Emotional Intelligence, Emotional Self-Awareness, and Team Effectiveness

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An issue at the forefront of recent emotional intelligence debates revolves around whether emotional intelligence can be linked to work performance. Although many authors continue to develop new and improved measures of emotional intelligence (e.g., Mayer, Caruso, & Salovey, 2001) to give us a better understanding of emotional intelligence, the links to performance in work settings, especially in the context of group effectiveness, have received much less attention. In this chapter, we present the results of a study in which we examined the role of emotional self-awareness and emotional intelligence as a predictor of group effectiveness. The study also addressed the utility of self- and peer assessment in measuring emotional self-awareness and emotional intelligence. In particular, we looked at the extent to which emotional self-awareness and emotional intelligence are predictors of team goal focus and process effectiveness related to achieving those goals. Both goal setting and effective team processes contribute to team performance (see Campion, Medsker, & Higgs, 1993; Marks, Mathieu, & Zaccaro, 2001; West, 1994). We also look at the practical implications of our research for managers and suggest how emotional intelligence and self-awareness can improve team effectiveness.

Although recent studies have started to explore the effects of emotional intelligence on work performance (e.g., Bachman, Stein, Campbell, & Sitarenios, 2000; Fox & Spector, 2000; Jordan, Ashkanasy, Härtel, & Hooper, 2002), a great deal of work still needs to be done to confirm the efficacy of emotional intelligence in this respect. The importance of this issue is rein-

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forced in chapters throughout this volume. Chapter 1, by Bar-On, Handley, and Fund, for example, outlines a study of emotional intelligence and its impact on the performance of military personnel, whereas Mount (chap. 5, this volume) describes a study that links emotional intelligence to individual performance in industry. In this chapter, we contribute to this work by outlining a study in which a self- and peer assessment measure of emotional intelligence is tested for its ability to predict team effectiveness.

EMOTIONAL INTELLIGENCE AND THE ROLE OF EMOTIONAL SELF-AWARENESS

Salovey and Mayer (1990) proposed initially that emotional intelligence comprised a set of social skills and abilities akin to, but distinct from, intellectual intelligence. Since then, interest in emotional intelligence has increased dramatically, including popular books on the topic, such as Goleman's (1995) best-seller. Driven in large part by the popularity of Goleman's book, interest in emotional intelligence has extended into management literature, with recent books focusing on the contribution of emotional intelligence to management in organizational settings (e.g., Cherniss & Adler, 2001; Cooper & Sawaf, 1997; Goleman, 1998; Weisinger, 1998).

The number and diversity of definitions of emotional intelligence have, however, caused a good deal of confusion in relation to the validity of the construct (see Jordan, Ashkanasy, & Härtel, 2003). In our research, we have conformed to the original concept as defined by Salovey and Mayer. In the most recent version of this model, Mayer and Salovey (1997) postulated four abilities (or "branches") that contribute to emotional intelligence: perception, assimilation, understanding, and management of emotion. According to Mayer and Salovey, the four branches involve the following skills: (a) accurate verbal and nonverbal expression and appraisal of emotion; (b) generation of emotions to assist in problem solving; (c) acquisition of emotional knowledge designed to promote intellectual and emotional growth; and (d) regulation of emotion in self and in others. These skills are seen by Mayer and Salovey to be iterative, rather than linear. In other words, each contributes to emotional intelligence, but they are not necessarily sequential. Rather, each ability assists in the development of other abilities.

To illustrate this in a team situation, as team members experience other team members' emotions they may gain more knowledge about emotions through their observations. This in turn may make them more emotionally aware of their own behavior and the emotion that influences this behavior. For instance, if they witness an emotional outburst by a fellow team member, they may, on reflection, realize that they are also prone to this type of

behavior. Subsequently, this may lead to improved emotional regulation during stressful episodes as that individual attempts to modify his or her behavior. On the other hand, experiences of emotional regulation may assist team members to gain a greater knowledge of their own emotions and thus contribute to their emotional knowledge. For example, during a crisis, team members may draw on emotional strengths and abilities that they were unaware they possessed. In this case, during a stressful episode an individual may react in a calm manner using this skill to calm others and assist them to focus on resolving the task at hand. The picture that emerges from this conceptualization of emotional intelligence in teams is one of inherent complexity. Within teams, this complexity is magnified as the complexity and diversity of the team are added to this equation.

To try to improve our understanding of this complex interaction, we argue that there may be some benefit in examining smaller aspects of emotional intelligence. In this chapter we examine the concept of emotional self-awareness and argue that this is a fundamental factor of emotional intelligence. Indeed, we argue that emotional self-awareness may provide a key to operationalizing the construct in teams and may have an impact on team effectiveness.

Sosik and Megerian (1999) also suggested that self-awareness may lie at the core of emotional intelligence, a view supported by Cherniss and Goleman (1998). In developing a program to implement emotional intelligence in organizations, Cherniss and Goleman (1998) identified self-awareness as an essential emotional and social competency. Mayer, Salovey, and Caruso (2000) also discussed the centrality of self-knowledge and the accuracy with which people report emotions as being an important factor in determining emotional intelligence. Based on this literature, our aim in the study we outline in this chapter was to investigate the role of emotional self-awareness in the emotional intelligence–performance nexus.

At this point, it is important also to note that, although emotional self-awareness forms one component of emotional intelligence (cf. Mayer & Salovey, 1997), it is not necessarily synonymous with high emotional intelligence. Thus, individuals can have high or low self-assessed emotional intelligence and still have accurate emotional self-awareness in comparison to how others see them. Variations in emotional self-awareness emerge from overestimation or underestimation by the respondent of his or her abilities (Lindeman, Sundvik, & Rouhiainen, 1995), not from having high or low emotional intelligence per se. Consequently, we included measures of both accurate emotional self-awareness and emotional intelligence in our study.

Drawing on our identification of emotional self-awareness as a cornerstone of emotional intelligence, we hypothesize specifically that team members who accurately assess their own emotional abilities will contribute to their team being more effective than teams whose members have an inaccu-

rate perception of their emotional abilities. Our focus on team effectiveness, rather than individual performance in teams, reflects the reality that teams are an increasingly common method of organizing work and achieving goals (Beyerlein, Johnson, & Beyerlein, 1997).

EMOTIONAL INTELLIGENCE AND TEAM EFFECTIVENESS

The purpose of organizing work around teams is to gain performance benefits (Beyerlein et al., 1997). Research demonstrates that a number of factors influence group performance, including organizational culture (Ashforth, 1985), similarity-attraction effects (Snyder, 1979), stages in team development (Gersick, 1991; Tuckman, 1965), and team processes (Marks et al., 2001). Other factors that can influence team performance are team diversity (Simons, Pelled, & Smith, 1999), length of tenure of the team (Pelled, 1996), and the homogeneity and heterogeneity of the team (Swezey, Meltzer, & Salas, 1994). In essence, high team performance emerges from the interaction between team members and the working relationships established in the team (Tuckman, 1965). These interactions and relationships produce processes that enable teams to perform at a higher level than individuals. Consequently, and as Campion et al. (1993) reported, team performance depends ultimately on the effectiveness of team processes (see also Marks et al., 2001).

Furthermore, and on the basis of work by Weiss and Cropanzano (1996), we argue that interactions in work settings are inherently emotional. As team performance emerges from a process of team member interaction (Campion et al., 1993; Marks et al., 2001), it follows that high team effectiveness (and resulting high performance) must also have an emotional genesis. Weiss and Cropanzano also noted that the episodic and situationally specific nature of emotions can both engender and decrease personal effectiveness in business settings. Clearly, this must also carry over to teams. For instance, emotions such as enthusiasm in a problem-solving situation can provide positive energy within a team that will invigorate others and lead to greater creativity (Barsade, 1997). On the other hand, when linked to dysfunctional conflict, emotions can result in team members being distracted from their current work and focusing instead on their feelings about the conflict (Jordan & Troth, 2002). An example of this occurs when team members are subject to a potential restructure or realignment of their tasks and spend an inordinate amount of time discussing potential outcomes as means to alleviate their anxiety. Individuals who have high emotional self-awareness or high emotional intelligence might be able to avoid this (Jordan, Ashkanasy, & Härtel, 2002).

Previous research has shown that behaviors that engender team effectiveness include constructive controversy (Alper, Tjosvold, & Law, 1998), cooperative behaviors (Eby & Dobbins, 1997), trust (Porter, 1997), and social approval (Eby & Dobbins, 1997). These behaviors, although not intrinsically emotional in nature, can be linked to emotional intelligence because they involve the control of emotional expression, being able to understand others' emotions, emotional awareness, and emotional knowledge.

An examination of one of these factors, constructive controversy, in greater detail demonstrates the link between emotional intelligence and team process effectiveness. The development of constructive controversy in teams involves the ability to see a problem from other team members' perspectives and also to understand and to address any underlying emotions that may be attached to those perspectives (Alper et al., 1998). Constructive controversy also requires the imposition of emotional self-control as any controversy in a team has the potential to be an extremely emotional event. As an emotional event, controversy can also be a source of dysfunctional conflict in organizations, particularly if the controversy results in the unrestrained expression of emotion (Fitness, 2000). In other words, if team members allow issues to become personalized, the conflict can move away from the issues at hand to focus on individual personalities. In this case, emotional awareness, knowledge, and management are required to deal with this conflict constructively and to prevent the conflict escalating. We argue that the application of these skills is an indicator of a concomitant high level of emotional intelligence.

EMOTIONAL SELF-AWARENESS
AND TEAM EFFECTIVENESS

One of the key premises of managing teams is that feedback improves effectiveness and therefore performance. In other words, increasing individuals' understanding of their strengths and weaknesses allows them to take corrective action to change their behavior and to become more effective. The underlying assumption here is that being aware of existing behavior allows individuals to undertake a diagnosis of their skill levels and abilities and work to improve any deficiencies. This is particularly the case for team members who are trying to adapt their suite of skills to fit into the team's needs.

We argued earlier that working in teams is an inherently emotional experience. Furthermore, as Tuckman (1965) observed, when working in teams, individuals have to work toward a common objective that may require them to suppress their own desire for achievement to work toward a common goal. In other words, the personal interactions that occur in teams

as a result of striving for collaborative goals often require individuals to compromise their own personal goals, leading to an affective response (Weiss & Cropanzano, 1996). We posit that emotional self-awareness can have a positive impact on individual team members' contributions to performance and thus on team effectiveness as it allows these team members to resolve their own feelings about their personal goals being subsumed into team goals.

One of the most useful tools consultants use when examining self-awareness is the Johari Window (Luft, 1970). The Johari Window is based on the premise that self-awareness of an individual's behaviors and traits can be understood by the intersection of four factors: things we know about ourselves, things we don't know about ourselves, things others know about us, and things others don't know about us. Consideration of these four factors provides not only an understanding of an individual's own personality but also an insight into the personality of others, and an explanation of their motivations and behaviors. The Johari Window raises the question of how we can increase or become better acquainted with our own level of emotional self-awareness. Clearly, peer assessment and feedback are one source of insight into emotional self-awareness (see Boyatzis & Goleman, 1999).

Note, however, that we diverge from others (e.g., Boyatzis & Goleman, 1999) who have used peer assessment measures of emotional intelligence and who argue that peer assessment can be used as a proxy measure for emotional intelligence. Our position is that comparative analysis of self-reports and peer reports can be used as an indicator of emotional self-awareness but that this should be used for developmental purposes only. In other words, a measure of emotional self-awareness can be used to provide feedback to the respondents on others' perceptions of their emotional abilities with the aim of improving their emotional self-awareness but not as a reliable measure of emotional intelligence per se.

To explore these issues further in our study, we tested the proposition that high levels of emotional intelligence and self-awareness are associated with team effectiveness, measured in terms of team members' ability to maintain a focus on achieving goals and the effectiveness of the processes used to achieve those goals within the team. To measure emotional self-awareness in our study we use peer assessment. The use of peer assessment, however, raises another set of issues that we now address.

PEER ASSESSMENT IN TEAMS

Peer ratings have been commonly used in organizations to measure performance (Barclay & Harland, 1995). Additionally, a considerable amount of research has been conducted into peer–self assessment within organiza-

tions, including peer evaluation in self-managing work groups (Saavedra & Kwun, 1993), self-monitoring and performance appraisal in project teams (Miller & Cardy, 2000), factors affecting the convergence of self– peer ratings on contextual and task performance (Mersman & Donaldson, 2000), and the influence of self-ratings versus peer ratings on supervisors' performance judgments (Makiney & Levy, 1998). Taken as a whole, this research has demonstrated that members constantly compare themselves with others in their work group.

Although much of the research conducted into peer assessment of personality has provided low positive correlations with self-assessment (D'Augelli, 1973; Powell, 1948; Shore, Tetrick, & Shore, 1998), each of these studies required peers to assess complex psychometric constructs such as personality adjustment and personality traits. Ready, Clark, Watson, and Westerhouse (2000), in a study of peer–self agreement, found that peer ratings moderately agreed with self-ratings and that the level of agreement increased in proportion to the length of the relationship. What Ready and her colleagues also found was that agreement varied depending on how difficult the trait was to judge. Where peers were asked to assess difficult or complex traits, they invariably based their judgments on their own personality. It may be that by asking peers to recall specific behaviors, a more accurate response can be obtained.

In developing a method of peer rating in teams, three broad issues need to be addressed. The first issue relates to the accuracy of data collected from peers. The second concerns the implications of peer ratings for the coherence of the team and future performance of the team. The final issue relates to the statistical preconditions required to ensure valid analysis of difference scores.

Accuracy of Peer Ratings

Murphy and Blazer (1989) and Imada (1982) noted that rater accuracy and rater error must be addressed when using peer ratings. Factors that influence accurate peer rating include intragroup reliability, the possibility that a varying standard is chosen by group members to determine ratings (Saavedra & Kwun, 1993), lack of willingness to provide peer ratings (Murphy & Cleveland, 1991), and the impact of the rater's own performance (Murphy & Cleveland, 1991). For instance, Murphy and Cleveland (1991) found that low performers adjusted their ratings of others to reflect their own poor performance, whereas high achievers rated in relation to the high standards they set for themselves.

In addition, as Lindeman et al. (1995) noted, the complex interaction of overestimation and underestimation of abilities when assessing self-awareness can mask the relations between variables. This observation is sup-

ported when you examine peer-assessed measures of personality and realize that these traditionally achieve low overall correlations with self-assessed measures (e.g., see Shore et al., 1998). Concerns over the reliability and validity of the peer ratings (Murphy & Blazer, 1989) mean that researchers and managers need to be careful in their use of peer ratings. In combination, our lack of understanding of the implications of over- and underestimation of abilities may mean that the links between emotional self-awareness and team effectiveness can only be accurately assessed for those with high emotional self-awareness.

To address this issue in our study, we combined the peer reports themselves to corroborate team members' self-reports of emotional intelligence. A discrepancy between peer-assessed and self-assessed emotional intelligence was taken to be an indicator of low emotional self-awareness. As we were unable to determine the source of this inaccuracy (inaccurate self-assessment or inaccurate peer assessment) these individuals were excluded from our test of the self-awareness hypothesis. We did this based on the premise that individuals with low emotional self-awareness are, by definition, least able to report accurately on their own emotional intelligence or on the emotional intelligence of their teammates.

Interaction With Team Performance

Another difficulty associated with peer ratings is that the ratings may affect team relationships and therefore the future performance of the work team. Liden and Mitchell (1983) found that differential ratings can disturb a positive work group climate. Although this issue is not of particular concern in the present study, because the teams in our study were ad hoc project teams, an ethical responsibility existed to ensure that any future working relationship of the team members was not jeopardized. This, however, is a much larger issue that needs to be addressed by managers who are working with established work teams. Managers need to be made aware that the results of peer assessment can have implications for team members' ongoing relationships and, by extension, the teams' performance. Steps to minimize the impact of both peer rating accuracy and future team performance were addressed in the research design phase of this study and are outlined in the methodology section of this chapter.

Use of Difference Scores

A third issue is a statistical issue revolving around the use of difference scores to assess the relation between self- and peer ratings. Although difference scores provide the most convenient method to measure differences between self-assessment and peer assessment, statistical concerns exist over

the use of difference scores. For instance, Zimmerman (1997) noted that psychometricians have questioned the reliability and validity of difference scores. In response, he maintained that there are specific conditions under which difference scores can be made more reliable. Issues noted by Zimmerman, and addressed in our study, include an examination of the reliabilities of component scores as well as correlations between components and reliabilities of criterion variables.

METHOD

Sample

Participants in this study were 140 Australian students enrolled in a business communication course. Their ages ranged from 17 years to 46 years, with a mean of 20.5 years (SD = 2.54 years). Females made up 62.3% of the sample, and 93% reported full-time or part-time work experience.

Procedure

Participants were randomly assigned to 35 teams. The size of the teams varied between three and seven people. The teams worked together weekly for 10 weeks using a problem-based learning model (Engel, 1993) to undertake self-directed study. The typical meeting lasted between 2 and 3 hr. The personal relationships and dependencies that emerged from this style of work correspond to a work setting where teams are formed to undertake specific projects and to achieve specific goals working within broad parameters (West, 1994). We anticipated that the relationships formed over the 10 weeks would enable team members to observe the behavior of their fellow team members during group work with the aim of improving the accuracy of the peer assessment (see also Jordan, Ashkanasy, Härtel, & Hooper, 2002).

The goals set at the team meetings and the processes the teams used to achieve these goals were at the discretion of the groups. Although overall objectives were stated in the course syllabus, the teams independently set their own weekly goals and devised their own methods of undertaking the work.

The teams were asked to submit weekly reports of their team meetings detailing the goals the team had set each week and the processes that contributed to their learning. Teams were also asked to detail in their report team member interactions, team processes, and any other factors that affect team effectiveness and performance, such as general moods, work environment, and diversions experienced by the team during their meeting. Typi-

cal processes used during these meetings included (but were not restricted to) role playing, general discussion, debates, group analysis, mind mapping, and brainstorming. These reports formed a part of the assessment for the course and were graded.

Measures of Emotional Intelligence

The Workgroup Emotional Intelligence Profile (WEIP; Jordan, Ashkanasy, Härtel, & Hooper, 2002) is a team-based measure of emotional intelligence that was developed on the premise that employee behavior, and consequently performance, can be predicted accurately using a contextual measure of emotional intelligence. Essentially, Jordan and his colleagues argued that variance in behavior and performance emerges as a result of differing prior experiences and differing affective reactions, which are triggered by the situation individuals encounter.

This framework conforms to Sternberg (1985), who posits that three criteria determine the existence of intelligence. First, intelligence should reflect behavior in the real world, relevant to the culture in which the individual lives. Second, it should be purposive or directed toward goals. Third, it should involve either adaptation to the environment (fluid intelligence) or the automation of high-level processes (crystallized ability). In essence, Sternberg's (1985) point was that the hallmark of intelligence is the ability to predict situational performance.

Dawda and Hart (2000) argued that multiple methods of data collection constitute a way to deal with measurement error in emotional intelligence instruments. Murphy and Cleveland (1995) similarly justify 360° performance evaluation as a means to reduce error. The WEIP contains both a self-reporting and a peer reporting measure.

Self-WEIP. The self-report version of the WEIP contains 52 items measured in a 7-point response format, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Jordan, Ashkanasy, Härtel, and Hooper (2002) outlined five factors that contribute to the construct. The focus of the current study is emotional self-awareness, so we used the self-WEIP as a unitary measure of emotional intelligence. The alpha for this scale was .85. Typical items in the self-WEIP include, "I can explain the emotions I feel to team members," "When I am angry with a member of my team, I can overcome that emotion quickly," and "My enthusiasm can be contagious for members of my team."

Because we were interested in assessing emotional self-awareness using difference scores, the unitary measure of self-assessed emotional intelligence we used drew only on items from the self-WEIP that directly matched the items in the peer-WEIP. This decision was made to address concerns

over the use of difference scores that we noted earlier. The resulting scale contained 17 items and had an alpha reliability of .81.

Peer-WEIP. The peer report version of the WEIP consists of 24 items measured on 7-point Likert-type scales where 1 = *strongly disagree* and 7 = *strongly agree.* The scale was based on the self-WEIP, with items chosen for their parsimony, reliability, and focus on observable behavioral manifestations (e.g., control of anger). To complete the peer-WEIP, respondents are asked to assess the emotional skills and abilities of each of the other individuals in their work team. Typical items include, "This team member can explain the emotions he/she feels to team members," "When this team member is angry he/she can overcome that emotion quickly," and "This team member's enthusiasm can be contagious for members of my team." Again, in line with our earlier discussion, the peer report was reduced to 17 items with a resulting alpha reliability of .82.

To address the issues of peer-assessment accuracy, participants were informed that peer feedback for each individual was to be averaged across all members of the team to ensure the anonymity of the rater. This method also dealt with three possible confounding effects: (a) ratings that may have diverged as a result of the performance of the rater (self–other agreement), (b) underlying personality clashes, and (c) each rater adopting a different standard of comparison. Thus, if a single discrepant score existed in rating a particular team member, then taking an average effectively attenuated the variance contributed by the discrepant score. To ensure this effect, peer data were used only for teams where three or more members in the group completed the evaluation on each team member.

The peer-WEIP was administered after the teams had been working together for 10 weeks. This gave each team member time to experience a range of behaviors of fellow team members during team meetings. Finally, the results of the peer assessment were only available after the team had completed their project, so that effects on team interactions and performance were minimized.

Team Effectiveness Data

Effectiveness data were drawn from analysis of the teams' regular meeting reports. In these reports, team members recorded the goals set by the team and the processes used to achieve those goals. The reports also documented team members' interpersonal interactions, including emotional states such as boredom, enthusiasm, and frustration. Three independent raters assessed the written reports of the team meetings using six criteria: three relating to the team's process effectiveness and three assessing the team's goal focus. Typical items in the team process effectiveness criteria in-

cluded, "How concerned was the group with monitoring its own application of the processes?" and "How appropriate were the processes used for learning about the content?" Team goal focus criteria dealt with the generation of appropriate goals and the focus the team had on goal attainment. Typical items used for assessing team goal focus included, "Are the goals clearly articulated in this session?" and "Does the group remain focused on the goals in this session?" Team process effectiveness criteria reflected quality, understanding, and attention to team processes. Team goal focus criteria dealt with the generation of appropriate goals and the focus the team had on goal attainment. The raters scored the reports using 7-point Likert-type scales. Computed alphas were .74 for team process effectiveness and .75 for team goal focus. Interrater reliability of the effectiveness data, also assessed using alpha reliability, was .91.

RESULTS

The reliability of the matching items from both the self-WEIP and the peer-WEIP scores (17 items) were tested to ensure that these did not interfere with the results of the difference score data (Zimmerman, 1997). The mean, standard deviations, correlations, and alphas for the scales are given in Table 7.1. Analysis of the standard deviations of mean scores for both the self-WEIP and peer-WEIP (Table 7.1) revealed that the scores were comparable and therefore were suitable for analysis as difference score data.

In terms of self- and peer-WEIP scores, there was a significant correlation between the measures, $r(140) = .18$, $p < .05$. This correlation between self- and peer reports was comparable to that reported in research by D'Augelli (1973) and Shore et al. (1998).

In respect to a link between emotional intelligence and team effectiveness, there were only weak correlations between the peer-WEIP and goal focus and the peer-WEIP and team effectiveness, $r(140) = .17$, $p < .05$, in each instance. Our results did not support any correlation between self-assessed emotional intelligence and the team effectiveness measures. To examine this further, we decided to examine the difference between peer-assessed and self-assessed scores as an indicator of emotional self-awareness.

There are basically three ways to calculate differences: raw (signed) difference scores, absolute (unsigned) difference scores, or squared difference scores. For this analysis, it was deemed appropriate to use absolute (unsigned) differences, because the focus of this study was on the accuracy of self-assessment, not whether the respondent overestimated or underestimated his or her ability (see Ashkanasy & O'Connor, 1997). In this respect, raw differences provided an index of accuracy of assessment, consistent with the construct of accurate self-awareness. No correlation was found be-

TABLE 7.1
Means, Standard Deviations, Correlations, and Cronbach Alphas (N = 140)

	Mean	SD	1	2	3	4	5	6	7
1 Process effectiveness	4.97	1.48	1.00	(.74)					
2 Goal focus	4.74	1.29	.85**	1.00	(.75)				
3 Team effectiveness	9.71	2.66	.97**	.95**	1.00	(.75)			
4 Self-WEIP	77.26	9.45	.12	.15	.14	1.00	(.81)		
5 Peer-WEIP	74.89	8.59	.15	.17*	.17*	.18*	1.00	(.82)	
6 Emotional self-awareness—as raw difference score	2.38	11.55	-.01	.00	-.01	.68**	-.59**	1.00	
7 Emotional self-awareness—as absolute difference score	9.23	7.29	-.07	-.07	-.08	.19*	-.26**	.35**	1.00

Note. WEIP = Workgroup Emotional Intelligence Profile. Cronbach alphas coefficients are listed on the diagonal.
*r (p < .05). **r (p < .01).

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TABLE 7.2
Correlations for Team Effectiveness, Self-WEIP, Peer-WEIP, and Absolute
Difference Scores for Respondents With High Self-Awareness (n = 35)

		Mean	SD	1	2	3	4	5	6
1	Process effectiveness	5.17	1.43	1.00					
2	Goal focus	5.00	1.21	.85**	1.00				
3	Team effectiveness	10.17	2.53	.96**	.95**	1.00			
4	Self-WEIP	76.65	5.38	.01	.09	.05	1.00		
5	Peer-WEIP	76.59	5.39	.07	.14	.11	.90**	1.00	
6	Emotional self-awareness— as absolute difference scores	1.91	1.37	.33*	.49**	.42**	.25	.26	1.00

Note. WEIP = Workgroup Emotional Intelligence Profile.
*r (p < .05). **r (p < .01).

tween the difference scores and process effectiveness or goal focus for the
full sample.

As we noted earlier, a problem with self-awareness is that respondents
with low self-awareness scores are intrinsically unreliable. In other words,
they are less able to accurately report regarding their own emotional intelli-
gence or the emotional intelligence of others. To overcome this problem,
we conducted an analysis using only a subsample of respondents deemed to
have accurate emotional self-awareness respondents (i.e., with low absolute
difference scores).

The results of this analysis are shown in Table 7.2. This indicates signifi-
cant correlations between self-awareness (unsigned difference scores) and
goal focus, $r(35)$ = .49, p < .01, and between self-awareness and team effec-
tiveness, $r(35)$ = .42, p < .01. There was also a significant correlation be-
tween self-awareness and process effectiveness, $r(35)$ = .33, p < .05. These re-
sults provide strong support for our argument that team effectiveness is
related to emotional self-awareness. As we anticipated, however, this effect
was only evident in the subsample of accurate self-assessors.

DISCUSSION

In this chapter, we wanted to explore the relation between emotional intel-
ligence, emotional self-awareness, and team effectiveness as a precursor of
team performance (Marks et al., 2001). A weak relation was found between
the peer-assessed measure of emotional intelligence and team effective-
ness, and no relation was found between the self-assessed measure of emo-
tional intelligence and team effectiveness. These results must be consid-
ered in the light of both self-report and peer report measures being proxy

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measures of emotional intelligence, as the number of items in both measures had been reduced to address issues relating to the self-awareness section of our study. As a result, no firm conclusions can be drawn from these data.

The results of our study, however, demonstrated that high emotional self-awareness predicted team effectiveness. Notably, however, this result emerged only when we used scores from individuals high on self-awareness (i.e., low absolute difference between self- and peer assessment). Our study has also demonstrated that a peer-assessed measure of emotional awareness is useful for enhancing the information gained from a self-assessed measure.

We acknowledge that there are three limitations inherent in our study. Two of them, lack of insight into the complex interactions inherent in emotional intelligence, and the problems of self-assessment, peer-assessment, and difference scores, have already been discussed. The third limitation of our study is that it was based on ad hoc student project teams who had only worked together for a relatively short period of time. As Ready et al. (2000) noted, teams who have worked together for longer periods of time may be expected to achieve a greater correlation between self- and peer assessment.

IMPLICATIONS FOR MANAGERS

Several implications for managers emerge from our study. In particular, we stress the importance of emotional self-awareness as a predictor of team effectiveness and, by extension, team performance. Although emotional intelligence has attracted considerable attention in relation to potential performance gains (e.g., Goleman, 1998), there has also been a great deal of controversy over the extent of variance in performance that can be attributed to emotional intelligence. On the other hand, self-awareness has been a focal point of performance improvement over a lengthy period of time. From this point of view, focusing on emotional self-awareness in the context of teamwork, where team member interactions are inherently emotional (Weiss & Cropanzano, 1996), has potential to provide clear performance benefits in terms of team effectiveness (cf. Marks et al., 2001). This is an area that managers may do well to address in the future.

Another aspect of emotional intelligence that managers will need to pay attention to is the inherent complexity of emotional intelligence, a construct that consists of four abilities (or branches) that have varying methods of interaction. How these abilities interact has not been made fully clear by empirical research, although the potential contribution of emotional intelligence to performance is clear (Jordan et al., 2003). There are also differing opinions on how to train workers to increase emotional intelligence.

On the other hand, examining self-awareness is much easier. Indeed, managers looking for a means to improve team effectiveness may wish to focus on improving emotional self-awareness as a relatively quicker way to improve team skills.

The final issue for managers and researchers to be aware of from our research involves the difficulties likely to be encountered when one uses peer assessment in teams. Although this method of data collection can provide valuable insights into the behavior of team members, the onus is on the manager to ensure that the method of collection of peer data does not affect the future performance of the team. Managers also need to ensure that the procedures used to collect the data contribute to the accuracy of those data and to be aware of the self–other reporting biases that can occur.

CONCLUSION

This study has demonstrated that high self-awareness of emotional abilities is a predictor of the effectiveness in teams. Thus, although a peer-assessed measure of emotional intelligence was weakly related to measures of team effectiveness, self-awareness was strongly related to team effectiveness for the accurate self-assessors in the sample.

Our principal findings relate to emotional self-awareness rather than emotional intelligence per se. Nonetheless, the finding that self-awareness is related to a measure of team effectiveness provides insight into the role of emotional intelligence in work settings. In essence, our work supports authors such as Goleman (1998) and Mayer et al. (2000), who argue that emotional intelligence is based, at its core, on personal self-awareness.

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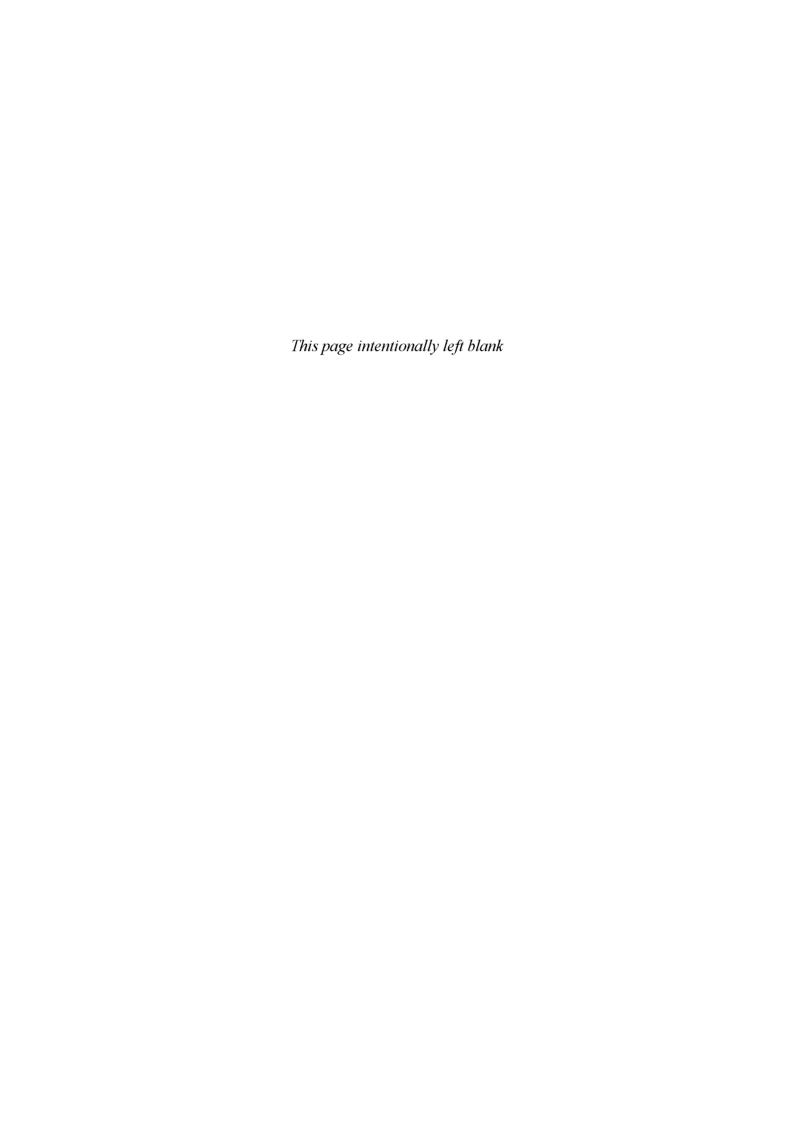
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