Predicting Workplace Outcomes From the Ability to Eavesdrop on Feelings

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Emotion recognition, the most reliably validated component within the construct of emotional intelligence, is a complicated skill. Although emotion recognition skill is generally valued in the workplace, "eavesdropping," or relatively better recognition ability with emotions expressed through the less controllable "leaky" nonverbal channels, can have detrimental social and workplace consequences. In light of theory regarding positive emotion in organizations, as well as research on the consequences of perceiving negative information, the authors hypothesized and found an interaction between nonverbal channel and emotional valence in predicting workplace ratings from colleagues and supervisors. Ratings were higher for eavesdropping ability with positive emotion and lower for eavesdropping ability with negative emotion. The authors discuss implications for the complexity of interventions associated with emotional intelligence in workplace settings.

There has been renewed interest in the relationship between emotion recognition skill and workplace outcomes because of the recent excitement surrounding "emotional intelligence" among practitioners, academics, and the public alike. Emotional intelligence—the "accurate appraisal and expression of emotions in oneself and others and the regulation of emotion in a way that enhances living" (Mayer, DiPaolo, & Salovey, 1990, p. 772)— holds out the promise of explaining individual differences in a range of important social, health, and organizational outcomes (Goleman, 1995). Well-cited field studies have suggested that emotional intelligence may be as important as traditional intelligence in predicting workplace success (Goleman, 1995, 1998), which has given rise to understandable enthusiasm about emotional intelligence in organizational settings.

Empirical work, however, suggests that it is very difficult to identify a set of valid measures that both capture the underlying construct of emotional intelligence and also distinguish it from personality characteristics (e.g., Davies, Stankov, & Roberts, 1998). There is evidence, however, that certain components of emotional intelligence may be quite valid. Mayer et al. (1990) theorized that a core component of "emotional intelligence" is the general ability to recognize emotions. There is a strong theoretical

basis for this component, as sensitivity to the internal state of colleagues can assist in coordinating activities and working interdependently (Riggio, 2001). Mayer et al. established the consistency of this ability across emotional domains that included facial expressions, colors, and abstract designs. More recently, Davies et al. (1998) conducted a large-scale psychometric investigation of emotional intelligence by using a wide range of measures related to the construct. They reported that most measures suffered from low reliability and low validity and that self-report questionnaires in particular were strongly correlated with well-established personality factors. They did find, however, some evidence for the existence of a separate "Emotional Perception" factor of emotional intelligence, which corresponded to Mayer et al.'s domain of emotion recognition. The particular measures of emotion recognition that Davies et al. used included audio recordings of vocal emotional expressions created for their study as well as facial expressions of emotion developed by Ekman and Friesen (1976). Likewise, Ciarrochi, Chan, and Caputi (2000) found that only the Emotion Identification scale of the popular Multi-Factor Emotional Intelligence Scale (MEIS)—which includes the recognition of emotion from faces, pictures, and stories—had acceptable reliability upon replication. Because emotion recognition appears to be the most reliably validated component of emotional intelligence, it is important to examine the relationship between emotion recognition ability and organizational outcomes.

Decades ago, researchers found that skill in emotion recognition predicted positive outcomes for individuals in a variety of organizational contexts. With three samples of business executives from national industrial corporations, Rosenthal, Hall, DiMatteo, Rogers, and Archer (1979) found a positive relationship between supervisory status and the recognition of nonverbal cues measured by their Profile of Nonverbal Sensitivity (PONS) test. For two samples of foreign service officers, Rosenthal et al. reported positive correlations between PONS scores and job effectiveness. They also reported the results of studies conducted by their colleagues finding positive associations between PONS scores and elementary school principals' leadership skills, human service workers' job ratings, and teachers' job ratings for two of three

samples of school teachers. Furthermore, validity studies demonstrated that PONS scores are distinct from both personality scales and traditional intelligence measures (Rosenthal et al., 1979).

The overall positive association between nonverbal decoding skill and workplace effectiveness has replicated with adults in counseling settings (Campbell, Kagan, & Krathwohl, 1971; Costanzo & Philpott, 1986; Schag, Loo, & Levin, 1978) and medical settings (DiMatteo, Friedman, & Taranta, 1979; Tickle-Degnen, 1998) and with children in academic settings (Halberstadt & Hall, 1980; Izard, 1971; Izard et al., 2001; Nowicki & Duke, 1994). School performance is especially worthwhile to examine because it is generally the earliest type of workplace outcome. Halberstadt and Hall (1980) reviewed numerous studies examining children's nonverbal sensitivity and academic outcomes, most of which documented a positive relationship. It is interesting that in these studies, although nonverbal sensitivity predicted academic achievement, especially subjective performance ratings from teachers, it related only weakly to traditional measures of cognitive skill. Nowicki and Duke (1994) reported that although emotion recognition skill was unrelated to traditional intelligence, it correlated positively with both children's academic test outcomes in seven different areas as well as social outcomes, such as popularity. Although some studies have failed to find a relationship between nonverbal skills and workplace outcomes, it is interesting to note that these studies made use of laboratory-based outcome measures. For example, Hill, Siegelman, Gronsky, Sturniolo, and Fretz (1981) did not find a correlation between PONS scores and raters' assessments of counseling outcome in a role-play that used doctoral students as counselors and undergraduate psychology students as patients. Likewise, Lee, Hallberg, and Kocsis (1980) did not find a relationship between PONS scores and the effectiveness of mock clinical interviews. Taken together, the majority of studies demonstrate a positive relationship between skill in emotion recognition and important outcomes across a wide range of real organizational settings, in different industries and different occupational levels.

Although emotion recognition appears to be an important skill in the workplace, it is far from a simple one. Emotions can be expressed through a number of different channels of the body, via facial expressions, vocal tones, body movements, and combinations of these (DePaulo & Friedman, 1998; Rosenthal et al., 1979). Furthermore, these channels can communicate a number of different emotions, both positive and negative. Thus, skill at emotion recognition and its workplace consequences may depend both on the nonverbal channel as well as on the specific emotion expressed.

Nonverbal Channels: Controllability and "Eavesdropping"

The nonverbal channels used to express emotion—the face, the voice, and the body—vary in the degree to which they can be intentionally controlled (Ekman & Friesen, 1969; Rosenthal et al., 1979). Ekman and Friesen (1969) proposed a controllability–leakage hierarchy of channels of communication. They suggested that the more controllable channels, such as the face, are subject to high accountability on the part of the expresser, elicit external feedback from others, and provide the expresser with internal feedback. This is in contrast to the less controllable "leaky" channels such as the body and the voice. According to this hierarchy, the face is the most controllable channel, followed by the body and then the voice. Because facial expressions are highly controllable,

they generally express the information that we choose to volunteer (DePaulo, 1992). This information is more subject to impression management and may also be more consistent with verbal messages (Brown, 1986). By contrast, information expressed through less controllable channels such, as body movements and the voice, may provide a truer window into a person's feelings. This information can still be controlled, but it is more difficult and requires more conscious, deliberate effort (Rosenthal & DePaulo, 1979). Thus, there is evidence that people can send the information they would like others to understand through certain types of nonverbal expression, but less so through others.

Ironically, people may have problems not only when they are unable to read the social cues around them, but also when they have the potential to "read too much" in a particular situation. That is, in some cases less can be more. Rosenthal and colleagues (Blanck, Rosenthal, Snodgrass, DePaulo, & Zuckerman, 1981; Rosenthal & DePaulo, 1979) found that people who were especially skilled at receiving nonverbal messages through the less controllable channels reported experiencing more difficulty in their social relationships. In these studies, the participants who could "eavesdrop" skillfully on these less controllable channels may have been responding to messages that the expressor did not intend them to receive. This skill made them unpleasant companions. Simpson, Ickes, and Blackstone (1995) reviewed a related literature on interpersonal success and "empathic accuracy"—the ability to infer another person's thoughts or feelings.[1] Although many studies found positive associations between such skill and social adjustment, many other studies found this relationship to be negative. Noting the differences in context across the two sets of studies, Simpson et al. integrated these findings in terms of the type of information gleaned through this empathic accuracy. Although the relationship between accuracy and social adjustment was positive with relatively mundane or less threatening issues, it was negative for the accurate ability to detect potentially harmful issues or substantive differences in opinion. Thus, the ability to use subtle nonverbal cues in gauging the internal state of others can be a mixed blessing, depending on the content of the internal state that is understood. Consistent with this possible explanation, Swann, Stein-Seroussi, and McNulty (1992) found that negative interpersonal feelings in social situations tended to "leak" out through the poorly controlled nonverbal channel of vocal tone. Consistent with a general reluctance to share bad news with others (Tesser & Rosen, 1975), Swann et al.'s participants covered their negativity through a veneer of kindness in their verbal expression. This implies that much of the information provided by accurate nonverbal eavesdropping is negative in content and is potentially harmful to understand accurately.

The correlates of nonverbal eavesdropping ability are not limited to social situations but appear in workplace contexts as well. In her study of medical fieldwork interns, Tickle-Degnen (1998) provided a striking example in which one clinical specialty rewarded nonverbal eavesdropping whereas another punished it. Consistent with Rosenthal and colleagues' (Blanck et al., 1981; Rosenthal & DePaulo, 1979) findings for social outcomes, supervisor ratings were lower for interns doing psychosocial fieldwork

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[1] We thank an anonymous reviewer for directing us toward these references as well as the focus on differences in the types of information obtained through nonverbal eavesdropping.

who were skilled at nonverbal eavesdropping. That is, lower-rated psychosocial interns were skilled in decoding the less controllable channels, and better-rated interns were skilled at decoding the more controllable channels. By contrast, supervisors rated pediatric fieldwork interns better if they had greater nonverbal eavesdropping ability. That is, higher-rated pediatric interns had better skills at understanding the less controllable channels and worse skills at understanding the more controllable channels. Tickle-Degnen interpreted these results in terms of differences in the demands placed on interns on the basis of the populations they serve. Because children are limited in their ability to express difficulties, pediatric fieldworkers can benefit by being able to read their young patients' unintentional expressions. However, these pediatric fieldworkers are held back if they are too skilled at understanding—and consequently being focused on—intentional channels. By contrast with infants, psychosocial patients can better articulate what they actually want their fieldworker to know, and it pays for the fieldworker to be able to understand the more controllable channels. If the fieldworker can also read unintended signals from emotionally distressed patients, this nonverbal eavesdropping may actually impair the effectiveness of the relationship. Tickle-Degnen concluded that varying institutional cultures, types of patients, and roles for the fieldworker can lead to differences in the skills required for succeeding in these contexts.

In another study examining nonverbal eavesdropping in a medical setting, DiMatteo et al. (1979) demonstrated a positive relationship between such ability and professional success for doctors. Using the PONS test, they found a much stronger correlation between patient ratings and doctors' ability to read body cues rather than facial cues. Because facial expressions are more controllable and deliberate than body movements, they concluded that patients valued the ability of doctors to understand their feelings—especially the feelings patients may be hesitant or unable to volunteer.

Although these workplace results may appear inconsistent, similar factors to those discussed above for the interpersonal realm both reconcile these findings as well as suggest testable predictions. Taken together, these findings argue for the importance of context. In particular, the *type* of information that is nonverbally eavesdropped varies across these situations. In general, nonverbal eavesdropping ability appears to be harmful because it allows one to understand precisely the type of information that colleagues are most reluctant to express. Because it can be uncomfortable or impolite to express negativity in a verbal and direct manner, negative feelings and feedback are more likely communicated through indirect means, often by using leaky nonverbal channels of communication (Swann et al., 1992; Tesser & Rosen, 1975). Thus, nonverbal eavesdropping can be disruptive because it provides an employee with negative information, particularly about himself or herself, which can distract and potentially undermine performance. In the two cases in which eavesdropping did not appear to undermine performance—Tickle-Degnen's (1998) pediatric fieldworkers and DiMatteo et al.'s (1979) medical doctors—the content of the information nonverbally eavesdropped was not likely related to disruptive or interpersonal issues.

Positive Versus Negative Emotion in the Workplace

Apparent explanations for the often harmful consequences of nonverbal eavesdropping ability center around the perception of negative information, because this is the information most often expressed through leaky channels. Given this focus on negative emotion in particular, it is worthwhile to explore the possible effects of the emotional valence of eavesdropped nonverbal messages on workplace outcomes.

Evidence from other areas of research on emotion in the workplace suggests that it is valuable to distinguish between positivity and negativity when studying associations between emotional tendencies and performance. In the case of emotional expression, positive emotion is particularly encouraged in the workplace, along with the suppression of negative emotion (Staw, Sutton, & Pelled, 1994). For instance, Staw and colleagues (e.g., Staw & Barsade, 1993; Staw et al., 1994; Wright & Staw, 1999) have found an association between the self-reporting of positive emotional traits and superior workplace outcomes. Staw et al. (1994) theorized that positive emotions have positive consequences not only because they are associated with individual differences, such as productivity and persistence, but also because they affect employees' relationships with colleagues. Feeling and expressing positive emotions on the job can lead to smoother social interactions, more helping behaviors, and a "halo effect" that leads to evaluations that are more favorable.

Such theory and associations provide additional encouragement to expect that the ability to eavesdrop on positive versus negative emotion could have different organizational consequences. Within organizations, people do not express emotions merely for the sake of expression. Rather, others around them continually interpret—and misinterpret—these emotional displays. Expressive behaviors function as communication between the sender and the receiver of such expressions (Ashkanasy, Hartel, & Zerbe, 2000; Rafaeli & Sutton, 1989; Riggio, 2001). Thus, individuals who can eavesdrop on positive emotion are more likely to detect sincere positive messages, whereas those who can eavesdrop on negative emotion are more likely to detect hidden negative messages, with corresponding consequences. Research on emotional contagion (e.g., Hatfield, Cacioppo, & Rapson, 1994) further documents how people mirror the emotional states and behaviors of those around them. Thus, the ability to eavesdrop on positive and negative expressions could lead the perceiver to experience and express positive and negative feelings and behavior, respectively. This suggests positive and negative workplace consequences, respectively, as well.

Therefore, the goal of this study was to examine whether the relationship between nonverbal eavesdropping ability and workplace outcomes differs for positive and negative emotions. We hypothesized that there is a significant interaction between nonverbal eavesdropping ability and the positive versus negative valence of emotion in predicting workplace performance. In particular, we hypothesized that nonverbal eavesdropping ability for positive emotions would be associated with positive outcomes and nonverbal eavesdropping ability for negative emotions would be associated with negative outcomes.

Method

Participants

Our field research setting was a nonprofit public service organization in a medium-sized city in the northeastern United States. Members were all full-time employees in a year-long public service program, assigned to

work together in teams averaging 5–7 previously unacquainted members. They performed projects such as organizing after-school programs for elementary school children, serving as teaching assistants in public schools, and assisting other local community service groups. The organization paid members modest compensation and benefits in addition to university scholarships if they completed the year-long program.

The organization is highly diverse demographically. Of the 69 members who completed these measures, there were 35 Caucasians, 8 African Americans, 12 Latinos or Latinas, 4 Asian Americans, and 10 who identified themselves as "other." Program rules required that all members were between 17 and 23 years of age ($M = 19.6$ years, $SD = 2.0$ years). Thirty-seven (54%) of the 69 were female, and 32 (46%) were male.

Measures

The Diagnostic Analysis of Nonverbal Accuracy (DANVA) test. Participants completed a standardized test of emotion recognition called the DANVA (Nowicki, 2000). The DANVA's Adult Faces and Adult Paralanguage scales each contain 24 emotional expressions using photographs of faces and audiotapes of voices, respectively. In each subtest, there are six items each for the emotions of anger, fear, happiness, and sadness. Therefore, these were the four emotions included in the current study. The DANVA test has been extensively validated (Nowicki, 2000; Nowicki & Duke, 1994, 2001), and used widely, in at least 36 published papers (e.g., Barth & Bastiani, 1997; Baum & Nowicki, 1998; C. W. Hall, Gaul, & Kent, 1999; Mufson & Nowicki, 1991), 33 doctoral theses, and 19 masters-level theses (Nowicki, 2000; Nowicki & Duke, 1994). Criterion validity tests link DANVA scores to social adjustment, discriminative validity tests distinguish between DANVA scores and traditional IQ, and convergent validity tests link the DANVA to another popular instrument—Rosenthal et al.'s (1979) PONS test (Baum & Nowicki, 1998; Nowicki, 2000; Nowicki & Duke, 1994, 2001). Given evidence of high stability of DANVA scores over time (Nowicki, 2000), participants completed the DANVA 4 months after the program began.

Eavesdropping ability. Previous studies of eavesdropping examined participants' ability to decode nonverbal cues expressed using less controllable channels. Thus, we conceptualized eavesdropping ability as the extent to which participants could extract nonverbal information more accurately through the leakier and less intentional communication channel tested. Correspondingly, the emotional eavesdropping score consisted of the channel main effect for each participant, calculated in terms of the advantage in the DANVA score for vocal tones over the DANVA score for facial photographs. To test the main hypothesis of an interaction between channel and valence in predicting workplace outcomes, we computed a valence main effect for each participant, calculated in terms of the advantage in the DANVA score for positive over negative emotion. For this purpose, anger, fear, and sadness were coded as negative emotions and happiness as positive. Finally, the interaction between channel and valence was calculated by multiplying together the channel and valence terms.

Outcome ratings from staff. Five months after administering the DANVA, we collected performance ratings from senior staff members at the organization. Staff members rated the overall outcome achieved by each individual, based on his or her success and perceived fit within the organization. They used a scale ranging from 0 (*extremely poor*) to 10 (*extremely great*). They left blank responses for any individual with whom they did not feel sufficiently acquainted. Fourteen staff members completed these ratings, and each individual participant received ratings from an average of 8.4 staff members. Staff performance ratings consisted of the standardized average of the rating from each staff member. Interrater reliability, the average product–moment correlation between raters (Rosenthal & Rosnow, 1991), which is equivalent to the ICC(1) (Bartko, 1976; Bliese, 2000), was .38, and the Cronbach's alpha for ratings across staff members, which is equivalent to the ICC(2) (Bartko, 1976; Bliese, 2000), was .84. The staff rated all 69 members who completed the DANVA.

Outcome ratings from teammates. Five months after administering the DANVA, we also collected outcome ratings from team members evaluating their colleagues. Participants rated performance and liking for each individual who had been a part of their team, including those who had since left the organization. They used a scale ranging from 0 (*extremely poor*) to 10 (*extremely great*). They left blank responses for any individual with whom they did not feel sufficiently acquainted, so that 6 of the 69 members did not receive peer ratings. Because performance and liking ratings were highly intercorrelated at .70, the standardized average of the two ratings formed a composite rating from teammates with Cronbach's alpha of .82 on the basis of the two questions. For each individual, teammate performance ratings consisted of the average rating from their teammates. Colleagues showed strong consensus in their outcome ratings. We calculated the interrater reliability for each team by correlating ratings made by each pair of teammates while excluding from the correlation the outcome ratings that the pair made of each other. This average interrater reliability was .69, and the Cronbach's alpha for ratings across teammates was .89. Each individual was rated by an average of 3.7 teammates.

Composite outcome rating. It is worthwhile to examine organizational outcomes from multiple perspectives, in this case from both senior staff members as well as colleagues. Peer and staff ratings correlated with each other at .58, which suggests sizable, but not complete, overlap in the information and criteria each group used to make their ratings. This value compares favorably with previous research documenting the average correlation between staff and peer performance ratings (Facteau & Craig, 2001; Furnham & Stringfield, 1998). Staw et al.'s (1994) theory on the mechanisms by which emotion affects workplace outcomes emphasizes the importance of relationships with colleagues. In the current study, colleagues' ratings appear to incorporate an affective component representing the quality of interpersonal relationships, as suggested by the extremely high correlation between performance and liking ratings. However, these ratings also incorporate objective performance data, as suggested by the extremely high level of agreement across teammates as well as strong agreement with staff ratings. Team members working together full time have more extensive daily contact with each other than they do with senior staff members. This daily contact might make peers more sensitive to eavesdropping on emotional expressions. As many organizations adopt 360-degree ratings into their performance measurement, these peer reviews are particularly valuable to examine. For these reasons, we include analyses using a composite outcome measure combining ratings from both staff and peers, with Cronbach's alpha of .73, as well as both staff and peer ratings separately.

Control variables. In order to rule out possible confounds, analyses below include several control variables characterizing variability within the population of participants: gender, age, and ethnic minority group membership. Extensive research demonstrates that females are generally more accurate than males in perceiving emotional expressions (for detailed reviews, see J. A. Hall, 1978, 1984). Emotion recognition also tends to grow more accurate with age (Izard, 1971; Nowicki & Duke, 2001; Rosenthal et al., 1979), with a leveling off beyond about 25 years of age (McCluskey & Albas, 1981). For 6 participants who did not report their age, analyses substituted the mean age of 19.6 years on the basis of the remaining 63 participants. A recent meta-analysis provides evidence that emotion recognition is generally more accurate when the perceiver is a member of the same cultural or ethnic group as the emotional expresser (Elfenbein & Ambady, 2002). Given that the DANVA instrument consists primarily of European American expressers, we included membership in a minority ethnic group as a control variable.

Results

Omnibus F tests confirmed that there were no significant intraclass correlations across teams for our core predictor and outcome

Table 1
Emotion Recognition Accuracy and Eavesdropping Ability by Emotion (N = 69), in Percentages

Emotion recognition	Happy	Afraid	Angry	Sad	Negative	Average
Accuracy						
Face	81.2	70.0	75.1	82.9	76.0	77.3
Voice	65.5	70.0	72.9	73.9	72.3	70.6
Average	73.3	70.0	74.0	78.4	74.2	73.9
Eavesdropping						
M	−15.7	0.0	−2.2	−9.0	−3.7	−6.7
SD	9.1	10.8	9.2	8.6	6.7	5.4

measures, and thus analyses used measures at the individual level.[2] Table 1 lists the average values for emotion recognition accuracy by channel and emotion, analyzed using a 2 (channel: voice, face) × 4 (emotion: happy, sad, angry, afraid) analysis of variance. Emotion recognition accuracy varied significantly across emotions, $F(3, 204) = 5.26$, $p < .01$, such that sadness was the easiest to recognize and fear the most difficult. Accuracy did not differ across positive versus negative emotions—contrast weights: $\lambda = 3$ for happy, −1 for sad, −1 for angry, and −1 for afraid; $F(1, 204) = 1.90$, $p = .17$. Accuracy also varied by channel, $F(1, 68) = 13.6$, $r = .41$, $p < .01$, with emotions easier to recognize through facial photographs than vocal tone. This indicates that emotional eavesdropping ability is generally negative, as participants could more accurately recognize emotions expressed using the more controllable channel. There was a significant interaction between emotion and channel, $F(3, 204) = 5.66$, $p < .01$, such that—after excluding the main effects of emotion and channel—anger and fear were relatively easier to recognize in the voice, whereas happiness and sadness were relatively easier to recognize in the face. This significant interaction indicates that emotional eavesdropping ability varied significantly across emotions, with anger and fear more easily eavesdropped than happiness or sadness.

Table 2 lists the correlations between workplace performance ratings and emotion recognition accuracy by channel and emotion. These zero-order correlations—particularly the overall accuracy with facial photographs—generally replicate past studies finding that emotion recognition ability significantly predicts workplace outcomes. However, a closer examination suggests a more complex trend: Accuracy with positive emotion expressed through vocal tone predicts positive outcomes, which is not the case for positive emotion expressed through the face. The opposite trend emerges for negative emotion: Accuracy with facial expressions predicts positive outcomes, which is not the case for accuracy with vocal tones. Thus, these zero-order correlations provide preliminary support for the hypothesized interaction between channel and emotional valence in predicting workplace outcomes.

Table 3 lists the correlations among performance ratings, emotional eavesdropping ability, and the control variables. As predicted, these zero-order correlations indicate that emotional eavesdropping ability with positive emotion predicts better workplace outcomes. Furthermore, emotional eavesdropping ability with negative emotion predicts worse workplace outcomes, although for sadness this effect was not significant. Emotional eavesdropping ability levels among the negative emotions are significantly intercorrelated, and they are essentially unrelated to eavesdropping ability level with positive emotion. Females appear to have lower emotional eavesdropping ability with fear, and ethnic minority

members appear to have lower emotional eavesdropping ability with happiness. Among the control variables, fewer female participants were members of ethnic minority groups than male participants in the sample.

Table 4 summarizes an ordinary least squares hierarchical regression model predicting workplace outcomes. The first model examines the control variables: gender, ethnic minority group membership, and age. Among the control variables, greater age predicts marginally higher ratings from staff members. The second model also considers total accuracy of emotion recognition, which is the grand mean or total score across all components of the DANVA measure. These results replicate past research finding that emotion recognition skill generally predicts better workplace outcomes, as the grand mean across items on the DANVA instrument is associated with significantly higher staff ratings and overall ratings.

The third model further examines the components of accuracy, adding terms representing the main effects for accuracy advantage by channel and by emotional valence, as well as the interaction between channel and valence. It is interesting to note that upon inclusion of these additional terms, the effect for total accuracy disappears. The hypothesis of this study is that there is a significant interaction of channel by valence, which represents the extent to which the emotional eavesdropping ability has different predictions for performance depending on whether the message is positive versus negative. This interaction term was significant in separate models examining outcome ratings from staff ($\beta = -.27$, $p < .04$) and peers ($\beta = -.36$, $p < .02$). The interaction term indicates that lower performers have a stronger advantage with the leakier nonverbal channel—the voice—for negative rather than positive emotion. By contrast, higher performers display the opposite pattern. This significant interaction term provides support for the hypothesis of the current study, that nonverbal eavesdropping with positive emotion corresponds with positive outcomes and with negative emotion corresponds with negative outcomes.

Discussion

In the current study, we found evidence that emotional eavesdropping ability can be rewarded or punished in workplace performance ratings, depending on the positive versus negative valence of the emotional expressions, respectively. These findings

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[2] For total DANVA scores, $F(15, 53) = 0.69$, *ns*; for the interaction between DANVA channel and emotional valence, $F(15, 53) = 0.57$, *ns*; and for outcome ratings, $F(15, 53) = 1.52$, *ns*.

Table 2

Intercorrelations Among Workplace Performance Ratings and Emotion Recognition Accuracy by Channel and Emotion

Emotion recognition accuracy	Outcome ratings			Facial photographs						Vocal tone		
	C	S	T	Happy	Sad	Angry	Afraid	Negative	All	Happy	Sad	Angry
Facial photographs												
Happy	−.11	−.08	−.19									
Sad	.27*	.31**	.12	−.05								
Angry	.40***	.45***	.21†	.06	.49***							
Afraid	.25*	.27*	.20	.04	.44***	.46***						
Negative	.38**	.43***	.23†	.02								
All	.34**	.39***	.16									
Vocal tone												
Happy	.24*	.22†	.20	−.02	.24*	.19	.23†	.28*	.26*			
Sad	.13	.22†	−.09	−.06	.23†	.35**	.18	.32**	.29*	.23†		
Angry	.08	.08	.13	−.08	.02	.22†	.16	.17	.14	.22†	.36**	
Afraid	−.21	−.14	−.25*	−.02	−.01	.12	.06	.08	.07	.08	−.01	.04
Negative	−.01	.07	−.12	−.08	.12	.35**	.20†	.28*	.25*	.27*		
All	.09	.15	−.01	−.07	.20†	.36**	.26*	.34**	.31*			

Note. $N = 69$ for the composite outcome and staff ratings; $N = 63$ for teammate ratings. Correlations not listed between any component and a composite to which it contributes. C = composite rating; S = rating from staff; T = rating from teammates.
† $p < .10$ (marginally significant). * $p < .05$. ** $p < .01$. *** $p < .001$.

integrate several different areas of applied research connecting emotion with workplace and interpersonal adjustment. A long tradition demonstrates that the ability to recognize nonverbal signals generally predicts better workplace performance (e.g., Halberstadt & Hall, 1980; Rosenthal et al., 1979). Within the highly popular phenomenon of emotional intelligence (e.g., Goleman, 1995), this particular skill is the most reliably valid construct (Ciarrochi et al., 2000; Davies et al., 1998) and thus is important to examine within organizational settings. We replicated previous findings predicting workplace success when considering only total accuracy levels, which is typical for many analyses of such data. Additionally, an intriguing literature on nonverbal eavesdropping suggests that it can be harmful to understand signals expressed through less controllable nonverbal channels of communication, as such signals often provide negative information with corresponding consequences (DiMatteo et al., 1979; Tickle-Degnen, 1998).

Research on affectivity has focused on the general benefits associated with positivity in the workplace (e.g., Staw & Barsade, 1993; Staw et al. 1994; Wright & Staw, 1999). Tying together these pieces, we found that relative skill in eavesdropping on nonverbal cues can be detrimental for negative expressions but can actually be valuable for positive expressions. Once we examined effects for nonverbal channels and emotional valence, along with the interaction between the two factors, total accuracy level no longer predicted workplace performance. This evidence helps to resolve previous inconsistencies in findings on the workplace value of emotional skills.

Because emotion recognition skill is generally valued in workplace contexts, why would it be problematic to be relatively more accurate with these signals? Accuracy in recognizing positive emotion from the more controllable nonverbal channels can lead individuals to be taken in by others' self-presentation. Given

Table 3

Intercorrelations Among Workplace Performance Ratings and Emotional Eavesdropping Ability by Emotion

Predictor	Ratings			Emotional eavesdropping ability						Control variables	
	C	S	T	Happy	Sad	Angry	Afraid	Negative	All	Female	Ethnic minority
Emotional eavesdropping ability											
Happy	.25*	.22†	.26*								
Sad	−.14	−.11	−.16	−.03							
Angry	−.30*	−.35**	−.10	.06	.32**						
Afraid	−.34**	−.31*	−.32**	−.08	.20†	.19					
Negative	−.38**	−.37**	−.29*								
All	−.25*	−.25*	−.15								
Control variables											
Female	−.05	−.06	−.05	.00	.10	.11	−.24*	−.04	−.04		
Ethnic minority	−.18	−.18	−.07	−.25*	−.10	.03	.15	.05	−.06	−.30*	
Age	.22†	.25*	.15	.21†	−.01	.03	−.04	−.01	.07	.05	−.06

Note. $N = 69$ for the composite outcome and staff ratings; $N = 63$ for teammate ratings. "Female" is a variable taking on a value of 0 for male participants and 1 for female participants. "Ethnic minority" is a variable taking on a value of 0 for European American participants and 1 for all others. Correlations not listed between any component and a composite to which it contributes. C = composite rating; S = rating from staff; T = rating from teammates.
† $p < .10$ (marginally significant). * $p < .05$. ** $p < .01$.

Table 4

Multivariate Regressions of Emotional Eavesdropping Ability Onto Workplace Outcome

Variable	Model 1: Control variables	Model 2: Total accuracy	Model 3: Components of accuracy
Control Variable			
Female	−.15	−.16	−.15
Ethnic minority group	−.19	−.13	−.09
Age	.22†	.21†	.17
Emotion recognition			
Total accuracy		.26*	.05
Channel			.13
Valence			−.04
Channel × Valence			−.36**
Model diagnostics			
F test of model	$F(3, 65)$	$F(4, 64)$	$F(7, 61)$
Value of F	2.19†	2.96*	3.46**
R^2	.09	.16	.29
ΔR^2		.07	.13
Adjusted R^2	.05	.10	.20
Change from previous model		$F(1, 64)$	$F(3, 61)$
Value of F		4.88*	3.63*

Note. $N = 69$. All terms other than model diagnostics are standardized regression coefficients. "Female" is a variable taking on a value of 0 for male participants and 1 for female participants. "Ethnic minority" is a variable taking on a value of 0 for European American participants and 1 for all others. "Channel" main effect is the advantage in score for vocal tones over facial photographs. "Valence" main effect is the advantage in score for positive emotion over negative emotion.
† $p < .10$ (marginally significant). * $p < .05$. ** $p < .01$.

research on "emotional labor" (e.g., Hochschild, 1983), controllable positive expressions are the most likely messages falsified for public consumption (Fineman, 1993). By contrast, positive expression through less controllable channels is more likely authentic, and thus eavesdropping may be helpful when it allows one to hear a pleasant message. Because the workplace often discourages the expression of negativity, its voluntary expression through facial expressions may be highly informative and therefore detrimental to miss. However, individuals are reluctant to share bad news with others (Tesser & Rosen, 1975), and unpleasant feedback often leaks into the less controllable nonverbal channels (Swann et al., 1992). Thus, reading negative expressions that were unintended or uncontrollable can be unproductive for individuals because it can provide harmful information easily blown out of proportion. Feelings that are repressed are more likely to be negative, so individuals can often burden themselves and others by seeing the hidden negativity around them. Perhaps team members who could detect hidden fear or anger in others were more reluctant to show respect or good will to their leaders and colleagues. Being somewhat oblivious to others' less controllable negative expressions can allow them some slack and can smooth over the noise of everyday workplace interaction rather than amplify it. However, by reading negative feedback when expressed purposely, employees may be able to receive messages their supervisors and colleagues send in order to suggest adjustments to their behavior. Supervisors appeared particularly sensitive to this ability to read more intentional negative signals.

In sum, these results replicated and extended previous research demonstrating that the relationship between emotion recognition skill and organizational outcomes is complex. This relationship varies according to the interaction between the nonverbal channel of communication and the valence of emotion judged.

Using What Emotions Tell You

Ultimately, in an organizational setting, it is important to examine how people use the emotional information they process—whether intended or eavesdropped—once they perceive it. Mayer et al.'s (1990) definition of emotional intelligence emphasizes emotional regulation along with skills in communicating emotion. If someone can navigate skillfully around negative feelings that his or her colleagues are reluctant or unable to volunteer openly, then eavesdropping abilities could be well rewarded. Although it may be better to wear "rose-colored glasses" in many workplace interactions, one can speculate that skillful eavesdropping on negative information could be helpful in a context offering the chance to use that information productively. This would be particularly likely in cases where the negative message is informative for conducting a job as well as unlikely to be interpersonally relevant to the perceiver. For example, it is possible that market researchers viewing focus groups could benefit from perceiving subtle negativity when analyzing customer attitudes, as might law enforcement personnel interviewing investigation witnesses or social workers perceiving distress in children. This would require the resources or skills necessary to use the substance of issues raised in eavesdropped messages. Thus, it could be worthwhile to test whether nonverbal eavesdropping with negative signals could predict greater success in specific situations in which the negative information is highly useful and interpersonally nonthreatening. It would also be valuable to design research to test the implicit mediator of the phenomenon: behavior. Like any skill, nonverbal eavesdropping may be important only because it can lead to different workplace-relevant behavior. We argue that it is often detrimental because it allows a person to perceive harmful information and then to act accordingly. Thus, it would be valuable to observe how nonverbal eavesdroppers may act differently than non-eavesdroppers in their social or organizational settings.

Weaknesses and Future Research

Several important weaknesses limit the findings of this study. Most notably, this research examined the phenomenon of emotional communication outside of its interactive, social context. By instructing participants to decode nonverbal cues, we lose the ability to observe individual differences in their inclination to do so and in their ability to do so while balancing other cognitive demands (e.g., Lieberman & Rosenthal, 2001). Likewise, by presenting standardized stimulus materials to participants, we lose the opportunity to observe individual differences in the types of nonverbal behavior that people elicit from others. Swann et al. (1992) found that people with negative self-concepts tended to elicit more negativity from interaction partners, expressed nonverbally through vocal tone. Thus, it would be valuable to conduct additional research supplementing such standardized conditions and situations with the observation of real-time nonverbal decoding, for example, in customer service or other contexts. Although this would create additional challenges to researchers in determining a criterion for accuracy, it would also provide the opportunity to judge spontaneous expressions in an ecological context.

The current study also used an atypical workplace. Teams of young adults from widely diverse demographic backgrounds performed difficult work closely together for modest pay. The replication in the current study of several core findings from previous work—for example, the overall positive impact of emotion recognition skill and overall negative impact of eavesdropping skill on workplace outcomes—mitigates this concern. Nonetheless, it is worthwhile to include mainstream organizations in future research.

Given the relationship between eavesdropping skill and workplace outcomes, it would be valuable for future research to examine the controllability of such skill. That is, are participants aware of their eavesdropping ability, and can they choose not to recognize cues from particular channels or emotions? The current study examined emotion recognition ability only under conditions encouraging participants to understand cues as accurately as possible.

Implications for Emotional Intelligence

There is a generally positive relationship between workplace outcomes and emotion recognition ability, one important and reliably evaluated aspect of emotional intelligence. However, this general relationship appears to be more complicated underneath its surface, as not all types of emotion recognition skill appear equally valued across all organizational settings. The current results suggest that the popular trend of emphasizing emotional intelligence in the workplace has the potential to cause unintended negative consequences. An emphasis on so-called "EQ" has encouraged organizations to consider hiring, training, and rewarding individuals for high levels of emotional intelligence skill. One popular instrument for EQ already incorporates emotion recognition measures (Salovey, Mayer, Caruso, & Lopes, 2001). Given this trend, the current study cautions that certain skills—or certain combinations of skills—may be counterproductive in contexts where less is more. Thus, emotional intelligence is a multifaceted skill, with many individual components that have different relationships with workplace success.

Researchers and practitioners should consider these complex skills together as a whole, rather than piecemeal, in order to create a benefit for organizations that focus on the emotional intelligence of their workforce. To use emotional intelligence in a particular setting, it seems crucial to develop a deeper understanding of the relationship between EQ skills and that setting's particular contexts, demands, and roles. Both the optimal level for each component of the skill as well as the relationships among skills should be scrutinized carefully. Before implementing an intervention using emotional intelligence, a range of organizational members should complete any proposed measurement. This is not for the purpose of determining members' deficiencies and jumping in to remedy them, which is frequent in practice, but rather to provide insight about the types and combinations of skills valued in that context. That is, assessments of current employees may help to establish the appropriate norms to which to aspire, rather than the baseline from which to "improve." If a manager finds that highly successful employees—and indeed fellow managers—fit a certain profile among skills, then it might be worthwhile to try to select for that profile among new recruits. However, it could be counterproductive to provide training to otherwise successful employees with the intent of altering their skill profile to yield high levels on each component. The current results demonstrate that the overall benefit of high scores can wash away upon examination of more subtle

trends. These findings suggest that in the case of emotional intelligence, one size may not fit all.

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