assessment*. Sage University, Beverly Hills, CA.
- Conger, J. A. and Kanungo, R. (1987). 'Toward a behavioral theory of charismatic leadership in organizational settings'. *Academy of Management Review*, 12, 637-647.
- Conger, J.A., and Lawler, E. E. (2009). 'Sharing leadership on corporate boards: A critical requirement for teamwork at the top'. *Organizational Dynamics*, 38, 183-191.
- Conway, J. M. (2000). 'Managerial performance development constructs and personality correlates'. *Human Performance*, 12, 23-46.
- Côté, S., and Miners, C.T.H. (2006). 'Emotional intelligence, cognitive intelligence, and job performance'. *Administrative Science Quarterly*, 51, 1-28.
- Christakis, N.A. and Fowler, J.H. (2009). Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives. Little, Brown, New York, NY.
- De Dreu, C. K. W. and Nauta, A. (2009). 'Self-interest and other-orientation in organizational behavior: Implications for job performance, prosocial behavior, and personal initiative'. *Journal of Applied Psychology*, 94, 913-926
- Digman, J.M. (1997). 'Higher order factors of the Big Five'. *Journal of Personality and Social Psychology*, 73, 1246-1256.
- Domagalski, T.A. (1999). 'Emotions in organizations: Main currents'. *Human Relations*, 52, 833-852.
- Fernández-Berrocal, P. and Extremera, N. (2006). 'Emotional Intelligence: A theoretical and empirical review of its first 15 years of history', *Psychotema*, 18, 7-12.
- Feyerherm, A. E., & Rice, C. L. (2002). 'Emotional intelligence and team performance: The good, the bad and the ugly', *The International Journal of Organizational Analysis*, 10, 343-362.

- Fredrickson, B. L. (2001). 'The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions', *American Psychologist*, 56, 218–226.
- George, J.M. (1991). 'State or trait: Effects of positive mood on prosocial behaviors at work', *Journal of Applied Psychology*, 76, 299-307.
- Goleman, D. (1995). Emotional Intelligence. Bantam Books, New York, NY.
- Goleman, D., Boyatzis, R.E. and McKee, A. (2002). *Leadership and Emotional Intelligence*. Harvard Business School Press, Boston, MA.
- Grandey, A.A. (2000). 'Emotion regulation in the workplace: A new way to conceptualize emotional labor', *Journal of Occupational Health Psychology*, 5, 95-110.
- Gully, S. M., Devine, D. J. and Whitney, D. J. (1995). 'A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence', *Small Group Research*, 26, 497-520.
- Hogan, R. and Shelton, D. (1998). 'A socioanalytic perspective on job performance', *Human Performance*, 11, 129-144.
- Hogan, J. and Holland, B. (2003). 'Using theory to evaluate personality and job-performance relations: A socioanalytic perspective', *Journal of Applied Psychology*, 88, 100-112.
- Johnson, H. M. & Spector, P. E. (2007). 'Service With A Smile: Do Emotional Intelligence, Gender and Autonomy Moderate the Emotional Labor Process?', *Journal of Occupational Health Psychology*, 12, 319-333.
- Joseph, D.L. and Newman, D.A. (2010). 'Emotional intelligence: An integrative meta-analysis and cascading model', *Journal of Applied Psychology*, 95, 54-78.
- Jung, D. and Sosik, J. (2002). 'Transformational leadership in work group: The role of empowerment, cohesiveness, and collective efficacy on perceived group performance', *Small Group Research*, 33, 313-336.
- Kets de Vries, M.F.R., Vrignaud, P. and Florent-Treacy, E. (2004). 'The Global Leadership Life Inventory: development and psychometric properties of a 360-degree feedback instrument', *International Journal of Human Resource Management*, 15, 475-492.
- Kets de Vries, M.F.R., Hellwig, T., Guillen Ramo, L., Florent-Treacy, E. and Korotov, K. (2008). 'Long-term effectiveness of a transitional leadership development program: An exploratory study', *INSEAD Working Paper*, 2008/24/EFE.
- Law, K.S., Wong, C.S. and Song, L.J. (2004). 'The construct and criterion validity of emotional intelligence and its potential utility for management studies', *Journal of Applied Psychology*, 89, 483-496.

- Levasseur, R.E. (1994). 'People skill: Self-awareness A critical skill for MS/OR professionals', *Interfaces*, 21, 130-133.
- Kirkpatrick, S., and Locke, E. (1996). 'Direct and indirect effects of three core charismatic leadership components on performance and attitudes', *Journal of Applied Psychology*, 81, 36-51.
- Matthews, G., Zeidner, M. and Roberts, R.D. (2002). *Emotional intelligence. Science and myth.* The MIT Press, Cambridge, Massachusetts.
- Mayer, J.D., Roberts, R.D. and Barsade, S.G. (2008). 'Human abilities: Emotional Intelligence', *Annual Review of Psychology*, 59, 507-536.
- McAdams, D.P. (1985). Power, intimacy, and the life story: Psychological inquiries into identity. Dow-Jones-Irwin, Homewood, IL.
- McCauley, C. D., Moxley, R. S., and Van Velsor, E. (1998). *The Center for Creative Leadership handbook of leadership development*. Jossey-Bass, San Francisco, CA.
- McDonald, R.P. (1999). *Test Theory: A unified treatment*. Lawrence Erlbaum Associates, Mahwah, NJ.
- McGregor, D. (1960). The Human Side of Enterprise. McGraw-Hill, New York, NY.
- Moon, H. (2001). 'The two faces of Conscientiousness: Duty and achievement –striving within evaluation of commitment dilemmas', *Journal of Applied Psychology*, 86, 533-540.
- Mount, M.K., Barrick, M.R., and Stewart, G.L. (1998). 'Five-factor model of personality and performance in jobs involving interpersonal interactions', *Human Performance*, 11, 145-165.
- Mullen, B. and Copper, C. (1994). 'The relation between group cohesiveness and performance: An integration', *Psychological Bulletin*, 115, 210-227.
- Petrides, K.V., and Furnham, A. (2000). 'On the dimensional structure of emotional Intelligence' *Personality and Individual Differences*, 29, 313-320.
- Prussia, G.E., Anderson, J.S. and Manz, C.C. (1998). 'Self-leadership and performance outcomes: The mediating influence of self-efficacy', *Journal of Organizational Behavior*, 19, 525-538.
- Purcell, T. W. (1967). 'Work psychology and business values: A triad theory of work motivation', *Personnel Psychology*, 30, 231-257.
- Rafaeli, A., and Sutton, R. I. (1987). 'The expression of emotion as part of the work role', *Academy of Management Review*, 12, 23-37.

- Salovey, P. and Mayer, J.D. (1990). 'Emotional Intelligence', *Imagination, cognition and personality*, 9, 185-211.
- Salovey, P. and Mayer, J.D. (1997). What is emotional intelligence? In P. Salovey and D.J.Sluyter (eds.) *Emotional development and emotional intelligence:* educational implications, Basic Books, New York, NY.
- Saris, W. E., Satorra, A., & Sörbom, D. (1987). The detection and correction of specification errors in structural equation models. In C.C. Clogg (Ed.), *Sociological methodology* (pp.105-129), Jossey-Bass, San Franscico, CA.
- Shipper, F. and Davy, J. (2002). 'A model and investigation of managerial skills, employees' attitudes, and managerial performance', *The Leadership Quarterly*, 13, 95-120.
- Sosik, J. J. and Megerian, L. E. (1999) 'Understanding Leader Emotional Intelligence and Performance', *Group & Oraganization Management*, 24, 367-390.
- Sosik, J.J. (2001). 'Self-Other agreement on charismatic leadership: Relationships with work attitudes and managerial performance', *Group & Organization Management*, 26, 484-511.
- Steiner, E.D. (1972). Group process and productivity, Academic Press, New York, NY.
- Wolff, S.B., Pescosolido, A.T. and Druskat, V.U. (2002). 'Emotional intelligence as the basis of leadership emergence in self-managing teams', *The Leadership Quarterly*, 13, 505-522.

Figure 1. Two-factor measurement model. (Standardized factor loadings, all statistically significant, appear along unidirectional arrows. Measurement errors and factor correlations are omitted for clarity).



Model X 2 (7)=33.03; RMSEA=0.063; CFI=1.00; SRMR=0.014

Table 1. Correlations and composite reliabilities of the dimensions.

n=929		Construct Reliability	Mean	SD	VISION	EMPOW	ENERGY	DESIGN	REWARD	TEAM	EI
1	VISION	0,88	44,33	3,69	1,00						
2	EMPOW	0,79	37,03	3,43	0,62	1,00					
3	ENERGY	0,90	44,50	4,15	0,77	0,69	1,00				
4	DESIGN	0,92	37,38	3,57	0,63	0,58	0,73	1,00			
5	REWARD	0,93	41,95	4,33	0,69	0,70	0,80	0,73	1,00		
6	TEAM	0,94	57,68	5,52	0,64	0,81	0,75	0,68	0,79	1,00	
7	EI	0,96	62,42	7,07	0,53	0,74	0,69	0,55	0,71	0,86	1,00

Table 2. Fit indexes for nested sequence of measurement models.

						Chi-				
	Chi-					squared		CFI	RMSEA	SRMR
Model	squared	df	CFI	RMSEA	SRMR	difference	df	diff.	diff.	diff.
1. Two-factor solution - Baseline measurement model	33,03	7	1	0,063	0,014					
2. Single-factor solution	203,25	8	0,97	0,16	0,03	170,22*	1	0,03	0,097	0,016

P<.0

Appendix 1. GELI scales, definitions and sample items.

Scale	Definition	Sample item
Visioning	Articulating a compelling vision, mission, and strategy with a	"I inspire my people to look beyond existing
	mission, and strategy with a perspective that connects	look beyond existing limitations"
	employees, shareholders, suppliers	
Energizing	and customers on a global scale. Motivating employees to actualize	"I convey my ideas in a
Elicigizing	the organization's specific vision of	clear and understandable
	the future.	way"
Designing and	Creating the proper organizational	"I set clear performance
aligning	design and control systems to make	standards and goals for my
	the guiding vision a reality, and	people"
	using those systems to align the behavior of the employees with the	
	organization's values and goals	
Rewarding	Setting up the appropriate reward structures and giving feedback to	"I make sure that compensation for my
	encourage the kinds of behavior that	compensation for my employees is fair and
	are expected from employees.	reflects individual efforts"
Teamwork	Creating team-players and focusing	"I make a great effort to earn the trust of other team
	on team effectiveness by instilling a cooperative atmosphere, building	members"
	collaborative interaction and	
Empoyyaring	encouraging constructive conflict.	"I try to involve my
Empowering	Giving workers at all levels a voice by empowering them through	"I try to involve my employees in decision
	sharing information and the	making"
	delegation of decisions to the	
	people most competent to execute them.	
Emotional	Expanding self-awareness and	"I consider how my
Intelligence	recognizing how their own behavior affects others. Manage emotions	emotions can affect others"
	well and 'read' people and know	
	how to deal with the emotions of	
	others.	

Europe Campus Boulevard de Constance 77305 Fontainebleau Cedex, France

Tel: +33 (0)1 60 72 40 00 Fax: +33 (0)1 60 74 55 00/01

Asia Campus

1 Ayer Rajah Avenue, Singapore 138676

Tel: +65 67 99 53 88 Fax: +65 67 99 53 99

Abu Dhabi Campus Muroor Road - Street No 4 P.O. Box 48049 Abu Dhabi, United Arab Emirates

Tel: +971 2 651 5200 Fax: +971 2 443 9461

www.insead.edu

