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

Laura GUILLEN Elizabeth FLORENT-TREACY 2011/23/IGLC Emotional Intelligence and Leadership Effectiveness:

The Mediating Influence of Collaborative Behaviors

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# 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 highorder 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 EIinspirational 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  $\Omega$  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:

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

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

The error variance of a dimension j (ErrorVar<sub>*j*</sub>) was calculated by the summation of the multiplication of the k items' variances that form that dimension (vark*j*) by the items' standardized error variances (errorkj). The reliability ( $\Omega j$ ) of a dimension j was computed by subtracting the division of the error variance (ErrorVarj) from the variance of the dimension scale (Var<sub>*j*</sub>) 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

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*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.

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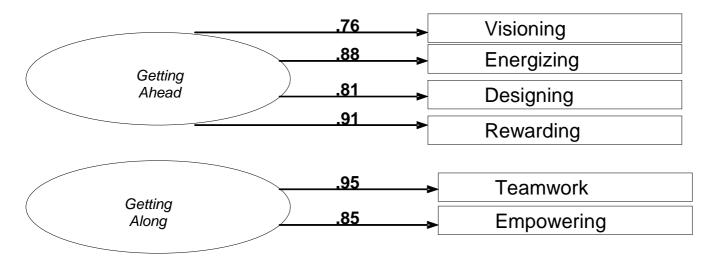
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**Figure 1. Two-factor measurement model.** (Standardized factor loadings, all statistically significant, appear along unidirectional arrows. Measurement errors and factor correlations are omitted for clarity).



Model X<sup>2</sup>(7)=33.03; RMSEA=0.063; CFI=1.00; SRMR=0.014

 Table 1. Correlations and composite reliabilities of the dimensions.

		Construct									
n=929		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 perspective that connects employees, shareholders, suppliers and customers on a global scale.	"I inspire my people to look beyond existing limitations"
Energizing	Motivating employees to actualize the organization's specific vision of the future.	"I convey my ideas in a clear and understandable way"
Designing and aligning	Creating the proper organizational design and control systems to make the guiding vision a reality, and using those systems to align the behavior of the employees with the organization's values and goals	"I set clear performance standards and goals for my people"
Rewarding	Setting up the appropriate reward structures and giving feedback to encourage the kinds of behavior that are expected from employees.	"I make sure that compensation for my employees is fair and reflects individual efforts"
Teamwork	Creating team-players and focusing on team effectiveness by instilling a cooperative atmosphere, building collaborative interaction and encouraging constructive conflict.	"I make a great effort to earn the trust of other team members"
Empowering	Giving workers at all levels a voice by empowering them through sharing information and the delegation of decisions to the people most competent to execute them.	"I try to involve my employees in decision making"
Emotional Intelligence	Expanding self-awareness and recognizing how their own behavior affects others. Manage emotions well and 'read' people and know how to deal with the emotions of others.	"I consider how my emotions can affect others"

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