

## **Antecedents of Emotional Intelligence: An Empirical Study**

**John E. Barbuto, Jr., Ph.D.**  
Associate Professor of Leadership  
University of Nebraska-Lincoln  
300 Agricultural Hall  
P.O Box 830709  
Lincoln, NE 68583-0709  
(402) 472-8736 FAX: (402) 472-5863  
[jbarbuto@unl.edu](mailto:jbarbuto@unl.edu)

**Joana S. Story**  
Assistant Professor of Management  
University of New Lisbon  
Lisbon, Portugal 1099-032  
(011) 351-21-380-1600  
[joanastory@gmail.com](mailto:joanastory@gmail.com)

### **Abstract**

This study examined the relationships between emotional intelligence, locus of control, and mental boundaries. Three hundred and eighty-two county employees were sampled using a cross-sectional survey design. The results indicated internal locus of control and thin mental boundaries are positively related to emotional intelligence. A hierarchical regression revealed that internal locus of control and thin mental boundaries together explained 18% of the variance in emotional intelligence for this population. Implications and future research directions are discussed.

### **Introduction**

There has been a surge in research of emotional intelligence (EI) in the past 20 years (Salovey & Mayer, 1990; Christie, Jordan, Troth, & Laurence, 2007). The majority of this exciting work used emotional intelligence to predict many behaviors, which included positive work attitudes, altruistic behavior (Carmeli, 2003), attitudes towards organizational change (Vakola, Tsaousis, & Nikolaou, 2004), cognitive-based performance (Lam & Kirby, 2002), transformational leadership (Barbuto & Burbach, 2006), critical thinking disposition (Stedman &

Andenoro, 2007), and higher quality of interpersonal relations (Schutte, Malouff, Bobik, Coston, Greeson, Jedlick, Rhodes, & Wendorf, 2001). The results of these studies indicate that emotional intelligence offers great promise as an antecedent to many positive organizational outcomes.

The dispositional antecedents of emotional intelligence has been studied with variables such as the big five personality construct (Valoka, et al., 2004), curiosity (Leonard & Harvey, 2007), and motivation (Christie et al., 2007) leading to an assumption that locus of control tend to coexist with emotional intelligence. Examining other salient antecedents seems necessary to fully understand the nature of emotional intelligence.

Inherent in emotional intelligence is the nature of relatedness and connectedness (Goleman, 1995). Individual with thin boundaries should therefore be predisposed to higher levels of EI. This project tests the antecedents of emotional intelligence using established criteria of locus of control and also a newer dimension of personal psychology – mental boundaries (Figure 1).

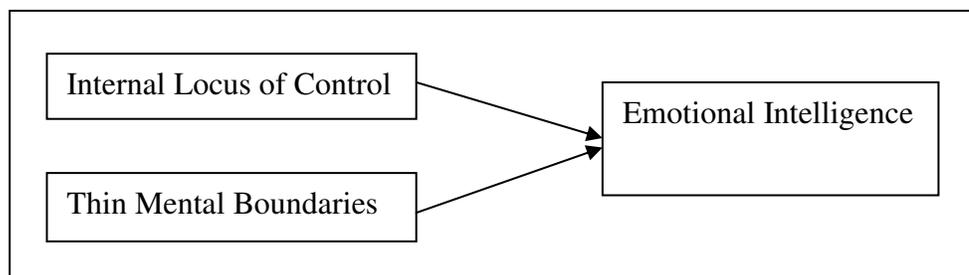


Figure 1: Summary of the model

## Literature Review

### Emotional Intelligence

Salovey and Mayer (1990) introduced the concept of “emotional intelligence” in their work which combines affect with cognition, emotion, and intelligence. Emotional intelligence represents a set of dispositional attributes for monitoring one’s own and others’ feelings, beliefs, and internal states in order to provide useful information to guide one’s and others’ thinking and action (Carson, Carson, & Birkenmeier, 2000; Goleman, 1995).

Carson et al. (2000) developed a measure of emotional intelligence based on Goleman’s five behavior-based factors (a) *empathetic response* - the ability to

understand the emotional structure of other people; (b) *mood regulation* - the ability to regulate and manage one's moods and impulses; (c) *interpersonal skill* - the ability to manage relationships and build positive networks; (d) *internal motivation* – the ability to influence the environment and pursue goals for the greater good while delaying immediate gratification; and, (e) *self-awareness* – the ability to self-monitor moods, emotions and drives, and their effects on others.

### **Locus of Control**

Locus of control is a personality variable that has been studied extensively in a wide variety of settings (Spector, 1988). According to Rotter (1966), internal locus of control is categorized by an individual that believes that reinforcements are dependent on one's own behavior. External locus of control is characterized by individuals that attribute control to outside sources. Internal locus of control is characterized by individuals that attribute control to selves. They are in charge of their situation, including other persons (i.e., subordinates).

Research has shown that internal locus of control is characterized by individuals who put forth more effort and perform better (Andrisani & Nestel, 1976; Heisler, 1974). Johnson, Luthans, and Hennessey (1984) reported that subordinate satisfaction with supervisors is higher when the supervisor is internally oriented rather than externally oriented. Internal locus of control individuals have been reported to have higher work motivation, effort, performance, job satisfaction, higher starting salaries, and greater salary increases as compared to external locus of control individuals (Spector, 1982; Nystrom, 1983). Judge and Bono (2001) reported that locus of control is a significant predictor of both job satisfaction and job performance. Thomas, Sorensen, and Eby (2006) conducted a meta-analysis and reported that locus of control was positively associated with favorable work outcomes, such as positive experiences and greater job motivation. Individuals that score high on emotional intelligence also should have more positive work experiences. Thus, individuals with high emotional intelligence have an ability to monitor their own and others' feelings, they take charge of their behaviors and control their environment which is consistent with internal locus of control individuals.

**Hypothesis 1:** Internal locus of control will be positively related to emotional intelligence.

## **Mental Boundaries**

Mental boundaries were first described in the literature in early work on hierarchical ordering of neurological structures (Freud, 1933). Mental Boundaries were later conceptualized to help understand dreaming patterns of the unconscious (Hartmann, 1991). These boundaries are psychological constructs relating to individuals' self-image and how they interact with the world around them. Twelve categories of mental boundaries were identified and measured, each with a wide range of application ranging from dream patterns, interpersonal relationships, opinions about nations and people, to opinions about organizational and groups. The concept of thick and thin boundaries involves the degree of separateness (thick boundaries) versus connectedness (thin boundaries) between a broad range of mental functions and processes (Hartmann, 1989). A thin boundary person will relate well to others' emotions and generally feel a sense of connectedness. Thin boundary individuals are less structured or categorized, more spontaneous, and more emotional than individuals with thicker boundaries. Thus, a thick boundary person will maintain separation with others, often seeking distinct role definitions, clear expectations, and will typically allow little room for collaboration. Individuals with thick boundaries are more analytical, less spontaneous, and more closure-oriented than individuals with thin boundaries.

For interpersonal relationships, thin boundaries reflect interactions that are less clearly defined and thicker boundaries reflect relationships are predictably defined (Barbuto & Plummer, 2000). Thin mental boundaries have been reported to share a small variance with self-concept internal motivation (Barbuto & Story, 2007). This means that individuals with thin mental boundaries are more likely to be motivated when they are challenged by the task at hand and can use their unique skills at work. Thus, mental boundary is a key personality construct and should share a relationship with emotional intelligence.

**Hypothesis 2:** Thin mental boundaries will be positively related to emotional intelligence.

## **Method**

### **Participants/Procedures**

Participants were 382 county employees in the Midwest United States whose average age was 46 years; 42% had a bachelor degree; less than 10% had an advanced degree; and, 53 % were women. Data were collected from a group of elected officials as part of a full-day leadership-training seminar for members of

an association that sponsors annual professional development programs for its members. Participants were asked to fill out the instruments used in this study.

### **Instruments**

All instruments were returned directly to the first author via United States mail. Participants were provided a letter detailing their participation and rights, which included the right to withdraw at any time during the research process.

**Emotional intelligence.** EI was used to predict positive leadership outcomes. It was measured with an instrument developed by Carson, et al. (2000). This instrument contains 30 self-report items rated on a five-point Likert-type scale ranging from 0 (not at all) to 4 (frequently, if not always). The data from five subscales yielded (a) empathetic response (I am keenly aware of feelings of other people,  $y = .90$ ), (b) mood regulation (My emotions are often out of control,  $y = .76$ ), (c) interpersonal skills (I have good people skills,  $y = .81$ ), (d) internal motivation (I have the will to accomplish my goals,  $y = .86$ ), and, (e) self-awareness (I am always aware of my moods,  $y = .75$ ). Added together, it produced a single score for EI with a reliability coefficient of .91.

**Locus of Control.** Locus of control was measured using selected items from Rotter's (1966) measure. The three questions achieved solid reliability estimates (I can control the things that happen in my life, I can make a difference in most situations, and The successes in my life result from my efforts,  $y = .71$ ). The three items were evaluated on a 5-point Likert-type scale ranging from 0 (not at all) to 4 frequently, if not always).

**Mental Boundaries.** Mental boundaries were measured using the Boundary Questionnaire (Hartmann, 1991). The five-item subscale for organizational and interpersonal boundaries was used to capture this variable for empirical research. Reliability estimates for mental boundaries was marginally acceptable (In an organization, everyone should have a definite place and specific role, When making business decisions, you shouldn't let your feelings get in your way, A good organization is one with clear lines of responsibility and accountability, A good relationship is one where everyone's roles are clearly spelled out, and Success is largely a matter of good organization and keeping good records,  $y = .68$ ). The five items were evaluated on a 5-point Likert-type scale ranging from 0 (not at all) to 4 (frequently, if not always).

## Results

Simple statistics and zero-order correlations were calculated for all variables examined in this study. From this analysis, several relationships were found. A significant positive relationship was found between internal locus of control and EI ( $r = .41, p < .01$ ) (H1). A significant positive relationship was also found between thin mental boundaries and EI ( $r = .32, p < .01$ ) (H2). Internal locus of control and thin mental boundaries also shared a positive significant relationship ( $r = .42, p < .01$ ).

TABLE 1. *Descriptive Statistics, Reliabilities, and Intercorrelations (N=382)*

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Emotional Intelligence	78.5	7.7	(0.91)		
2. Locus of Control	8.56	1.78	.41**	(.71)	
3. Boundaries of the Mind	15.12	2.69	.32**	.42**	(.68)

Note \* $p < .05$ . \*\* $p < .01$

To test the best predictive model for the significant findings, the variables were entered in a step-wise hierarchical model. Internal locus of control and thin mental boundaries together explained 18% of the variance in EI.

TABLE 2. *Summary of Hierarchical Regression Analysis for Variables Predicting Emotional Intelligence (N=382)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Locus of Control	1.70	.20	<.01*
Step 2			
Locus of Control	1.35	.22	<.01*
Boundaries of the Mind	.538	.15	<.01*

Note.  $R^2 = .15$  for Step 1;  $R^2 = .18$  for Step 2;  $p < .003$ .; \*  $p < .01$ .

## Discussion

The present study revealed several relationships between participants' EI with locus of control and mental boundaries. EI shared a positive significant relationship with internal locus of control. This means that individuals who believe they control the events in their lives are more likely to have emotional insights and aptitudes. This finding is consistent with other studies that described

locus of control as encompassing true ownership of circumstances and future events which also cross over to controlling one's emotional responses and moods to manage their environments, feelings, and affect (Rotter, 1966; Salvoey & Mayer, 1990). EI also shared a positive significant relationship with thin mental boundaries. This means that individuals that that maintain vague distinctions and categories in interpersonal and organizational boundaries are also more likely to display emotional competence and skill. This finding is consistent with the literature on mental boundaries (Hartmann, 1991). Thin mental boundary individuals are more emotional and connected with others and their feelings. This is also a characteristic that individuals that score high on EI (Carson et al., 2000). Together, these variables explained 18% of the variance in emotional intelligence. This means that a simplistic model including just mental boundaries and locus of control can provide a substantive antecedent to EI. In the field of organizational behavior, explained variances in excess of 10% are highly credible.

These findings support a dispositional view of emotional intelligence, as substantial variance was explained using just two independent person-centered variables. Although not tested in this work, no evidence was found that supports a contextual nature of EI based solely on the results of this study. EI appears to share many dispositional tenants. Organizations wishing to develop emotional intelligence may be advised to rather recruit individuals that already display such attributes. A dispositional perspective of emotional intelligence makes recruitment (as opposed to development) the organizational priority. Until such time as contextual antecedents of EI are confirmed efforts for developing EI are cautioned.

Leadership education curriculum should be cautious about including EI under the auspice of developing EI until such time as a contextual antecedent is tested and confirmed. In the interim discussions about the importance of emotional intelligence remains relevant but its importance at this stage of research is in finding the leaders that possess EI.

Future research testing other dispositional variables and their relationships with EI is highly encouraged. Additionally, varied populations may serve to better generalize the results of this study. It is our hope that additional inquiries of EI will clarify its antecedents and outcomes.

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### **Author Biographies**

John E. Barbuto, Jr. (Jay) is an Associate Professor of Leadership in the Department of Agricultural Leadership, Education, and Communication. He teaches courses in foundations of leadership, leadership development, motivation, and power/influence. His current research projects include transformational advising, dramaturgical teaching, servant leadership, work motivation, emotional intelligence, cross-cultural and diversity issues, and antecedents of leadership. He has published over 70 journal articles and 150 conference proceedings in the leadership, organizational behavior, and social psychology field. His work has been published in journals such as *Journal of Leadership Education*, *Leadership Quarterly*, *Sex Roles*, *Journal of Leadership and Organizational Studies*, *Group & Organization Management*, *Journal of Agricultural Education*, and *Journal of Social Psychology*.

Joana S. Story, Assistant Professor of Management, University of New Lisbon, is finishing her Ph.D. at the University of Nebraska–Lincoln under the supervision of Dr. Barbuto. She earned her B.S. in Communication Studies from the Pontificia Universidade Catolica de Minas Gerais, Brazil. Her research interests include global leadership, cross-cultural leadership, and global mindset. She has published in *Journal of Leadership Education*, *Psychological Reports*, *Perceptual and Motor Skills*, *Leadership and Organizational Management Journal*, and *International Journal of Leadership Studies*.