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## Self-Reported Leadership Experiences in Relation to Inventoried Social and Emotional Intelligence

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# **Self-Reported Leadership Experiences in Relation to Inventoried Social and Emotional Intelligence**

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*Abstract:* Leadership has both social and emotional components. Social intelligence appears to tap the social component found in leadership. Recently, emotional intelligence has surfaced as a stable individual difference variable and appears to tap the emotional component of leadership. Mayer and Salovey (1993) suggested that the emotional intelligence and social intelligence constructs overlap. This study examined the power of both emotional and social intelligence to account for variance in self-reported leadership experiences. One hundred ninety-two university students completed measures of social and emotional intelligence and a measure of leadership experiences. Regression analyses showed that both social intelligence and emotional intelligence accounted for variance in leadership experiences. Although emotional intelligence was found to account for variance in leadership, it did not add unique variance beyond social intelligence. Social intelligence appears to play a principal role in leadership.

Leadership is an integral part of our everyday existence, especially in the workplace. Because of its ubiquitous presence in all of our lives, understanding who may be a good leader is an important issue that deserves attention. The leadership construct has both a social and an emotional component (Bass, 1990). Leadership, even at the dyadic level, requires some social relationship (Zaccaro, Gilbert, Thor, & Mumford, 1991). Every leadership situation involves interaction between a leader and a follower. By its very nature then, leadership includes a social component. It is not surprising that individuals who are better able to assess and adapt to social situations are expected to be leaders (Bass, 1990; Zaccaro, et al. 1991).

Along with the social component of leadership, there is also an emotional component. Social interactions are laden with affective interpretations. Perceivers assess the intentions and the behaviors of the other actors and make judgments based on these interpretations. Again, it is not surprising that individuals who are able to assess their own and others' emotions and appropriately adapt their behavior for a given situation based on this assessment are expected to be leaders (Bass, 1990). The focus of this study was to compare two components of leadership, emotional and social intelligence.

### **Understanding Emotional Intelligence**

Goleman (1995,1998) defined emotional intelligence as the ability to be aware of and to handle one's emotions in varying situations. He claimed that emotional intelligence includes such things as self-awareness, self-regulation, motivation, empathy, and social skill. Goleman (1998) stated that although IQ and technical skills are important aspects of leadership, emotional intelligence is the most essential contributor to effective leadership.

Bar-On (1997) viewed emotional intelligence as an array of competencies and skills that influence both an individual's ability to succeed in life and an individual's general, psychological well-being. These competencies and skills make up the personal, emotional, and social dimensions of intelligence. Bar-On differentiated emotional intelligence and general intelligence by asserting that the focus of emotional intelligence is on the personal, emotional, and social competencies and not on the cognitive dimensions of intelligence. He also suggested that unlike cognitive intelligence, emotional intelligence predicts an individual's success because it reflects how a person applies knowledge to the immediate situation.

Mayer and Salovey (1995) discussed emotional intelligence as the ability to process emotional information efficiently. Emotionally-intelligent individuals recognize emotions in themselves and others and are able to respond appropriately. Mayer and Salovey alleged that emotional intelligence bridges the gap between the cognitive and emotional systems, and therefore, emotional intelligence should be separate from general intelligence.

Performing a factor analysis of intelligence measures, Davies, Stankov, and Roberts (1998) found that emotional intelligence is indeed independent of the fluid and crystallized abilities that are associated with general intelligence. This evidence suggests that emotional intelligence is a separate construct from general intelligence. In addition to being a separate construct, several authors have suggested that emotional intelligence is a better predictor of performance than general intelligence (Bar-On, 1996; Goleman, 1995; O'Neil, 1996).

Feldman (1999) discussed emotionally intelligent leadership as the development and application of emotional and social skills to positively influence others. He stated that there are two sets of skills present in emotional intelligence, core skills and higher-order skills. The core skill set consists of several specific individualized skills: (a) knowing yourself, (b) maintaining control, (c) reading others, (d) perceiving accurately, and (e) communicating with flexibility. The higher-order skill set also contains several specific skills: (a) taking responsibility, (b) generating choices, (c) embracing a vision, (d) having courage, and (e) demonstrating resolve. Feldman suggested that the combination of core and higher-order skills leads to effective leadership because emotionally intelligent individuals are aware of others' needs and are able to effectively respond to any situation.

Although empirical studies on emotional intelligence are lacking, one recent study examined the relationship between emotional intelligence and leadership. Sosik and Megerian (1999) hypothesized that aspects of emotional intelligence would relate to transformational leadership. Specifically, these authors proposed that managers' self-awareness would moderate the relationship between emotional intelligence and transformational leadership behavior. They also hypothesized that managers' self-awareness would moderate the relationship between transformational leadership behavior and managerial performance. Sosik and Magerian found that several aspects of emotional intelligence (purpose in life, personal efficacy, interpersonal control, and social self-confidence) were related to transformational leadership for self-aware leaders. In addition, results showed that managers who had been rated high on transformational leadership had more satisfied subordinates, were seen as more effective, and were seen as putting forth more effort than were managers rated low on transformational leadership.

The results of Sosik and Megerian (1999) suggest a connection between emotional intelligence and leadership. Individuals high in emotional intelligence may be more likely to participate in leadership experiences and perhaps may be more likely to be effective leaders. The present study examined self-reported participation in leadership experiences and not leadership effectiveness. Given the proposed connection between emotional intelligence and leadership, we formulated our first hypothesis:

Hypothesis 1: Individuals who score high on a measure of emotional intelligence will report more participation in leadership experiences and show more leadership behaviors than will individuals who score low on a measure of emotional intelligence.

## Understanding Social Intelligence

The social intelligence construct has existed for many years. Social intelligence was first proposed by Thorndike (1920) who defined it as "the ability to understand and manage men and women, boys and girls--to act wisely in human relations" (p. 228). Since that time, the term social intelligence has taken on many meanings, sometimes very different than Thorndike's original interpretation of the construct (Walker & Foley, 1973). Despite past disagreements, researchers now concede that social intelligence contains two components: (a) being aware of or noticing others' needs and problems and (b) responding or adapting to different social situations (Mayer & Salovey, 1993; Thorndike, 1920; Zaccaro, et al. 1991).

Similar to the history of emotional intelligence, researchers once contested whether social intelligence was a distinct construct from general intelligence. For example, Keating (1978) conducted a factor analysis of intelligence data and found no identifiable social factor. On the other hand, Ford and Tisak (1983) found both convergent and divergent validity for social intelligence. In addition, Ford and Tisak found that a distinct social factor resulted when factor analyzing measures of intelligence and that social intelligence was a better predictor of a behavioral measure of social effectiveness than was academic intelligence. Overall, researchers agree that social intelligence is distinct from general intelligence and may serve as a predictor of behavior (Bass, 1990; Ford & Tisak, 1983).

As noted in the overview, leadership contains a social component. Bass (1990) discussed several skills and abilities necessary for leadership. He declared that good leaders are those individuals who are best able to understand and interact with their followers. Good leaders show empathy for and understanding of the needs of their followers. Bass stated that good leaders spend time assessing the group's attitudes and motivations and are concerned about followers' level of satisfaction. These components of a good leader are captured by the social intelligence construct. It seems plausible then that social intelligence is an essential component of leadership.

Zaccaro et al. (1991) suggested that to fully understand leadership, researchers must carefully examine the social factors that are implanted deeply within it. Zaccaro et al. stated that social intelligence is essential to leader effectiveness because it links the person and situation aspects of leadership. The authors discussed two personal attributes of leadership, social perceptiveness and behavioral flexibility. Social perceptiveness refers to a leader's ability to be aware of and sensitive to employee and organizational needs, goals, and problems. Behavioral flexibility refers to a leader's willingness and ability to respond appropriately and differently to different situations. Zaccaro et al. declared that not possessing these attributes does not necessarily result in poor leadership; however, leaders who do display these two characteristics will be effective leaders.

Zaccaro et al. (1991) described social intelligence as comprised of two aspects: (a) social understanding and (b) situationally-appropriate behavior. These two aspects are directly linked to the personal attributes discussed above. Socially-intelligent individuals are aware of the social situation, including the problems and needs of others (social perceptiveness). Socially-intelligent individuals are also able to behave appropriately for different social situations (behavioral flexibility). Zaccaro et al. (1991) suggested that social intelligence links behavioral flexibility and social perceptiveness to leadership situations, enabling leaders to be effective.

The previous discussion suggests that researchers propose a link between social intelligence and leadership. As noted before, this research paper examined leadership experiences and not leader effectiveness. It may be true that socially-intelligence individuals are more effective leaders; however, we proposed that socially-intelligent individuals are likely to participate in leadership experiences.

Hypothesis 2: Individuals who score high on a measure of social intelligence will report more participation in leadership experiences and will show more leadership behaviors than will individuals who score low on a measure of social intelligence.

### **Linking Social Intelligence and Emotional Intelligence**

Researchers discussing the theoretical basis of emotional intelligence suggested that it may be a type or part of social intelligence (Abraham, 1999; Mayer & Salovey, 1993; Salovey & Mayer, 1990). Mayer and Salovey (1993) defined social intelligence as the ability to adapt to and act accordingly in a variety of social situations. Salovey and Mayor 1990) alleged that emotional intelligence is the subset of social intelligence that involves "the ability to monitor one's own feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (p. 189).

As the definitions show, the emotional intelligence and the social intelligence constructs overlap. If the suggestion by Mayer and Salovey (1993) and Salovey and Mayer (1990) is correct, that is, if emotional intelligence is indeed a component of social intelligence, we must wonder whether anything new is learned by using the newer emotional intelligence construct instead of or in addition to the better established social intelligence construct. The social intelligence construct appears to subsume the emotional intelligence construct. Because social intelligence has a broader scope than does emotional intelligence and because leadership is a broad construct that develops across the life-span, it may be that social intelligence is a primary component of leadership and therefore would account for more variance in leadership than would emotional intelligence.

Hypothesis 3: Social intelligence will account for variance in leadership above and beyond the variance accounted for by emotional intelligence, but emotional intelligence will not account for variance in leadership above and beyond the variance accounted for by social intelligence.

### **Method**

#### *Sample*

One hundred ninety-two undergraduate students at a Midwestern university participated in this study. Participants earned course credit after they finished the study. There were 126 females and 66 males who completed the study. The mean age was 22 years with a standard deviation of 5 years. Participants represented all levels of university education: 25% first year, 30% second year, 23% third year, 10% fourth year, and 12% other.

#### *Measures*

Participants were asked to complete a questionnaire containing a measure of emotional intelligence, a measure of social intelligence, and a measure of leadership. Both the social intelligence measure and the leadership measure were life history or biographical data measures. Biographical data measures allow an examination of antecedent behaviors thought important for the development of a particular behavior or attribute, such as leadership behaviors or social intelligence. The past behaviors related to the construct in question (leadership) form a predictable pattern of behavior for an individual. These behavioral patterns can be used to assess individual differences in a construct. Constructs measured using biographical data scales have shown good convergent validity with traditional measures of those same constructs (Mumford, Snell, & Reiter-Palmon, 1994; Mumford & Stokes, 1992).

Social intelligence was measured with 30 validated biodata items (Zaccaro, Zazanis, Diana, & Gilbert, 1993). Using a five-point, Likert-type rating scale, participants reported their past behaviors and experiences in adapting to and handling social situations. The range of possible scores was 30 to 150 with a mean social intelligence score of 101 and a standard deviation of 11. The internal consistency of the social intelligence measure was .80.

Leadership was measured using 14 biodata items modified from a 19-item leadership measure developed by Mumford, O'Conner, Clifton, Connelly, and Zaccaro (1993). The original Mumford et al. (1993) measure was used for individuals directly out of high school. Because the participants at the university where we conducted the study were older, on average, than the typical 17 or 18 year old first-year student, we altered the wording of the items so the items would be relevant to our participants. The items assessed both specific behaviors (e.g. "How active have you been in political clubs or student council?") as well as more general, cross-situational behaviors (e.g., "In group discussion, to what extent have you tried to make others see your point of view?") using a five-point, Likert-type rating scale. The possible range of scores was 14 to 70. The mean leadership score was 45 with a standard deviation of 7. The internal consistency of the leadership measure was .78.

Emotional intelligence was measured using Bar-On's (1996) Emotional Quotient Inventory (EQ-i). Participants responded to 152 items on a five-point, Likert-type rating scale. The total EQ-i score is comprised of five factors: (a) intra-personal, (b) inter-personal, (c) cognition-orientation, (d) stress management, and (e) affect. The scores for each of the five factors are summed to obtain the total emotional intelligence score. The possible range of scores on emotional intelligence was 152 to 760. The mean emotional intelligence score in this study was approximately 497 with a standard deviation of 64. Bar-On (1997) reported test-retest reliability of .85 for one month and .75 for four months. Bar-On also reported reliability estimates for each of the five factors of the emotional intelligence measure for various samples (.64 to .90) but did not report the internal consistency of the entire measure. This study found an internal consistency of .66.

### *Analyses*

Correlation analysis was used to assess the relationships between emotional intelligence and social intelligence as well as the relationship between each type of intelligence and self-reported leadership experiences. Hierarchical regression analyses were performed to test the hypotheses. The first step of each hierarchical regression analysis was used to test hypotheses one and two, which stated that individuals who score high on a measure of emotional intelligence will report more participation in leadership

experiences than will individuals who score low on a measure of emotional intelligence (hypothesis one) and that individuals who score high on a measure of social intelligence will report more participation in leadership experiences than will individuals who score low on a measure of social intelligence (hypothesis two).

In the first hierarchical regression analysis, leadership was regressed first on emotional intelligence (testing hypothesis one) and second on social intelligence. In the second hierarchical regression analysis, leadership was regressed first on social intelligence (testing hypothesis two) and second on emotional intelligence. The combination of both hierarchical regression analyses was used to test hypothesis three, which stated that social intelligence will account for variance in leadership above and beyond the variance accounted for by emotional intelligence, but emotional intelligence will not account for variance in leadership above and beyond the variance accounted for by social intelligence.

### *Results*

Measures of emotional intelligence, social intelligence, and leadership were all positively correlated with each other (Table 1). As expected, individuals who scored high in social intelligence scored high in emotional intelligence and scored high in self-reported leadership experiences.

In the first hierarchical regression analysis, emotional intelligence was entered in step one to verify that it is an important component of leadership. Supporting hypothesis one, emotional intelligence was found to account for a significant amount of variance in leadership ( $R^2=.12$ ,  $F(1,190) = 26.55$ ,  $p < .001$ ). Social intelligence was entered in step two to determine whether it would account for variance in leadership experiences above and beyond the variance accounted for by emotional intelligence. Social intelligence accounted for an additional 17% of the variance in leadership experiences after controlling for emotional intelligence ( $\Delta R^2 = .17$ ,  $F(2,189) = 45.23$ ,  $p < .001$ ). Social intelligence added variance accounted for in leadership above and beyond emotional intelligence. Together, the two variables accounted for 29% of the variance in leadership experiences. The results of this analysis are presented in Table 2.

In the second hierarchical regression analysis, social intelligence was entered in step one and was also found to account for a significant amount of variance in leadership. This supports hypothesis two. Social intelligence accounted for 29% of the variance in leadership when entered by itself ( $R^2 = .29$ ,  $F(1,190) = 77.39$ ,  $p < .001$ ). The addition of emotional intelligence in step two was not significant ( $R^2 = .003$ ,  $ns$ ). When accounting for the variance in leadership experiences, emotional intelligence did not add any unique variance beyond the variance accounted for by social intelligence. The results of this analysis are presented in Table 3.

### **Discussion**

This study proposed that both emotional intelligence and social intelligence are related to leadership. Although both emotional intelligence and social intelligence separately accounted for variance in leadership experiences as hypothesized, social intelligence accounted for a larger proportion of the variance in leadership experiences than did emotional intelligence. This finding suggests that social intelligence might be a primary component of leadership.



Hierarchical regression analyses were used to determine if either social or emotional intelligence added a significant amount of variance above and beyond the other variable. The additional analyses showed that emotional intelligence did not account for variance in leadership experiences above and beyond social intelligence. However, social intelligence did account for variance in leadership experiences above and beyond emotional intelligence. Taken together, these results suggest that there is significant overlap between the emotional intelligence and social intelligence constructs when accounting for variance in leadership experiences. It may be the case that when attempting to account for variance in leadership, a measure of social intelligence is sufficient.

### *Implications*

It is important to state that both emotional and social intelligence were found to be components of leadership experiences. Both of the measures used in this study accounted for a significant amount of the variance in leadership experiences; however, emotional intelligence may play a complimentary role to social intelligence. Mayer and Salovey (1990) and Salovey and Mayer (1993) asserted that social intelligence is a broader construct that subsumes emotional intelligence. The findings of this study support this assertion. Emotional intelligence did not account for variance in leadership experiences above and beyond social intelligence, however, social intelligence did account for variance in leadership experiences above and beyond emotional intelligence.

The present study offers some insight into leadership. As indicated in the introduction, many researchers have suggested that leadership contains both emotional and social components (e.g., Bass, 1990). The results presented here support the notion that there are social and emotional aspects of leadership. By assessing employees emotional and social intelligence, organizations may better predict who will be a leader.

If social intelligence does indeed capture the emotional intelligence construct, researchers could assess both variables using just one measure. Organizations may save time and money by using only the social intelligence measure to account for differences in leadership. However, it is important to note that emotional intelligence may account for variance in other important organizational behaviors. Future research should address the predictive power of both social intelligence and emotional intelligence to determine the adequacy of these constructs as predictors of organizational behaviors.

### *Limitations and Future Research*

A limitation of this study was common method bias. Each of the measures used were self-report, rating scales, and two of the measures used biographical data items. Although it is possible that common method bias contributed to the significant correlations, the magnitude of the correlations suggests that relationships do exist among social intelligence, emotional intelligence, and leadership experiences. To eliminate common method bias, observations of leadership experiences could be recorded, or participants could be asked to perform leadership behaviors. The behaviors or experiences could be examined on frequency, effectiveness, and subordinate reactions. These additional measures of leadership would extend the findings presented here beyond self-reported leadership experiences.

A second limitation was the nature of the sample, university students. Although student populations are more accessible than employees, it would be interesting to examine whether the hypotheses presented in this study hold true in organizations. It would be ideal to conduct this study using leaders and subordinates in an organizational setting.

## **Conclusion**

The results presented above suggest that both emotional intelligence and social intelligence are important for leadership in university students. In addition, social intelligence accounted for a larger proportion of variance in leadership experiences than did emotional intelligence. Mayer and Salovey (1993) may be correct in proposing that emotional intelligence is a part of the social intelligence construct.

**TABLE 1**  
**Variable Means, Standard Deviations, and Intercorrelations**

	Variable	<i>M</i>	<i>SD</i>	1	2	3
1.	EI	497.11	64.23	—	.5729**	.3501**
2.	SI	101.98	11.28	—	—	.5475**
3.	Leadership	45.12	7.01	—	—	—

*Note.* EI = emotional intelligence. SI = social intelligence. *n* = 192.

\*\**p* < .01.

**TABLE 2**  
**Hierarchical Regression Analysis—Emotional Intelligence Entered First**

	Variable	<i>B</i>	<i>SE B</i>	<i>b</i>
Step 1				
	EI	.038	.007	.350*
Step 2				
	EI	.007	.008	.062
	SI	.312	.046	.502*

*Note.* EI = emotional intelligence. SI = social intelligence.  $R^2 = .12$  for step 1.  $\Delta R^2 = .17$  for step 2 ( $p < .001$ ). *n* = 192.

\**p* < .001.

**TABLE 3**  
**Hierarchical Regression Analysis—Social Intelligence Entered First**

	Variable	<i>B</i>	<i>SE B</i>	<i>b</i>
Step 1				
	SI	.334	.038	.538*
Step 2				
	SI	.312	.046	.502*
	EI	.007	.008	.062

*Note.* EI = emotional intelligence. SI = social intelligence.  $R^2 = .29$  for step 1.  $\Delta R^2 = .003$  for step 2 (*ns*). *n* = 192

\**p* < .001.

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