

Empathy and the emergence of task and relations leaders

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Abstract

This empirical study of small workgroup peers investigated relationships among perceptions of emotional abilities (i.e., empathy, ability to identify others' emotions, and ability to express one's own emotions), cognitive abilities, and leadership emergence. While controlling for cognitive ability and complex task performance, we found that people rated highly on empathy garnered attributions of leadership from their peers. Our study found that an actor's empathy (1) related positively to ratings of task leadership and ratings of relations leadership and (2) mediated the effect of other emotional abilities (i.e., the ability to identify others' emotions and the ability to express one's own emotions) on task and relations leadership. Emotional abilities were unrelated to cognitive abilities or complex task performance. Cognitive abilities and complex task performance earned actors higher ratings on task leadership, but not on relations leadership. The article concludes by relating the results to the new research on authentic leadership.

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1. Introduction

Building on earlier theories of social intelligence (Thorndike, 1920) and multiple intelligences (Gardner, 1983), Salovey & Mayer's (1990) concept of emotional intelligence has captured the attention of practitioners and intrigued researchers. Studies (Ciarrochi, Chan, & Caputi, 2000; Lopes, Salovey, & Straus, 2003) indicate that emotional intelligence predicts desirable outcomes (e.g., interpersonal relationship quality and life satisfaction) even after controlling for cognitive ability and personality traits. Recent theorizing suggests, furthermore, that emotional intelligence, along with cognitive ability, offers benefits for leadership.

The current study contributes to research by empirically testing theoretical relationships among emotional intelligence constructs (Cooper & Sawaf, 1997; George, 2000), cognitive abilities/activities (Atwater & Yammarino, 1993; Lord, De Vader, & Alliger, 1986), and perceptions of leadership. This study extends work that has shown (a) an association between task complexity and leadership perceptions (Humphrey, 1985), (b) a relationship

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between empathy and leadership perceptions (Kellett, Humphrey, & Sleeth, 2002; Wolff, Pescosolido, & Druskat, 2002), and (c) a connection between empathy and the cognitive skills that underlie effective leadership behaviors (Wolff et al., 2002).

Recent research has demonstrated that leaders' influence on group members' emotions can substantially affect job attitudes and performance. Pescosolido (2002) argued, and his case examples illustrated, that leadership involves a process of managing group members' emotions in order to improve performance. McColl-Kennedy & Anderson (2002) demonstrated that leaders strongly influenced their subordinates' feelings of frustration and feelings of optimism, which in turn influenced objective sales performance. Likewise, Pirola-Merlo, Haertel, Mann, & Hirst (2002) found that leaders had a strong impact on affective team climate, which in turn influenced team performance. Cote & Morgan (2002, p. 947) found that "the amplification of pleasant emotions increases job satisfaction and decreases intentions to quit by improving the quality of interpersonal encounters at work." Wong & Law (2002) showed that leader emotional intelligence related to follower job satisfaction and organizational citizenship behavior. These findings all correspond with Affective Events Theory, which states that work events can alter employees' moods and feelings at work (Weiss & Cropanzano, 1996; Weiss, Nichols, & Daus, 1999).

Despite these findings, by focusing on general leadership perceptions, most research has not yet addressed how emotional intelligence relates to task-oriented and relations-oriented leadership styles. Humphrey (2002) points out that these relationships may not conform to intuitive expectations. Intuition might suggest an empathy link to relations leadership, but not to task leadership.

Yet Wolff et al. (2002) argue that empathy underlies the cognitive skills necessary for task leadership. According to their model, task leaders organize and plan group work. Accordingly, a leader must develop a vision that encompasses a wide variety of often confusing information about environment, task characteristics, and group members' abilities and personalities. To do so requires pattern recognition and perspective taking. Because empathy consists of the ability and desire to understand others' feelings, Wolff et al. argue that empathy should correlate with pattern recognition and perspective taking. They did not argue for a direct relationship between empathy and task leadership, but for only an indirect effect through empathy's association with cognitive activities. Their results supported their model. Kellett et al. (2002) found no relationship between empathy and the number of complex tasks performed, a key behavior related to task leadership.

We can thus recognize a lack of clarity in and need for further investigation of the relationships between emotional abilities and different leadership styles. Our present design addresses this need by including (a) three basic emotional abilities (empathy, ability to identify others' emotions, and ability to express one's own emotions; Salovey & Mayer, 1990; Mayer & Salovey, 1997) and (b) two basic leadership behaviors (relations-oriented and task-oriented; Yukl, 1998). In this study of peer perceptions we are interested in the extent to which emotional abilities account for emergence of task and relations leaders in small groups. We develop our hypotheses and describe a model of the relationships (Fig. 1) below. Our model addresses emotional abilities as perceived by group members.

1.1. Empathy

Empathy, defined as "the ability to comprehend another's feelings and to re-experience them oneself," represents an important concept central to emotionally intelligent behavior (Salovey & Mayer, 1990, pp. 194–195). Plutchik (1987, p. 43) describes empathy as a sharing of positive and negative emotions that promotes a bond between individuals. Years of study within the fields of counseling and psychotherapy have shown the importance of empathy in establishing interpersonal relationships (Rogers, 1951, pp. 52–54) and in producing change and learning (Rogers 1975, p. 3). Katz (1963, p. 5) explains that an empathetic response is "triggered by cues in the conversation or by impressions we receive of the state of mind or feeling of the other person. We assimilate this information without being aware of doing so. We pick up the signals through a kind of inner radar and certain changes in our own emotional states make themselves felt. We mimic the other person and in the excitement of our spontaneous response our attention is almost completely absorbed." Thus, the empathizer becomes personally involved and conveys reassurance, recognition, and acceptance (Katz, 1963, p. 8).

Management scholars have also begun to realize the importance of empathy. Goleman, Boyatzis, & McKee (2002, p. 50) state that empathy is "the fundamental competence of social awareness" and "the sine qua non of all social effectiveness in working life." They argue that effective leaders create a "resonance" with their followers and that by establishing resonance leaders can guide their followers to more productive emotional responses and work

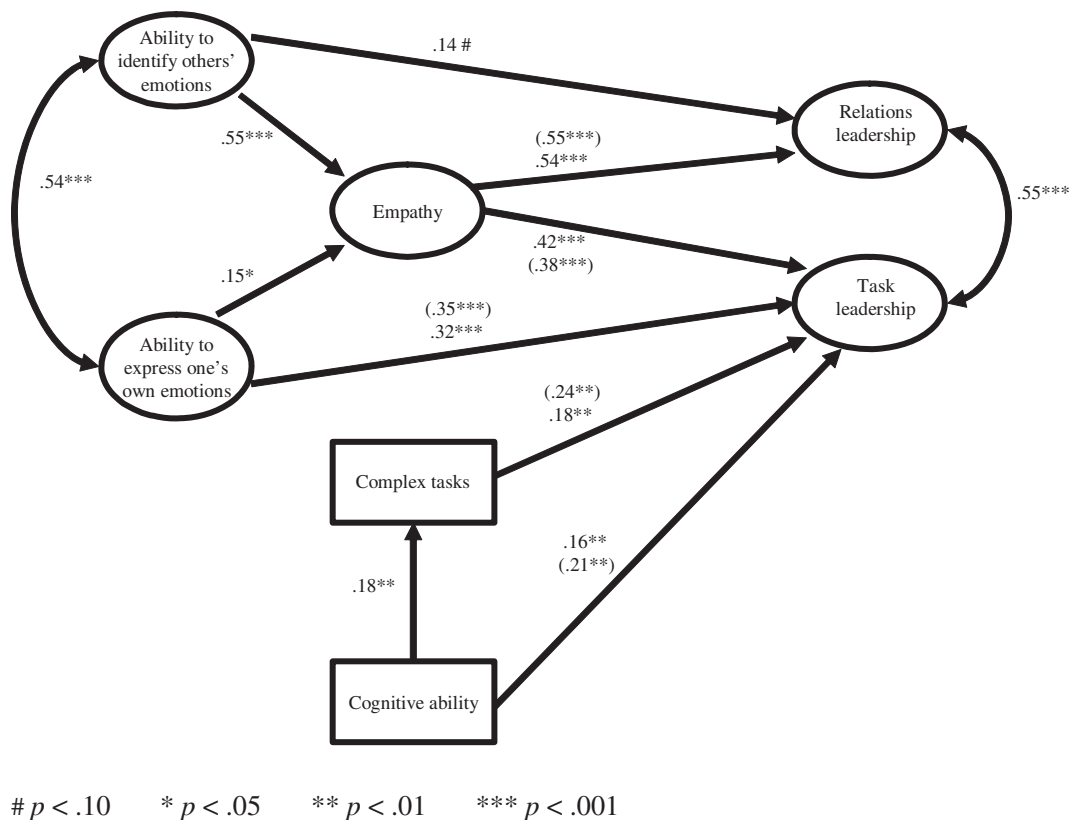


Fig. 1. Relations leadership and task leadership behavior model. (To conserve space, statistics from the Results section are included on this diagram. Standardized path coefficients are shown. Factor loadings are excluded in the interest of clarity. Complex tasks and cognitive ability are manifest variables. The five latent variables are peer-rated. χ^2 (159, $n=198$)=285.74, CFI=.93, RMSEA=.06. Results using a three-item task leadership scale appear in (). For the three-item task leadership scale, the Structural Model: χ^2 (141, $n=198$)=245.25, CFI=.93, RMSEA=.06. Measurement Model: χ^2 (109, $n=198$)=210.32, CFI=.93, RMSEA=.07. Factor loadings are .60, .70, and .63 for task leadership.)

behaviors. Moreover, they state, “most crucially, empathy makes resonance possible; lacking empathy, leaders act in ways that create dissonance” (Goleman, Boyatzis, & McKee, 2002, p. 50). Thus like the counseling psychologists cited earlier, they believe that empathy is necessary to establishing the interpersonal relationships that make change possible.

Researchers have distinguished empathy from other constructs such as personality traits (McCrae & Costa, 1997) and relations-oriented leadership behavior (Yukl, 1998). For example, if a person high on agreeableness (good-natured and cooperative; Barrick & Mount, 1991) also shows consideration, that person does not necessarily comprehend and experience others' emotions. We would expect, however, a relationship between empathy and aspects of personality. Indeed, Davies, Stankov, & Roberts (1998) found empathy related to both openness ($r=.23$, $p<.05$) and agreeableness ($r=.26$, $p<.01$).

1.2. Ability to express one's own emotions

The ability to express one's own emotions involves the abilities to communicate feelings accurately and to express related needs (Mayer & Salovey, 1997, p. 12). George (2000, p. 1034) states, “the accurate expression of emotion ensures that people are able to effectively communicate with others to meet their needs and accomplish their goals or objectives” and notes “ambivalence over expression of emotions can hamper an individual from developing beneficial interpersonal relationships in life.” Leaders' abilities to display emotions apparently can influence how subordinates perceive them, and thus their ability to develop effective leader–member relationships (Dasborough & Ashkanasy, 2002; Graen & Uhl-Bien, 1998; Newcombe & Ashkanasy, 2002).

1.3. Ability to identify others' emotions

The ability to identify others' emotions involves clearly recognizing emotions in other people through attention to language, sound, appearance, and behavior (Mayer & Salovey, 1997, p. 12). Research has found individual differences in the accuracy of perceiving these cues (Salovey & Mayer, 1990, pp. 192–193). Beginning at an early age and through experience, we learn that a facial expression may represent a social not an emotional response (Saarni, 1999, p. 110), a masquerade that complicates the skill of interpreting others' emotions.

Unsuccessful efforts to falsify expression of emotion can alert us to a person's true feelings. Clues to the underlying emotion appear from muscle movement, timing and duration of an expression, inconsistencies with other body movements, and the overall social and interpersonal context (Goldstein & Michaels, 1985). Physiological changes particularly help the keen observer. Many expressions of emotions — joy in a sparkling eye, embarrassment in a blushing face, fear in a panting breath and a perspiring forehead, and anger in a tensing jaw — tend to occur prior to conscious control and therefore resist camouflage (Ashkanasy, Hartel, & Zerbe, 2000, pp. 9–12; Goleman, 1995).

In short, empathy, ability to express one's own emotions, and ability to identify others' emotions, represent complex skills that vary among individuals (Buck, 1984, p. 194; Dymond, 1949, p. 133; Ickes, Stinson, Bissonnette, & Garcia, 1990, p. 739) and may assist development of positive relationships, problem-solving, decision-making, and accomplishment of personal goals. Research indicates that these important emotional abilities correlate positively with each other (Salovey & Mayer, 1990, pp. 194–195).

As the above paragraphs make clear, we believe that emotionally intelligent leadership consists of creating a bond or relationship between the leader and the other group members. Although people who want to be leaders may try to create such a bond, it is not always easy to act in an emotionally intelligent way, and individuals obviously differ in their ability to communicate their feelings, make others feel understood, and demonstrate their empathy and concern for others. We believe that peer ratings would be the best way to measure whether an individual group member has successfully created these ties with the group.

For example, suppose an individual does care about other group members and sympathizes with them. Nonetheless, it is possible that the group members may not recognize the individual's care and concern. This may occur if the individual is passive and does not exert influence on the group emotional experience. Because our focus is on leadership, we feel it is important to distinguish between a "passive empathy," in which one feels sympathy for others but exerts little influence on the group shared emotional tone, and what we call "interactive empathy." From our perspective, leaders create interactive empathy only when the other group members recognize the leader's care and concern and the leader's role in creating the shared emotional experience.

Another example concerns the ability to express emotions. Clearly, the actor must first express emotions; then, in order for the communication to be effective, the observers must receive the emotions and feel the emotional impact of the message. In other words, we are less concerned with the individual's internal emotional state than in whether or not the individual has exerted leadership by creating an emotional tie with others. For our purposes, we believe that peer ratings provide the best measure of whether an actor has successfully created such a bond, because the bond will only exist if the group members feel that it exists.

There are a number of different ways to measure emotional intelligence. If the goal is to prove that emotional intelligence is indeed an intelligence, then perhaps the best way would be to use a multiple choice test, such as the MEIS, developed by Mayer, Caruso, & Salovey (2000). The MEIS is designed to meet the criteria normally used to judge intelligences. However, if the goal is to measure whether emotionally intelligent leadership has taken place in a group, then peer ratings may be the best way to measure what has actually happened in the group. These peer ratings reflect a real and important outcome, namely, the leadership structure of the group. If all the group members agree that Person A is the leader of the group, then Person A for all practical purposes has emerged as the leader of the group. Likewise, if all of the group members believe that Person A has exhibited empathy and expressed emotions clearly, then Person A has succeeded in creating these emotional outcomes as well.

Thus when interpreting our results, it is important to realize that we are not measuring emotional intelligence in terms of an emotional intelligence test, and that our results cannot be used to demonstrate that emotional intelligence meets established criteria for determining whether something is an "intelligence" or not. However, our measures should give us a good idea of group processes and outcomes as they relate to emotional competencies. When referring to our own study variables, we will use the term "emotional abilities" to reflect our use of peer ratings.

1.4. *Perceived leadership*

Research by Lord and his colleagues (Cronshaw & Lord, 1987; Lord, Foti, & DeVader, 1984; Phillips & Lord, 1981) indicates that discrete behaviors enable observers to categorize others as leaders or nonleaders. Lord et al. (1984) use the term “prototype” to refer to the loosely associated attributes that constitute an observer’s image of a leader. These categories (1) assist observers to predict future behavior and (2) help to explain how leaders emerge and exercise influence in groups. Lord & Kanfer (2002, p. 12) note that emotions, although at times fleeting and occurring outside of conscious awareness, can affect perceptions. These authors (p.15) point out that perceptions of charismatic leadership vary strongly with the emotional content of nonverbal behavior. In the same vein, we believe that behavior that conveys empathy and other emotional abilities cues a leadership prototype in the minds of observers. Lord’s theory suggests that people become effective leaders only after others perceive them as leaders.

1.5. *Routes to perceived leadership*

Reviews covering decades of leadership research agree on two predominant types of effective leadership behavior — relations-oriented behavior and task-oriented behavior (Yukl, 1998; Dansereau & Yammarino, 1998). Relations behaviors largely concern maintaining or improving cooperative interpersonal relationships that build trust and loyalty. Relations behaviors include listening carefully to others to understand their concerns, providing support and encouragement, helping, and recognizing people as individuals. Task behaviors largely concern maintaining or improving processes that facilitate accomplishment of tasks. Task behaviors include organizing activities and resources, clarifying role expectations and standards for task performance, marshalling information, and solving problems.

1.6. *Empathy and leadership*

Growing evidence suggests that we will respond to others as leaders if their displays of empathy first make us feel understood and valued as individuals. House & Podsakoff’s (1994) review observed that outstanding leaders differ from less-effective leaders in their higher consideration of and sensitivity to the needs of their followers. Dansereau, Yammarino, Markham, & Alutto (1995), in their recent theory of individualized leadership, argue that by supporting others’ feelings of self-worth we cause others to view us as leaders. Thus, leaders may, in exchange for satisfactory performance, provide support for a person’s sense of self-worth. Indeed, the leadership literature is beginning to recognize that the ability to extend empathy contributes to leadership success (Cooper & Sawaf, 1997, p. 48; Yukl, 1998, p. 99). Current theorizing regarding emotions and transformational leadership (Ashkanasy, Hartel, & Daus, 2002, p. 326; Bass & Avolio, 1990) suggests that the ability to understand others’ emotions enables a leader to empathize and results in effectiveness. Barbuto & Burbach (2004) found that empathy was related to transformational leadership.

High quality relationships stemming from empathy tend to enhance perceptions of a leader’s integrity or credibility, and tend to engender cooperation and trust (George, 2000; Lewis, 2000). The knowledge and understanding gained from their sense of empathy may enable leaders to influence follower’s emotions and attitudes, including feelings of excitement, enthusiasm, and optimism, in support of corporate goals and objectives (George, 2000; Lewis, 2000). Thus, it is not surprising that empirical research (Kellett et al., 2002) has found a positive correlation between perceived leadership (general leadership impression) and displays of empathy.

From the introductory literature review, the relationship between empathy and the two different types of leadership behaviors remains unclear in prior empirical and theoretical research. We propose these exploratory hypotheses:

Hypothesis 1. Empathy relates positively to relations leadership.

Hypothesis 2. Empathy relates positively to task leadership.

We show the abilities to identify and to express emotions as antecedents to empathy in our model because we doubt that anyone experiences empathy without these indicators of emotional awareness. Cooper & Sawaf (1997) and George (2000) suggest that effective leaders draw upon their ability to identify and express emotions in order to better

understand and influence followers, to convey a compelling vision, to maintain excitement, and to promote interpersonal cooperation.

Although we believe that the ability to express emotions and the ability to identify others' emotions are highly related to empathy, we also realize that they are conceptually distinct from empathy. First, the ability to identify others' emotions does not necessarily imply that one is going to interact with the others in a positive way. A person could accurately perceive others' opinions and feelings, but remain passive and emotionally unaffected. Second, someone highly capable of interpreting or expressing emotions might use those skills to exploit or intimidate rather than to help in a particular situation. We may view a keen, detached target as Machiavellian, whereas we may view a keen, empathetic, and helpful target as a relations leader.

Because high self-monitors should also be good at perceiving others' emotions, the research on self-monitoring can provide some insight into whether being aware of other's emotions is always related to pro-social feelings such as empathy. [Sosik, Avolio, & Jung \(2002, p. 217\)](#) concluded that "Self-monitoring was negatively related to ratings of pro-social impression management and positively related to ratings of self-serving impression management. Pro-social impression management related positively to charismatic leadership, which predicted managerial and unit performance." Their findings are consistent with our position in two ways. First, their results suggest that the ability to perceive others' emotions is conceptually distinct from empathy, in that some people who are good at perceiving emotions may not have pro-social, empathic responses. Second, we believe that empathy should be positively related to pro-social motivations, so their finding that pro-social impression management related positively to charismatic leadership supports our position that empathy should be related to leadership.

[Dasborough & Ashkanasy \(2002\)](#) have discussed how leaders differ in their care and concern for followers, and that their amount of concern is one of the main differences between true and pseudo-transformational leaders. We believe that empathy is one of the key differences between Machiavellian, pseudo-transformational leaders and true transformational leaders. For these reasons, empathy should act as a mediator, as hypothesized below:

Hypothesis 3. Empathy mediates the relationship between the ability to identify others' emotions and relations leadership.

Hypothesis 4. Empathy mediates the relationship between the ability to express one's own emotions and relations leadership.

1.7. Cognitive ability, task complexity, and leadership

The positive relationship between cognitive ability and leadership is well established in organizational research. A meta-analysis by [Lord et al. \(1986\)](#), including studies representing a diverse range of populations, found a strong correlation between intelligence and leadership emergence in small groups. [Atwater & Yammarino \(1993\)](#) found that leader intelligence related to subordinate ratings of leadership. A longitudinal study by [Atwater, Dionne, Avolio, Camobreco, & Lau \(1999\)](#) found that individuals with greater cognitive ability were more likely to emerge as leaders.

Humphrey & his colleagues ([Humphrey, 1985; Kellett et al., 2002](#)) have shown that observers perceive leadership in those they see performing complex tasks. [Humphrey \(1985\)](#) demonstrated that individuals performing complex managerial roles received higher ratings from their fellow participants on leadership and executive skills than others performing low-skilled clerical tasks. This result occurred even though the participants realized they were performing randomly assigned work roles. Subsequent research examined the effects of individual differences on willingness to perform complex tasks ([Kellett et al., 2002](#)). Participants in these studies had the opportunity to work on their choice of either complex or simple tasks. Grade point average, an indicator of cognitive ability, related positively with complex task choice. All studies found a close association between performance of complex tasks and favorable leadership attributions from teammates. We posit that cognitive ability and performance of complex tasks are closely associated with task leadership (planning, organizing, problem-solving) and not associated with relations leadership (cooperating, supporting, trusting).

Hypothesis 5a. Cognitive ability relates positively to task leadership.

Hypothesis 5b. Performance (number) of complex tasks relates positively to task leadership.

2. Method

2.1. Setting and participants

Because all methods provide strengths and weaknesses, we believe that a wide variety of approaches to organizational research ensures a comprehensive set of results from which to draw conclusions. Our study took the form of an assessment center exercise developed by [Humphrey \(1985\)](#). Recent research by [Woehr & Arthur \(2002\)](#) supports the validity of well-designed assessment centers. According to their meta-analysis, “it is widely accepted that the situations and exercises incorporated into assessment centers represent relatively realistic work samples and that the knowledge, skills, and abilities, required for successful assessment center performance are the same as those required for successful job performance” (p. 233). Prior studies using Humphrey’s assessment center design have shown a correlation between leadership rankings and standard measures of success or performance (e.g., grade point average, management level).

Our sample consisted of 198 undergraduate and 33 graduate students enrolled in Organizational Behavior classes at a southeastern university, who chose to participate for course credit. The sample included 101 men and 130 women — averaging 23.5 years of age. Study participants worked in triads on a combination of individual tasks and group tasks we designed to enable peer-evaluations of emotional abilities and leadership.

Participants were told that companies often used assessment centers to make promotion and placement decisions, and that there was a good chance that sometime in their future their place of employment might ask them to attend an assessment center. The participants were given examples of how some of the largest employers in the area used assessment centers. Students were told that participating in the assessment center would help prepare them to do well in any future assessment center they attended, and that it would also help prepare them for everyday corporate work tasks. Students were informed that they would receive individualized feedback on their performance, as well as a five page “tip sheet” on how to do well in assessment centers and in the workplace.

2.2. Procedure

2.2.1. Set-up and preliminary questionnaire

We assigned participants randomly to tables of three as Person A, Person B, and Person C. As a preliminary step, we administered the timed Wonderlic Personnel Test (a problem-solving test measuring cognitive ability). Then we presented an overview of the assessment center process. Next, we allowed participants 20 min to complete an introductory group task. We designed that group task, involving a discussion of community service opportunities, to enable peer-evaluations of emotional awareness, empathy, and leadership. Group members were to act as if they were general managers in a corporation. Their task was to develop ways to get employees involved in assisting needy people within the community. Group members also discussed (1) their own feelings about the community service program, (2) their assessment of employees’ feelings about the program, and (3) the level of support they intended to provide.

2.2.2. Round 1

During Round 1, participants worked individually on their choices of tasks (one task at a time) for an interval of 40 min. Triads shared a Task Sign-Up Form in selecting relatively complex tasks (e.g., marketing new products) or simple tasks (e.g., copying addresses to mailing labels) that others had not chosen from a list of 24 activities. Following prior studies (cf. [Humphrey & Berthiaume, 1993](#), p. 411; [Kellett et al., 2002](#), p. 531), the complex tasks offered skill variety, task identity, task significance, and autonomy ([Hackman & Oldham, 1980](#); [Fried & Ferris, 1987](#)) as well as component, coordinative, and dynamic complexity ([Wood, 1986](#)).

Every complex task required participants to (1) retrieve correspondence, instructions, and data about the task from a file box, (2) determine the action required, (3) calculate appropriate solutions, and (4) write a response to the original correspondence. The simple tasks were repetitive and relatively mindless. Based on prior studies, task names on the Task Sign-Up Form enabled participants to distinguish easily between complex and simple tasks, and the 24 tasks were sufficient to occupy the three members of each triad.

2.2.3. Round 2

Immediately following Round 1, participants at each table worked on the three Round 2 tasks as a group over a period of 50 min (including a 10-min break). These tasks involved brainstorming and group decision-making, and required group members to complete group reports. We designed these tasks to enable self-evaluation and peer-evaluation of selected task characteristics and leadership behavior. These activities also provided further opportunity for group members to assess emotional awareness and empathic abilities. At the end of Round 2, we separated participants to establish privacy. We distributed questionnaires requesting ratings of fellow group members on emotional abilities, task leadership and relations leadership. Because group members worked closely together for more than two hours, we believe that this assessment center design provided ample opportunity for assessing each others' emotional abilities. Indeed, research (Ickes et al., 1990) suggests that individuals are able to accurately infer others' thoughts and feelings after a mere six minute encounter.

2.3. Measures

This study seeks to examine whether a person rated highly by fellow group members on emotional abilities tends to receive high ratings from fellow group members on task and/or relations leadership. Thus, measures of ability to express one's own emotions, ability to identify others' emotions, empathy, task leadership, and relations leadership came from peer-reports. We note other points favoring the use of observer ratings in this study. By eschewing self-reports, we avoided response biases such as social desirability and self-presentation. Research (Dymond, 1949; Ickes et al., 1990) suggests that, in particular, individuals are poor assessors of their own empathic skills.

An individual's score on the peer-report measures resulted from an average of the ratings provided by the two other people in the triad. We offer evidence supporting the validity of these constructs in the Levels of analysis considerations section below. We report reliabilities of the current study's measures in the Results section.

2.3.1. Ability to express one's own emotions and ability to identify others' emotions

We measured two peer-reported constructs, ability to express one's own emotions and ability to identify others' emotions, using the Workgroup Emotional Intelligence Profile (WEIP) scales (Jordan, 2001). Both WEIP measures consist of three items and seven-point Likert-type scales, anchored by "strongly disagree" and "strongly agree." These measures follow Salovey & Mayer's (1990) model and are designed to evaluate affective reactions of individuals working in groups (Jordan, 2001; Jordan, Ashkanasy, & Hartel, 1998). Jordan (2001) reported Cronbach alphas of .85 and .75 for the two scales. Sample items are: "This person can talk to other members of the team about the emotions he/she experiences" and "This person is able to describe accurately the way others in the team are feeling." Jordan demonstrated that the WEIP scales have discriminant validity with regard to related personality trait scales, such as the 16 Personality Factors, Revised Self-Monitoring, and the Personal Style Inventory.

2.3.2. Interactive empathy

We wrote five peer-report items to measure interactive empathy on a seven-point Likert-type scale, anchored by "slightly characteristic" and "very characteristic." These items are: (1) "Values others as individuals"; (2) "Feels emotions that other people experience"; (3) "Makes others feel understood"; (4) "Shares others' feelings of happiness"; and (5) "Encourages others to talk about how they feel." Our objective was to develop an empathy measure that tapped the interactive dimension within the domain of the construct — the ability to share and re-experience others' feelings. Our interactive empathy scale items differ from the WEIP scales on identifying and expressing emotions in two ways. First, the identifying emotions items measure an actor's awareness of others' emotions, but do not suggest that the actor shares the emotions that he or she observes. This is different from the interactive empathy items, which measure the extent to which the actor shares other's emotions. Second, the expressing emotions scale measures the degree to which the actor expresses his or her own emotions, whereas the interactive empathy scale measures the degree to which the actor encourages others to express their emotions.

2.3.3. Cognitive ability

We measured cognitive ability using the Wonderlic Personnel Test, a proprietary instrument donated by Wonderlic Personnel Test, Inc. for use in this research. This 50-item questionnaire has demonstrated a long-term test-retest reliability of .94 and congruence with other measures of general intelligence (Dodrill, 1983; Dodrill & Warner, 1988).

The Wonderlic's usefulness is evidenced by its application in a variety of published studies (e.g., Fox & Spector, 2000).

2.3.4. Complex tasks

We counted the number of complex tasks an individual selected during Round 1.

2.3.5. Task leadership and relations leadership scales

Participants completed a five-point, two-factor leadership scale (Humphrey, 1985) that measured task leadership and relations leadership (see Appendix). A prior study using 276 cases found Cronbach alphas were .90 for the six-item task leadership factor and .86 for the three-item relations leadership factor. In a prior unpublished study using this same measure, the task leadership factor was more highly correlated (by inspection) with a measure of Stogdill's (1965) leadership-direction ($r = .49, p < .01$) than with a measure of Stogdill's (1965) leadership-consideration ($r = .30, p < .01$). The relations leadership factor was more highly correlated with a measure of Stogdill's (1965) leadership-consideration ($r = .50, p < .01$) than with a measure of Stogdill's leadership-direction ($r = .35, p < .01$). However, because the task leadership scale contained three items on general leadership, we also created a shorter scale that used only the three items that focused specifically on the task dimension (hardworking, intelligence, and assertiveness). In our analysis, we report the results for both the six and the three item versions of the task scales.

To ensure that the scales enabled groups to clearly distinguish leaders from non-leaders, we measured the ranking (1, 2, or 3) of each team member on measures of task leadership and relations leadership. We found significant differences (at $p < .001$) in leadership scores when comparing both rank 1 to 2, and rank 2 to 3, for both scales.

2.4. Levels of analysis considerations

Although this study sought to test hypotheses about relationships between individuals, it also considered the potential impact from dyad-level and group-level effects (Klein, Dansereau, & Hall, 1994).

We looked for effects from the dyads composed of two peer raters. There, significant ANOVAs and ICC1s greater than .12 attest to the validity of the peer-rated construct by providing evidence of within-group agreement and between-group differences (Bliese, 2000; James, 1982; Kenny & LaVoie, 1985). We found ICC1s of .32 (express emotions), .23 (identify emotions), .02 (empathy), .19 (task leadership), and .12 (relations leadership). An inspection of empathy scores from the individual raters in each dyad showed 33 cases in which the raters differed by more than 2 points on the empathy measure. Because individuals differ in their ability to discern what others are feeling (Dymond, 1949; Ickes et al., 1990), rater differences in assessing empathy are not surprising. A reexamination of the remaining sample of 198 cases showed acceptable ICC1s for all of the latent constructs as follows: .36 (express emotions), .29 (identify emotions), .36 (empathy), .23 (task leadership), and .15 (relations leadership).

As an added indicator of inter-rater agreement for the sample of 198 cases, median r_{wg} scores were .90 ($SD = .36$) for the ability to express one's own emotions, .92 ($SD = .41$) for the ability to identify others' emotions, .94 ($SD = .47$) for task leadership, .94 ($SD = .39$) for relations leadership, and .92 ($SD = .16$) for empathy.

We looked for evidence of nonindependence (Kenny & Judd, 1996) from the three-person group level by calculating intraclass correlations (ICC1s) from one-way analyses of variance (ANOVAs) for the two criterion variables: task leadership, and relations leadership (Bliese, 2000). We found no group-level effects for task leadership ($ICC1 = 0$) in either the full sample or in the sample of 198 cases. However, relations leadership's ICC1 of .33 in the full sample and .25 in the sample of 198 cases indicated that in the three-person groups, level could account for variance in perceptions of relations leadership (Bliese, 2000).

In order to determine the sensitivity of study findings to dyad-level and group-level effects, we conducted three separate analyses. We conducted the first analysis using the full sample of 231 cases. We conducted the second analysis using the reduced sample of 198 cases having acceptable within-dyad agreement and between-dyad differences. We conducted the third analysis using the full sample of 231 cases for which peer-rated measures came from only *one* rather than *two* raters and showed no group-level effects. We found a similar pattern of results across all three analyses. Thus, we concluded that dyad-level and group-level effects had little impact in this study. To conserve space, the results reported in this article reflect the sample of 198 cases, using two-rater measures of the latent variables.

3. Results

Means, standard deviations, bivariate correlations, and reliabilities for all study variables appear in Table 1. An inspection of the correlations showed no relationship between emotional abilities variables (ability to express one's own emotions, ability to identify others' emotions, empathy) and either cognitive ability or complex tasks. Results showed a strong positive relationship between empathy and relations leadership ($r = .55, p < .001$), supporting Hypothesis 1. Interestingly, empathy also related to task leadership ($r = .43, p < .001$), supporting Hypothesis 2. Results from regression analysis and structural equation modeling, described below, offered further support for empathy's positive relationship with relations leadership and task leadership.

3.1. Mediation effects

We used regression equations (Baron & Kenny, 1986; Kenny, Kashy, & Bolger, 1998) to investigate empathy as a mediator for the ability to identify others' emotions and for the ability to express one's own emotions in predicting relations leadership. The ability to identify others' emotions related positively to empathy ($\beta = .52, p < .001$) and to relations leadership ($\beta = .43, p < .001$). When empathy was part of the equation, ability to identify others' emotions showed a weaker positive relationship with relations leadership ($\beta = .19, p < .01$). Similarly, the ability to express one's own emotions related positively to empathy ($\beta = .39, p < .001$) and to relations leadership ($\beta = .30, p < .001$), but its positive relationship with relations leadership shrank ($\beta = .09, n.s.$) when the model contained empathy. Our test for mediation (Sobel, 1982) was significant in both cases ($z = 5.19$ and $4.58, p < .001$), supporting Hypotheses 3 and 4.

3.2. Relations and task leadership regression model

As expected, regression analysis showed that cognitive ability and performance of complex tasks related positively with task leadership (Hypotheses 5a and 5b) and had no relationship with relations leadership. Further, regression analysis enabled us to investigate relationships among the emotional abilities and the leadership behavior variables. Standardized regression coefficients (Table 2) indicated that cognitive ability ($\beta = .13, p < .05$), complex tasks ($\beta = .16, p < .01$), empathy ($\beta = .29, p < .001$), and the ability to express one's own emotions ($\beta = .30, p < .001$) were related to task leadership, whereas the ability to identify others' emotions was unrelated to task leadership. Empathy ($\beta = .43, p < .001$) and the ability to identify others' emotions ($\beta = .19, p < .05$) were related to relations leadership, whereas cognitive ability, complex tasks, and the ability to express one's own emotions were unrelated to relations leadership. The results were essentially identical when we used the three-item leadership scale.

Empathy (squared semipartial correlation = .13, $p < .001$) and the ability to identify others' emotions (squared semipartial correlation = .02, $p < .01$) explained unique variance in relations leadership. Interestingly, empathy (squared semipartial correlation = .06, $p < .001$) and the ability to express one's own emotions (squared semipartial correlation = .07, $p < .001$) accounted for greater variance in task leadership than did cognitive ability (squared semipartial correlation = .02, $p < .05$) and complex tasks (squared semipartial correlation = .02, $p < .01$).

Table 1
Means, standard deviations, and correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Cognitive ability	24.91	6.20							
2. Complex tasks	1.23	1.06	.18*						
3. Express emotions	4.82	1.09	.04	−.06	(.81)				
4. Identify emotions	4.80	.99	−.02	−.04	.48***	(.87)			
5. Empathy-interactive	5.09	.86	−.07	−.15*	.39***	.52***	(.85)		
6. Task leadership	3.91	.62	.14*	.12	.46***	.39***	.43***	(.83)	
3-item scale ^a	4.01	.59	.17*	.18*	.42***	.34***	.36***	(.68)	
7. Relations leadership	4.10	.59	−.10	−.13	.30***	.43***	.55***	.44***	(.80)
								.40***	

Note. $n = 198$. Reliabilities for the latent variables appear on the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

^a Results using a three-item task leadership scale appear in italics.

Table 2
Results of regression analysis

Predictor variables	Outcome variables	
	Task leadership ^a	Relations leadership
Cognitive ability	.13* (.14*)	–.05
Complex tasks	.16** (.21***)	–.05
Empathy	.29*** (.24***)	.43***
Express emotions	.30*** (.29***)	.04
Identify emotions	.11 (.09)	.19*
<i>F</i>	20.05*** (16.53***)	19.75***
<i>R</i> ²	.34 (.30)	.34

Note. *n* = 198. Standardized coefficients are shown.

p* < .05. *p* < .01. ****p* < .001.

^a Results using a three-item task leadership scale appear in ().

We used regression equations (Baron & Kenny, 1986; Kenny et al., 1998) to investigate empathy as a mediator for the ability to identify others' emotions and for the ability to express one's own emotions in predicting task leadership. The ability to identify others' emotions related positively to empathy ($\beta = .52, p < .001$) and to task leadership ($\beta = .39, p < .001$), but its positive relationship with task leadership dropped ($\beta = .23, p < .01$) when empathy joined the equation. Similarly, the ability to express one's own emotions related positively to empathy ($\beta = .39, p < .001$) and to task leadership ($\beta = .46, p < .001$), but its positive relationship with task leadership decreased ($\beta = .35, p < .001$) when the model contained empathy. Our test for mediation (Sobel, 1982) was significant in both cases ($z = 3.64$ and $3.66, p < .001$).

3.3. Relations and task leadership measurement and structural models

We incorporated the distinctive relationships among the ability to identify others' emotions, the ability to express one's own emotions, empathy, relations leadership, and task leadership into a relations and task leadership structural model (Fig. 1). We used confirmatory factor analysis to assess a measurement model containing the five latent variables (the ability to express one's own emotions, the ability to identify others' emotions, empathy, task leadership and relations leadership). Due to our sample size we decreased the number of estimated parameters by reducing the six-item task leadership scale into four aggregate item parcels, as recommended by Hall, Snell, & Foust (1999).

The test of the measurement model revealed an acceptable chi-square value, χ^2 (125, *n* = 198) = 236.40, and acceptable fit indices (CFI = .94, RMSEA = .07). Factor loadings were all significant ($p < .001$), with standardized values of: .82, .83, and .85 for ability to identify others' emotions; .47, .88, and .91 for ability to express one's own emotions; .65, .68, .68, .81, and .83 for empathy; .65, .79, and .82 for relations leadership; and .56, .69, .70, and .91 for task leadership. Composite reliabilities (Fornell & Larcker, 1981) for the latent variables ranged from .80 to .87 and appear on the diagonal in Table 1.

We then assessed relationships among the latent variables (ability to express one's own emotions, ability to identify others' emotions, empathy, task leadership, and relations leadership) and the two manifest variables (cognitive ability and complex tasks) using structural equation modeling. Fig. 1 displays estimated standardized path coefficients. The structural model showed an acceptable fit, χ^2 (159, *n* = 198) = 285.74, CFI = .93, RMSEA = .06, and all path coefficients (except for the link between the ability to identify others' emotions and relations leadership) were significant. Empathy showed a strong positive relationship with both relations leadership ($\beta = .54, p < .001$) and task leadership ($\beta = .42, p < .001$). The ability to express one's own emotions related positively to task leadership ($\gamma = .32, p < .001$). The association between the ability to identify others' emotions and relations leadership was not significant ($\gamma = .14, p < .10$). Cognitive ability ($\gamma = .16, p < .01$) and complex tasks ($\beta = .18, p < .01$) related positively with task leadership but showed no relationship with relations leadership. The pattern of results was the same when we used the three-item task leadership scale.

For comparative purposes we considered a structural model in which the three emotional abilities formed one common factor. We rejected it due to its unacceptable fit, χ^2 (165, *n* = 198) = 626.19, CFI = .75, RMSEA = .13.

3.4. Alternative analysis

To further study the relationships we analyzed the data in an alternative way using ratings of the independent emotional abilities variables from one person and ratings of the dependent leadership variables from a different person in the three-person group (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 887). For Person A we used Person B's ratings of the IVs and Person C's ratings of the DVs. For Person B we used Person C's ratings of the IVs and Person A's ratings of the DVs. For Person C we used Person A's ratings of the IVs and Person B's ratings of the DVs.

We used structural equation modeling to reassess the relationships in Fig. 1. The structural model showed an acceptable fit, χ^2 (159, $n=198$)=235.69, CFI=.95, RMSEA=.05. Empathy showed a positive relationship with relations leadership ($\beta=.25$, $p<.05$); however, its relationship with task leadership was not significant ($\beta=.12$, $p<.10$). The ability to express one's own emotions related to empathy ($\gamma=.22$, $p<.01$) and to task leadership ($\gamma=.24$, $p<.01$). The ability to identify the emotions of others related to empathy ($\gamma=.49$, $p<.001$) and was unrelated to relations leadership. Thus, we found a similar pattern of results with the alternative analysis. We would expect to find weaker IV–DV relationships using this method because not only do people differ in their ability to recognize emotions in others but also they differ in their standards for rating high and low abilities.

4. Discussion and conclusions

Results from this study are consistent with a developing body of conceptual work linking emotional abilities with effective leadership. Indeed, the results point to the importance of emotional abilities (particularly empathy) to leadership perceptions — relationships largely overlooked in leadership research (George, 2000).

This study suggests that emotional faculties and cognitive abilities/tasks are unrelated to each other and account for unique variance in leadership perceptions. This study further supports the propositions that, in small groups, (a) emotional abilities relate to emergence of relations leaders, whereas (b) cognitive and emotional abilities relate to emergence of task leaders.

Although prior theory and empirical findings offered no clear link between empathy and task leadership, our results make sense when we consider the full benefits derived from emotional intelligence for communication, problem-solving, and accomplishment of personal goals (George, 2000; Saarni, 1999). Indeed, recent research findings (Humphrey, 2002; Wolff et al., 2002) suggest that by furthering a leader's understanding of followers' needs and feelings, empathy may assist task-related cognitive processes. Results imply that empathy may be instrumental not only in building bonds with followers, providing support for self-worth, and showing individual consideration, but also in effective communication, problem-solving, decision-making, and ultimately performance.

Our study identified empathy as a mediator of the ability to identify others' emotions and the ability to express one's own emotions on both relations and task leadership. We also found a strong relationship between the ability to express one's own emotions and task leadership. We offer a possible explanation. Because perceptions of relations leadership require feelings of being understood and valued, it is important for a leader to accurately detect emotions and to experience and express empathy. However, expression of emotions other than empathy would not necessarily trigger a perception of relations leadership and, in the case of negative emotions, may even impede that perception.

Because perceptions of task leadership require evidence of progress toward goals, it is reasonable to expect that a leader's full range of emotional expression would supplement empathetic expression to arouse effort and cooperation. Indeed, one can easily imagine a leader such as General George Patton expressing his emotions in both an empathic and a nonempathic way. A leader's ability to detect others' emotions would have less affect and could even distract from the task. Our results suggest that identifying others' emotions and expressing one's own emotions should not be grouped together in the single category of "emotional awareness" and should instead be treated as separate constructs. Of course, these findings require replication in other samples.

This study has implications for practitioners. In order to convey the full range of task *and* relations behavior, leaders must hone their ability to identify and display emotions (particularly empathy). It is not enough to simply "be emotional" and to express feelings. Instead, it is important for a leader to understand others' feelings and to be able to impart a sense of self-worth and value by communicating a recognition, an understanding, and a consideration of their emotions.

Future research should continue to explore the relationship between empathy and perceptions of leadership. Designs capturing both behavioral and perceptual data would offer opportunities for triangulation, would serve to

indicate internal validity, and would help justify conclusions about the direction of causality. That is, such research would address whether empathy influences perceptions of leadership or perceptions of leadership cause attributions of empathy. Field notes from observers, audio and video recordings, and participant interviews represent potential sources of behavioral information.

The influence of leader empathy on follower creativity and performance requires attention. Mumford, Scott, Gaddis, & Strange (2002) posit that individualized consideration and support for self-worth foster creativity and innovation. Beatty (2000) highlights the correspondence between a teacher's feelings of emotional support from a principal and the teacher's performance in the classroom. It is likely that leader *empathy* helps to explain a follower's sense of emotional support that in turn sparks creativity and performance in educational institutions and in other organizations.

4.1. Limitations

While this study highlights an important link between emotional abilities and leadership, it is necessary to acknowledge that the strength of the association may depend on the given situation. In other words, depending on the requirements of the job, emotional intelligence may be critical in some leadership positions and less so in others (Caruso, Mayer, & Salovey, 2002). Caruso et al. (2002) point out that an effective leader draws from a number of competencies including technical knowledge, cross-functional expertise, international experience, collaborative teamwork, and personal characteristics such as integrity. Emotional intelligence may underlie some, but not all, of these competencies.

This study does not imply that empathy, ability to identify others' emotions, and ability to express one's own emotions benefit only leadership. It is likely that emotional abilities relate to other work roles as well. For example, Morris & Feldman (1997) discuss ties to customer relationships. They explain (p. 269) that "customers who have the power to choose among a number of different organizations may be more likely to utilize the organization's services when employee expression of appropriate emotion has established bonds of liking and trust."

Other study limitations stem from the sample, the design, and the measures. For some, the use of college students, who have relatively little at stake, raises concerns about the generalizability of the results. Yet, extensive research (Locke, 1986) confirms that college students and employees respond similarly to social science conditions, and characteristics of the lab setting do not confound relationships among the variables. Thus, findings from lab research yield ample external validity (Dobbins, Lane, & Steiner, 1988), particularly in the study of leadership perception. In one study students and managers produced "virtually identical rankings" of job applicants (Emrich, 1999, p. 1004). In another study a comparison of results from experts with experience in a leadership context (e.g., business, political, etc.) and students with no experience in a context yielded significantly correlated leadership categories and "similar theoretical conclusions" (Lord & Maher, 1991, p. 48).

In the current study, students from the same school and who were unfamiliar with each other formed the three-person groups. Although similarly exposed to the culture of the school and their courses in Organizational Behavior, they had only a short time during the study to form perceptions about the emotional skills and leadership abilities of their peers. It seems reasonable to predict that the relationships observed in this study would generalize to newly formed workgroups operating at lower levels in a relatively stable organizational context (Osborn, Hunt, & Jauch, 2002). Indeed, as organizational commitment builds, the importance of emotional abilities may become even greater (Luthans, Wahl, & Steinhaus, 1992).

Because the design was cross-sectional and because there is no way to confirm a structural equation model (there are always competing models with good fits), inferences about cause and effect must be viewed with caution.

In this study of workgroup peers we were interested in the relationship between a group member's perception of emotional abilities and his/her perception of relations and task leadership. Thus percept–percept measurement was appropriate to the design of the study. However, we recognize that the use of a common source for the emotional abilities and leadership variables may bias their relationship to some degree (Podsakoff et al., 2003). Because our alternative analysis using measures of variables from different sources (Podsakoff et al., 2003, p. 887) yielded a similar pattern of relationships, we conclude that common source bias did not affect study findings.

This study illuminates two distinct and important types of abilities that distinguish perception of individuals as leaders in small groups. Findings suggest that displays of emotional abilities (empathy, ability to identify others' emotions, and ability to express one's own emotions) are linked to ratings of both relations and task leadership, and

that displays of cognitive abilities/activities are linked to ratings of task leadership. This research points to empathy as an important factor and mediator of other emotional abilities in perceptions of task and relations leadership. The study contributes to the ongoing discussion about the association between emotions and cognitive ability by supporting the proposition that emotional abilities are distinct and independent. We found that emotional abilities (1) did not relate to cognitive ability and complex task performance and (2) did account for unique variance in ratings of leadership.

Our focus on empathy fits in well with the recent emphasis on authentic leadership. Authentic leadership involves developing an honest, open, and transparent relationship between leaders and followers. Humphrey (2004) argues that empathy plays a key role in authentic relationships and that empathic feelings motivate leaders to behave ethically and to become true, as opposed to pseudo-transformational leaders (Dasborough & Ashkanasy, 2002). Empathy may also play a part in developing the sort of compassionate leadership described in *Positive Organizational Scholarship* (Cameron, Dutton, & Quinn, 2003). Luthans & Avolio (2003) have described how the creation of positive emotions is crucial to authentic leadership development, and we believe that empathic leaders are more likely to create these positive feelings.

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Appendix A. Measurement items

Ability to identify others' emotions (Jordan, 2001)

- This person is aware of how others in the team are feeling.
- This person is able to describe accurately the way others in the team are feeling.
- This person takes notice of the mood fellow team members are in.

Ability to express one's own emotions (Jordan, 2001)

- This person finds it difficult to tell fellow team members how she/he feels.
- This person can discuss the emotions she/he feels with other team members.
- This person can talk to other members of the team about the emotions he/she experiences.

Relations leadership

- How warm or friendly would you say each person is?
- How caring and concerned about others would you say each person is?
- How supportive would you say each person is?

Task leadership

- How would you rate each person's leadership abilities?
- How lazy or hard working would you say each person is?
- How intelligent would you say each person is?
- How assertive would you say each person is?
- How would you rate each person's ability to be a success in a future career?
- How good a job do you think each person would do at being an executive at a large corporation or other business enterprise?

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