

S Y M P O S I U M

THE “BIG IDEA” THAT IS YET TO BE: TOWARD A MORE MOTIVATED, CONTEXTUAL, AND DYNAMIC MODEL OF EMOTIONAL INTELLIGENCE

OSCAR YBARRA
ETHAN KROSS
JEFFREY SANCHEZ-BURKS
University of Michigan

The “emotional intelligence” construct has been the focus of enormous scrutiny over the past 20 years (Salovey & Mayer, 1990). Much of this interest is based on the so-called “big idea” that first brought widespread attention to it—an idea popularized by Goleman’s best-selling book *Emotional Intelligence* (1995), in which he claimed that emotional intelligence (EI) can matter more than the intelligence quotient (IQ) in predicting important life outcomes. Despite the appeal of this idea, recent meta-analyses indicate that emotional intelligence has not lived up to its promise. What are the implications of these findings for emotional intelligence research and for people interested in applying EI research to their organizations? We suggest that the predictive validity of emotional intelligence can be enhanced by refining the construct through the incorporation of three well-established principles of psychological processing: (a) dual-process principles that capture automatic and deliberate processing, (b) motivational principles that highlight the importance of goals for processing social-emotional information, and (c) person X situation principles that delineate how context influences the way people think, feel, and behave. We discuss the implications of this reconceptualization for emotional intelligence theory, research, and practice.

The concept of “emotional intelligence” has been the focus of much research over the past 20 years. What began as a proposed definition for a new construct, “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and action” (Salovey & Mayer, 1990, p. 189), has evolved into a thriving area of multi-disciplinary research and practice.

The appeal of EI is based largely on the so-called “big idea” that first brought widespread attention to the construct—an idea popularized by Goleman’s best-selling book *Emotional Intelligence* (1995), in which he claimed that EI can matter more than IQ and suggested a redefining of what it means to be smart. Although the hyperbole surrounding this claim has tempered with time, the basic “big idea” remains influential. For example, Cherniss (2010) recently noted, “This big idea is that success in work and life depends on more than just

the basic cognitive abilities typically measured by IQ tests and related measures; it also depends on a number of personal qualities that involve the perception, understanding, and regulation of emotion” (Cherniss, 2010, p. 184).

These claims are largely based on findings in the intelligence literature indicating that scores on intelligence tests account for 20% to 25% of the variance in work, school, and life outcomes (Goldstein, Zedeck, & Goldstein, 2002; Hunt, 2011; Hunter & Hunter, 1984; Neisser et al., 1996; Schmidt & Hunter, 2004). The remaining unexplained variance invites conjectures regarding what other factors might contribute to a person’s success. This is where EI enters the equation.

It is often assumed that EI accounts for a large portion of this unexplained variance (e.g., Abraham, 1999; Cherniss, 2010; Goleman, 1995). However, a critical examination of the EI literature indicates that this is not the case. Meta-analyses

indicate that when cognitive ability and personality measures are controlled for, the relationship between EI measures and consequential work, academic, and life outcomes is remarkably small, explaining between 1% and 7% of the variance across these domains (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Van Rooy & Viswesvaran, 2004). Contrary to the "big idea" motivating much EI research, these findings indicate that EI actually does little to explain how well people successfully navigate their lives.

What are the implications of these findings for EI research, theory, and practice? Although they appear to paint a glum picture, our goal in this article is to offer a set of suggestions for how to refine the way EI is conceptualized to enhance its predictive utility. Specifically, we suggest that building a model of EI that takes into account (a) dual processes that characterize psychological phenomena, (b) motivation, and (c) interactionist principles that govern human behavior is critical to refining this construct in ways that may yet allow the "big idea" behind EI to come to fruition. In the following sections we elaborate on these issues.

PRINCIPLE 1: DUAL PROCESSES GOVERN HUMAN THOUGHT, FEELING, AND BEHAVIOR

Most EI research adopts a "conscious" view of how people process emotional information. For example, participants are asked to report on their feelings and EI abilities, judge the effectiveness of emotion management strategies illustrated in scenarios, and identify faces or other emotion-evoking stimuli by attaching labels to them (e.g., Bar-On, 1997; Mayer, Salovey, & Caruso, 2002; Schutte et al., 1998; Tett, Fox, & Wang, 2005).¹ Although EI researchers acknowledge that mental processes can operate outside of people's awareness (e.g., Goleman, 1995; Zeidner, Matthews, & Roberts, 2003), the distinction between automatic and conscious (or deliberate) processes and their potential interactions do not factor into leading EI models (for an

exception, see Fiori, 2009). From both a practical and theoretical perspective this is problematic, as much research indicates that taking into account such processes and their interactions is critical to understanding psychological phenomena (e.g., Chaiken & Trope, 1999; Epstein, 1994; Kahneman, 2011; Gawronski & Bodenhausen, 2011; Kross & Mischel, 2010; Metcalfe & Mischel, 1999; Posner & Snyder, 1975; Sloman, 1996; Smith & DeCoster, 2000; Stanovich & West, 2000).

Taking seriously the distinction between conscious and automatic processes adds dynamism and context sensitivity to the concept of EI, and it suggests novel hypotheses. To illustrate the importance of this feature of our reconceptualization, we focus on two "abilities" that are common to many emotional intelligence models: emotion recognition and emotion control. Emotion recognition involves being able to recognize the emotions that the self or someone else is experiencing. Emotion control refers to the ability to manage emotions in the self and others, usually in the service of maintaining or creating positive affective states and eliminating or minimizing negative ones (e.g., Clark & Isen, 1982; Larsen, 2000).

Abundant findings indicate that both emotion recognition and control can and often do operate consciously (e.g., Mayer & Salovey, 1997). A nice illustration of this is work showing how changes in cognitive control capacity—a constellation of processes that largely underlies conscious, deliberative processing of information (e.g., Feldman-Barrett, Tugade, & Engle, 2004)—directly influence emotion recognition. Research indicates that older adults do worse than younger adults in recognizing emotions (for a review see Isaacowitz and colleagues, 2007). Older adults also have worse cognitive functioning than younger adults (e.g., Park, 2000), which is crucial for the deliberate processing of information (e.g., Smith & DeCoster, 2000). Of greater interest, research indicates that controlling for level of cognitive functioning reduces the emotion recognition differences found across age groups (Orgeta & Phillips, 2008), suggesting that emotion recognition relies on deliberate processes. Other research has shown that individuals who perform poorly on tasks that assay cognitive resources, such as the Wisconsin card sorting task, also perform more poorly in recognizing others' emotional expressions (Bryson, Bell, & Lysaker, 1997), and that sensory conflict, which requires cognitive resources to be resolved, influences emo-

¹ Here we focus on measures specifically labeled as emotional intelligence. Other approaches to the study of EI-relevant abilities exist (e.g., Banzinger, Grandjean, & Scherer, 2009; Izard et al., 2001; Matsumoto et al., 2000; O'Sullivan, 1982; Pitterman & Nowicki, 2004). However, most of the research assessing predictive validity (in meta-analyses controlling for other important factors) has focused on specific measures of EI, whether as integrated EI abilities or self-report trait or "mixed" models.

tion recognition (Keeley-Dyreson, Bailey, & Burgoon, 1991).

Emotion control refers to the modulation of emotional reactions and expressions. It is considered a critical challenge as people mature (Posner, 2012) and is many times carried out through the implementation of conscious processes. When overwhelmed with anger, for example, some people deliberately try to control their emotions by distracting, reappraising, or distancing themselves (e.g., Bushman, 2002; Gross, 1998; Kross & Ayduk, 2011; Rusting & Nolen-Hoeksema, 1998). Such deliberately implemented skills are critical for helping people interact effectively. However, the control of emotion is restricted in part by a person's level of cognitive resources. This is evident in infants, as distressing situations are more likely to give rise to negative emotions in infants to the degree they are unable to control their attention (Rothbart, Posner, & Boylan, 1990). Research with adults has also shown that continuous attempts to control one's emotions paradoxically reduces cognitive resources, leaving people vulnerable to inefficient emotion control in the future (Schmeichel, 2007). As a whole, this research suggests that emotion control can occur through a deliberate process that relies on cognitive resources, and that a lack of cognitive resources can diminish deliberate attempts at emotion control.

Fortunately, emotion recognition and control also can operate automatically through processes that are more immune to cognitive resource availability (e.g., Smith & DeCoster, 2000). People, for example, can recognize emotion expressions under cognitive load, even self-conscious emotions (Tracy & Robins, 2008). People also recognize the valence of faces (positive, negative) even when the faces are presented too fast to engage higher-level cognitive skills (e.g., Clark, Winkielman, & McIntosh, 2008; Whalen et al., 1998; Winkielman, Berridge, & Wilbarger, 2005).

Recent findings also suggest that some elements of emotion control can occur efficiently with little deliberation (for reviews see Bargh & Williams, 2007; Mauss, Bunge, & Gross, 2007). In one study, researchers primed individuals with words related to controlling or expressing their emotions to activate emotion control-related goals. These individuals were then led to experience anger and subsequently rated how they felt. The findings indicated that individuals with the "emotion control" goal expressed less anger after the anger induction than individuals for whom the "emotion expression"

goal was activated (Mauss, Cook, & Gross, 2007, Experiment 1). This was the case even though participants were unaware of the goal concepts that had been activated. Such findings provide evidence for an efficient, automatic type of emotion-control process.

Other work that has documented the operation of efficient, automatic processes comes from research on theory of mind and how people understand others' psychological states, preferences, and intentions behind actions (e.g., Baron-Cohen, Leslie, & Frith, 1985; Wellman, Cross, & Watson, 2001). Understanding emotions in others is intertwined with the perception of others' psychological states and behaviors. Comparative and developmental approaches to theory of mind have shown that perceivers can immediately grasp the meaning of others' acts or aspects of their mental states without thinking extensively about the available information (e.g., Iacoboni et al., 2005; Moll & Tomasello, 2006; Onishi & Baillargeon, 2005; Qureshi, Apperly, & Samson, 2010).

Although EI can occur efficiently through automatic processing, that does not mean this type of processing will always be effective or that all emotion recognition and control processes will have occasion to become automatic.² In terms of the former, a person who has been part of an overly competitive organizational environment could be mentally prepared to see interpersonal threats at a new job even when there are no threats, or to underestimate others' good intentions. Basing final judgments on such initial inferences and forecasts could create a host of interpersonal problems. In cases such as these, conscious and deliberate processes are useful to unlearn potentially ineffective ways of relating to others, or for controlling and modulating initial assessments of others to correct for inaccurate inferences.

In addition, although automatic processes are critical for effective functioning, there may not be enough occasions for EI processes to become practiced and automatic. That is, emotion knowledge and understanding are often tied to specific contexts (Barrett, 2006), but if a person does not consistently and frequently encounter such contexts—

² Most skills, given enough practice, follow the path of explicit practice to automaticity, from being deliberate to becoming more automatic. This is not to say that skill acquisition cannot occur implicitly and with little awareness (Bargh & Chartrand, 1999; Lewicki, Hill, & Czyzewska, 1992).

core factors determining automaticity (Bargh, Lombardi, & Higgins, 1988)—EI-related processes will not become automatic, and deliberate EI processes will continue to be necessary to achieve effective EI, given requisite cognitive resources.

By not measuring how emotion recognition and control, as well as a host of other processes related to EI, operate both automatically and deliberately, and by not explicitly factoring the distinction between automatic and deliberate processes into EI models, the field loses out on a potentially large piece of the EI puzzle. It is well established that automatic and deliberate processes often do not correlate, such as when a perceiver consciously reports positive emotions or attitudes toward a person, but at an automatic or implicit level readily ascribes negative characteristics to them (for a review see Gawronski & Bodenhausen, 2011). Therefore, understanding where a person stands on both of these dimensions for any given EI process seems essential to enhancing the validity and predictive utility of this construct.

Dual Psychological Processes in EI: Future Research Questions

An important question raised by this analysis concerns whether certain aspects of current EI assessments are affected by changes in cognitive load. Do people who score high on some or all aspects of the MSCEIT³ (Mayer et al., 2002), for example, score similarly when their attention is divided? What if individuals are led to become cognitively fatigued and then their EI is assessed? It stands to reason that processes that are deliberate will be affected more than those that are more automatic. Research investigating fluid intelligence (i.e., how people reason through and solve novel problems) and executive function has shown that only when people are cognitively stressed do performance differences emerge between those high and low in fluid intelligence (Conway, Kane, & Engle (2003). Thus, researchers may obtain additional variation in performance by taking into account cognitive load in different situations and the availability of cognitive resources.

It also would be useful to know how individuals differ in their sensitivity to emotion-related information that has been activated outside of conscious awareness and how this sensitivity relates not only

to performance on an immediate task relevant to that priming, but also to tasks that are more distant from the priming episode. We described earlier research by Mauss and colleagues in which concepts were primed, and then the investigators assessed the prime's effect on the ability to control an emotion induced in a different context (Mauss et al., 2007). What is not known is whether individuals differed in their sensitivity to the information that was activated in the first part of the study.

One possibility is that two different individuals could show different levels of sensitivity to some activated concepts or feelings (e.g., one person becomes aware why he or she is feeling upset; another does not). In rendering a subsequent judgment in a novel situation, one individual, due to his lack of awareness, might then transfer the activated feelings to judgments of a stranger and judge the stranger more negatively, whereas the other individual who was more aware of the activated feelings might not. Given that the stranger had nothing to do with the earlier activated emotional experience, high EI then would also have to do with people's assessments of whether the activated feelings or concepts are "appropriate" in the new context (Higgins, 1996).

Finally, can we develop measures that assay automatic emotion recognition and control processes, as well as other processes relevant to EI? The answer is yes. In fact, available EI measures in conjunction with easy-to-implement changes in the testing environment could be used to suggest whose EI abilities are more practiced or automatic. For example, even though the conscious and deliberate processes likely captured by current EI assessments might become impaired under time pressure or cognitive strain, as we discussed above, there will likely be individual differences in performance, meaning some individuals will be affected significantly more than others. So simple interventions, such as dividing people's attention by having them retain information in memory (e.g., a string of numbers to be recalled later), could be implemented easily during the testing procedures. Being able to carry out the EI tasks even under cognitive strain would suggest that individuals possess some EI processes that are efficient and likely to operate automatically.

Other assessments could also be adopted to assay the nonconscious elements of emotion recognition and control. For example, in terms of recognizing emotions, individuals could be presented with pictures on a computer, and the pictures could display

³ The Mayer-Salovey-Caruso emotional intelligence test.

different emotional expressions. The person performing the assessment could vary the presentation to determine the minimal presentation times a particular individual needs to recognize the emotions. Such a test would provide a gradient of efficiency in recognizing the emotions (i.e., those who need shorter presentation times are more efficient). In addition, at the extreme—where presentation times are only a few milliseconds and so rapid that no one can explicitly report on what was presented—the ability to guess the emotional expression or its valence at levels significantly above chance could be taken to signal automatic emotion recognition (see Clark et al., 2008, for a possible paradigm for doing this).

Various other procedures could be adopted by practitioners to better assess both the automatic and deliberate aspects of emotion recognition and control (see Gawronski & Payne, 2010, for a review of implicit cognition methods). In addition (although this may not be practicable in the field it could be of potential benefit to basic research), the recent proliferation of neural measures that can monitor neural activity continuously with good spatial (fMRI)⁴ and temporal (EEG)⁵ resolution could provide several promising vehicles for developing tools to better assess both automatic and deliberate aspects of EI, especially when such measures are linked to performance on standard self-report and behavioral EI measures administered under different testing conditions (e.g., under high or low cognitive strain).

Summary

Principle 1 contends that two factors influence a person's emotional intelligence: (a) conscious or deliberate mental processes that rely on rules for understanding and controlling emotionally relevant information and (b) automatic processes that can render some degree of emotional understanding and control when cognitive resources are scarce. Incorporating automatic processes into a model of EI is critical because a large portion of social and emotional life is regulated through the deployment of such processes (Bargh & Chartrand, 1999). However, the fact that an automatic process can be executed efficiently does not imply appropriateness, as such processes may be based on lim-

ited learning opportunities or a history of imperfect learning and understanding, and they can be misapplied (cf. Kahneman, 2011; March, 2010; Meehl, 1986). In some cases it makes sense to more carefully consider or “shelve” these inferences before acting on them. Many times the outcomes of automatic processes are proposed solutions that need to be monitored for appropriateness by deliberate processes. An adaptive EI model thus necessitates both types of processes to allow for the best emotional understanding and control possible given the circumstances and availability of cognitive resources.

PRINCIPLE 2: MOTIVATION IN SOCIAL-EMOTIONAL INTELLIGENCE

Emotional facts are ambiguous and at times even negotiable, meaning they can be as much a reflection of the actual stimuli as the way people construe them (Kelly, 1955). People who are motivated to compete, for example, pay more attention to others' competencies, whereas people motivated to cooperate attend more to others' communal characteristics, even though the other type of information is available for processing (Chan & Ybarra, 2002). Much of the basis for people's attention and interpretation, then, rests not only on what might be considered an “ability,” as usually conceived in EI, but also on people's motivation—that is, the extent to which they are engaged and willing to process the available information (cf. Hunt, 2011). Thus, even though the automatic and deliberate processes discussed under Principle 1 can be applied to relevant EI, motivation directs the person to the social-emotional information that is to be processed and the degree to which he or she engages with it.

There are diverse ways to conceptualize motivational processes, and many levels of analyses can be considered (e.g., biological to cognitive levels). For example, motivation can be approached from the perspective of value X expectancy (e.g., Weiner, 1985), prevention and promotion (Higgins, 1998), wanting versus liking (Berridge, 2009), extrinsic versus intrinsic (e.g., Deci & Ryan, 1985), and mastery versus performance mindsets (Dweck, 1999). The motivational approach researchers pursue can have different implications for the types of questions they ask.

In terms of value X expectancy, for example, a person could value having positive interactions with coworkers, but a competitive organizational culture could lead them to expect that their colleagues will not reciprocate such intentions, result-

⁴ Functional magnetic resonance imaging.

⁵ Electroencephalography.

ing in reduced motivation to cooperate. In contrast, a researcher who takes an extrinsic versus intrinsic motivation approach to EI might postulate that external rewards might lead some individuals to focus more on recognizing and managing the emotions of those with the power to provide external rewards compared to paying attention to other organizational members with less influence. Contemplating these and other motivation frameworks generates a host of hypotheses regarding when people are (and are not) likely to be “emotionally intelligent.” But doing so is beyond the scope of our framework. Our goal in this section is to articulate at a general level why motivation is a critical component of emotional intelligence.

Motivation and Emotion Recognition

There are many occasions in life in which people do not have control over events, so they are dependent on others who can facilitate the outcomes they seek. A good example is being dependent on an employer for a job or a project leader for a good evaluation. The outcomes an individual seeks in such situations will not be achieved without enlisting the other person’s help. In fact, much of social life has this structure to it; we need others to get things done. This is referred to as outcome dependency (Berscheid, Graziano, Monson, & Dermer, 1976).

Outcome dependency affects what people attend to and the understandings they can extract about others, so it helps demonstrate the implications of motivation for emotional intelligence. In one study demonstrating such effects, individuals were brought into a study to perform a task where their choices and monetary rewards from the game would depend on the other player’s choices (Vonk, 1999). Before the game, individuals read an essay written by someone else. Half of the individuals were told that the essay, having to do with cooperative and pro-environmental behavior or being competitive and less concerned with the environment, was written by the person they would be playing the game with; the other half were told the essay was from a different person. Also, half of the individuals were told the author had freely chosen to write the essay; the other half were told the essay topic had been assigned by the researcher.

Two findings from the study are of central importance. When judging the author’s attitude toward the environment, people generally attributed the intentions behind the essay to the target. However, when predicting the author’s tendency to be

cooperative or competitive more generally—an assessment relevant to the game they would be playing—the judgments varied. Participants who were outcome dependent spent more time studying the essays from authors who had no choice in writing the essays, suggesting they were trying to more intensely uncover underlying intentions and attitudes. Also, the judgments about authors participants would be dependent on, because of the upcoming game, were more nuanced than those of authors the participants would not meet later. So, once individuals’ outcome dependency was activated, meaning they became highly motivated to predict the person on whom they were dependent, their willingness to process the available information was altered. They took in more information and appeared more careful in considering the causes of the other person’s behavior.

The lesson for emotional intelligence is straightforward: Motivation can alter the judgments about others, whether it involves judgments about their emotions, personalities, or behavioral tendencies. If a perceiver is not motivated he will miss much social-emotional information others are providing. This same perceiver’s judgments, if viewed without consideration for motivational influences, could even be taken to reflect lower EI.

Motivation and Emotion Control

In addition to having implications for emotion recognition, motivation also influences emotion control. For example, emotion regulation research indicates that people high in agreeableness are more motivated to control emotions than those low in agreeableness (Tobin, Graziano, Vanman, & Tassinari, 2000). In this research (Tobin and colleagues, 2000, Study 2), participants were presented with slides they had to evaluate on valence. The slides had been selected to be affectively negative and highly arousing. In addition, participants had to communicate the content of the slides to another person via video, and recordings were made of these communications. These videos were later coded by observers who were unaware of how the participants had scored on agreeableness. The findings indicated that participants higher in agreeableness reported engaging in more efforts to control their emotions. In addition, these attempts at control corresponded to observer ratings. The point here for emotional intelligence is that motivation matters. For example, the investigators of this study suggest that such differential motivation to control

emotions has implications for harmony in interpersonal relationships (Tobin et al., 2000).

Another example highlighting the role of motivation comes from a recent study by Job and colleagues on ego depletion (Job, Dweck, & Walton, 2010). The classic ego depletion literature indicates that exerting cognitive control undermines efforts to control thought and behavior on future tasks (Muraven & Baumeister, 2000). The control of emotions also has been shown to reduce cognitive resources (Schmeichel, 2007). However, Job and colleagues found that cueing people to be more motivated by leading them to assume that “will-power” is malleable led them to perform better on the demanding tasks, thus undoing the classic depletion effect (Job et al., 2010).

Motivation and EI: Future Directions

By considering motivation, we will likely improve chances for EI assessments to predict outcomes of interest above and beyond intelligence and personality. A recent meta-analysis studying EI and job performance, for example, not only confirmed the low predictive validity of EI over IQ and personality, but also found that EI assessments of a “mixed” nature showed relatively more validity in predicting job performance (Joseph & Newman, 2010). The authors conclude that this was due “to the mixed EI’s inclusion of surplus motivational constructs and other sundry content that might be performance relevant” (Joseph & Newman, 2010, p. 66–67). So there are empirical suggestions regarding the importance of motivation for EI’s predictive validity.

Additional factors that have to do with motivation can be considered to help elevate EI’s predictive validity. One concerns the match between the motivational state that is typically activated when the EI assessments are made and the contexts in which EI is applied. This “matching” principle is a mainstay in research dealing with attitudes and the prediction of behavior (Ajzen & Fishbein, 1980; Millar & Tesser, 1989). In one work role a person could be motivated to read and try to understand another party (e.g., one’s manager or boss), but in another role be less motivated to engage with the other party (e.g., dealing with a subordinate or a disliked colleague). If this individual happens to score high on some EI assessment, and assuming the assessment requires high motivation to do well, then EI performance should better match the former than the latter role. Trying to predict across all

role situations might limit the strength of those predictive relationships.

Summary

Principle 2 contends that focusing on motivation has the potential to inform the concept of emotional intelligence. Although some people may score high on emotional intelligence measures of ability (e.g., emotion recognition or control), prior research suggests that they will not implement those skills unless they are motivated to do so. Under such circumstances, when people display low levels of emotional intelligence, the challenge for researchers is to discern whether such failures are a result of poor motivation, lack of ability, or both of these qualities. In addition, failing to predict relevant outcomes from EI assessments may also depend on matching processes between the motivation required by the assessment and the types of outcomes to be predicted.

PRINCIPLE 3: CONTEXT MATTERS

As it stands now, the emotional intelligence field is dominated by the goal of assigning people some kind of score—devoid of context—to try to quantify the abilities underlying emotional intelligence. Of course, assigning numbers to behavioral and mental phenomena allows for relationships to be tested, categorizations to be made, and predictions to be considered. However, scores about people can be misused. Because explanations for people’s judgments and behaviors depend critically on information about the person and the situational context (e.g., Heider, 1944; Jones & Davis, 1965; Mischel, 1968; Mischel & Shoda, 1995), such scores often miss important information regarding the nuances that characterize the way people think, feel, and behave in daily life in different contexts.

Scores resulting from emotional intelligence tests suggest that people can manage their own and others’ emotions and navigate social situations, assuming they received a high score. However, assigning a person an emotional intelligence score imparts little explanation for understanding people’s past decisions and behaviors, as it collapses over time and the many contexts those decisions and behaviors are bound to. Hence, such scores can lead us to assume the tested person’s decisions and behaviors have been consistent across time and contexts and that we know what a person with a certain emotional intelligence score is likely to do. However,

without appreciating how context affects the expression of emotional intelligence (or vice versa), we forgo much understanding of how people make sense of social situations and others and also the influence situational forces play in emotional intelligence.

Focusing on context broadens the promise of emotional intelligence, helping it address puzzling questions such as why otherwise emotionally intelligent individuals crumble when faced with temptation, such as President Clinton with Monica Lewinsky. President Clinton won two elections—achievements based in part on the careful navigation of the perilous world of U.S. politics. But one could argue that the Lewinsky debacle resulted from Clinton's failure to appropriately control his emotions. Usually, the explanation for such occurrences is based on the big idea behind emotional intelligence. As discussed earlier, the idea is that successful people with high IQs can falter, which leaves room for other abilities such as emotional intelligence to help explain such shortfalls—meaning they must have been low on emotional intelligence or some aspect of it (Cherniss, 2010). However, Clinton clearly demonstrated the capacity to be “emotionally intelligent” in other contexts. He was adept, for example, at negotiating difficult treaties between opposing factions and when interacting with opposing parties in Congress.

The resolution of such discrepancies necessitates greater elaboration of the role context plays in emotional intelligence, as we attempt to accomplish in our framework. Fortunately, there already exist many models that explicitly address how context and behavior intersect. For example, Tett and colleagues have put forth the notion of trait relevance and activation to argue that not all situations (e.g., roles or aspects of a job) will provide behavioral cues relevant to a personality trait (Tett & Burnett, 2003; Tett & Guterman, 2000). Another approach is put forth by the Cognitive Affective Personality System (CAPS) theory of personality that explicitly looks at the interrelationship between persons, situations, and behaviors (Mischel & Shoda, 1995). In CAPS, different situations acquire different meanings for the same person, or a situation could be interpreted differently by different individuals. Consequently, the kinds of appraisals, expectations and beliefs, affects, goals, and behavioral scripts that are likely to become activated in relation to particular situations will vary in systematic ways. Theoretically as well as empirically, there is no reason to expect individuals to manifest similar

behavior in relation to different psychological situations unless they are functionally equivalent in meaning.

Applied to emotional intelligence, this model suggests that being able to predict whether person X is going to behave in an emotionally intelligent way in situation Y requires researchers to take into account the situation and its meaning for the individual (e.g., Cervone & Shoda, 1999; Magnusson & Endler, 1977; Mischel, 1973; Mischel & Shoda, 1995). Identifying these contingencies is critical, in our view, to developing an integrative model of emotional intelligence that is capable of accurately predicting behavior.

To illustrate concretely how this analysis might apply to emotional intelligence, consider Darley and Batson's (1973) classic study on helping. Darley and Batson were interested in studying the power of context in helping. Their participants involved seminary students who, depending on the condition they were randomly assigned to, had the goal of delivering a talk on the parable of the Good Samaritan or on a non-helping topic. In addition, these individuals were randomly assigned either to a condition in which they thought they had enough time to get to where they would deliver their talk or to a different condition in which they were told they were late. On their way to deliver the talk the seminary students were presented with a powerful event that was directly relevant to their goal but also conflicted with it; as they were making their way to give the talk they encountered a man slumped in an alleyway in need of help. What did the results show?

The findings were striking and indicated that the seminary students were more likely to help when not in a hurry to give their talk (again, on the Good Samaritan!). Some hurried students literally stepped over the person in the alleyway. So here you have a group of people undertaking what might be considered intensive emotional intelligence training in the sense that they were honing their skills in attending to others and being more emotionally attuned. They also were off to give a talk on helping. But when presented with the opportunity to read a potentially problematic event in which a person needed help, many of them faltered. Tying this example back to CAPS, it can be argued that the different conditions (contexts) activated distinct EI-relevant knowledge (perceptions, beliefs) and thus different psychological situations for the individuals involved. Thus, for the individuals in a hurry, their context made them focus on being late

to give the presentation, which likely impeded the activation of knowledge and responses relevant to dealing with the emotional cues with which they were presented.

Another example that highlights the power of context in emotional intelligence can be found in studies that examine variation in how attuned people are to social-emotional cues across different contexts (for a review see Sanchez-Burks, 2005). This work shows that individuals, particularly within certain cultural regions, exhibit substantially lower levels of emotional intelligence in work contexts relative to non-work contexts. For example, when involved in a work-related project, individuals are less able to detect emotional cues in spoken language than when they are involved in projects not carried out in a work context (Sanchez-Burks, 2002).

Other relevant findings deal with the extent to which the occupational context involves “emotional labor,” or the extent to which a job requires the regulation of feelings and emotional expressions (Grandey, 2000). Jobs that involve frequent interaction with customers require more emotional labor, for example. A study in which occupational contexts were categorized as involving high or low emotional labor found that EI played a more prominent role in performance outcomes when the job involved more emotional labor (Joseph & Newman, 2010). Relating these general findings to the CAPS model, it is likely that jobs with high compared to low emotional labor are more likely to provide people with emotional and social cues that can activate EI abilities and processes to the extent the individual possesses a high level of EI.⁶

These findings illustrate how contextually embedded emotional intelligence is. Moreover, the findings support the notion that abilities held

are not necessarily abilities that are deployed, as this depends to a large extent on the expectations individuals hold about different situational contexts.

Context and EI: Future Directions

A more explicit emphasis on how context influences EI is likely to improve the ability of EI assessments to predict outcomes of interest. We already mentioned the importance of the matching principle to help align predictors and outcomes (Ajzen & Fishbein, 1980; Millar & Tesser, 1989), and this would apply to context as well. It also might be useful to provide profiles of people’s emotion recognition and control abilities across different contexts and roles, assessed with both implicit and more “conscious” measures. Such a focus could also introduce different ways of defining levels of emotional intelligence, as some individuals may score very high in a few specific contexts, whereas other individuals may score moderately well across a wider range of contexts.

Summary

Principle 3 of our analysis suggests that an explicit consideration of context is needed to enhance current conceptions of emotional intelligence. We could all be interested in or even immersed in emotional intelligence training, but if the situations we find ourselves in activate other goals or beliefs, conflict may occur and our best intentions to think, feel, and behave in emotionally intelligent ways may come undone. Other contexts may not provide enough emotion-related cues to activate EI-relevant knowledge and beliefs, even though an individual might score high on some EI assessment. Thus, a better understanding and appreciation of context can help explain why people considered emotionally intelligent can be socially ineffective at times, and why EI assessments at times might have limited predictive validity above and beyond personality and IQ.

INTERACTIONS AMONG THE THREE PRINCIPLES

We organized this article by considering three distinct principles separately, but the value added by the present conceptualization also comes from considering how these principles interact, as they may produce a wide range of emotional intelli-

⁶ However, one potential caveat is that some emotionally intense roles can over time become burdensome and distressing for individuals, not too different from situations in which people are dealing with other types of traumatic experiences. This would suggest that for some roles people might begin to use available social cues to engage emotion control abilities, such as suppression, that have been associated with poorer social outcomes (Gross & John, 2003). Nevertheless, it is important to keep in mind that for some emotional experiences—such as those involving little personal control—suppression has been shown not to produce negative outcomes and to actually be beneficial for the distressed individuals (Bonnano, Keltner, Holen, & Horowitz, 1995).

gence-related outcomes. For example, in terms of Principle 1 (dual psychological processes) and Principle 3 (context), often cognitive capacity can be influenced by context. For example, research indicates that stress due to the fear of being evaluated by others can lead to a reduction in cognitive resources (cf. Schmader & Johns, 2003), and research indicates that stress can influence emotion recognition (Hänggi, 2004). Thus, context and the stress it can give rise to (e.g., being evaluated by a manager or coworker, noise, crowding) can reduce the availability of cognitive resources as people attempt to manage stress (see Muraven & Baumeister, 2000, for a review), which then negatively affects deliberate aspects of emotion recognition. In addition, deliberate processes are more likely to be deployed not only when people have the requisite cognitive resources, but also when they are motivated to engage with the available, emotionally relevant information (Principle 2). EI aspects that are more automatic, though, are less likely to be affected by low levels of motivation (Smith & DeCoster, 2000).

In addition, many of the examples we have referred to in this review can be used to highlight the interactions among the three principles. For example, regarding automatic and deliberate processes (Principle 1), we discussed work on theory of mind or how people understand psychological states in others, which is important in helping determine emotional assessments (e.g., Baron-Cohen et al., 1985; Wellman et al., 2001). Some of this research with adults has shown that when people perform theory of mind-related tasks under cognitive load, they can still carry out simple calculations to arrive at some understanding of others (e.g., Onishi & Baillargeon, 2005; Qureshi et al., 2010).

In day-to-day life, different contexts (Principle 3) can give rise to time pressure or to different motivations, such as not wanting to be in the company of a certain individual or feeling bored at a meeting (Principle 2). The time pressure in the former case and the lack of motivation in the latter could actually reduce the extent to which people attend to those around them, thus limiting deliberate processing related to emotional intelligence. This does not mean perceivers in these situations would fail to achieve any understanding, but that emotional understanding is likely to be of a more simple and generic quality. Further, if the person who makes you uncomfortable actually acts in positive and kind ways, the lack of deliberate processing may preclude considering the initial judgments

and revising them. Work by Berscheid and colleagues (1976) has shown that for people not within one's motivational purview, impressions of them are likely to be simple, incoherent, and less memorable.

The study of seminary students (Darley & Batson, 1973) provides another example of how the three factors might interact. The seminary students who were in a hurry were under a different motivational state (Principle 2) than those not in a hurry, and this motivational state was determined by the context (Principle 3: different information received from instructors). Many people have experienced deadlines and the threat of being late, which changes what they value and their priorities—that is, their motivation. For the seminary students who thought they were late, their goal caused many of them to disregard the person in need of help, which could have stemmed from various processes involving automatic and deliberate emotional intelligence (Principle 1). For example, one possibility is that they just did not notice the person. Another is that they noticed the person but categorized the situation incorrectly. A third possibility is that the students accurately categorized the situation but overrode the assessment through a deliberate process and decided they could not help due to the pressing and conflicting goal.

Viewed without consideration for context the first two outcomes might suggest to some observers low levels of emotional intelligence, whereas the third outcome might suggest coldness and lack of caring. On a different day the seminary students might have been quite willing to help (like those in the control group), which might lead some observers to attribute high emotional intelligence to them for being able to read the situation and for being generous. Regardless of attribution, all three factors—dual mental processes, motivation, and context—likely conspired to create different decisional and behavior paths for the seminary students in the different conditions.

Other possible interactions among the principles may be derived from knowledge of how emotions can influence information processing, which suggests that motivational processes can also be affected by the profile of different emotional states. Some positive emotional states, for example, can lead people to process information more simply and to rely on prior knowledge (Bless et al., 1996), whereas others can make people think more broadly or become more approach-oriented (Fredrickson, 2001; Gable & Harmon-Jones,

2008). A similar distinction has been made for negative emotion states (Bodenhausen, Sheppard, & Kramer, 1994; Lerner & Keltner, 2001; Tiedens & Linton, 2001).

In summary, the current discussion should help demonstrate that the three principles we are proposing to help reconceptualize emotional intelligence are elements in an interactive mental system. The elements can interact and align in different ways, providing more nuanced explanations of how effective emotional intelligence emerges, helping explain why individuals thought to be high in emotional intelligence can enact ineffective behavior in some situations, and suggesting ideas for assessment and the alignment of predictors to outcomes to help improve EI's predictive validity.

CONCLUSION

For understanding many organizational behavior dynamics, emotional intelligence is an important and relevant area of study. Its popular appeal among researchers and the public attests to this. We believe that those in the field face difficult questions, as most researchers do, but this may also stem from the use of conceptual frameworks that are limited in scope. Available conceptual frameworks could be expanded, which could allow for numerous new questions to be asked regarding emotional intelligence and the many twists and turns it can take. In this vein, we have proposed one approach that involves taking seriously the notion that dual processes, motivation, and context have direct and substantial implications for whether people think, feel, and behave in emotionally intelligent (or unintelligent) ways in organizations. It is our hope that by delving deeper into these processes researchers will have more guidance and knowledge at their disposal to pursue questions and projects able to reveal interesting and novel insights about organizational life.

REFERENCES

- Abraham, R. (1999). Emotional intelligence in organizations: A conceptualization. *Genetic, Social, and General Psychology Monographs*, *125*, 209–224.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Bänziger, T., Grandjean, D., & Scherer, K. R. (2009). Emotion recognition from expressions in face, voice, and body: The Multimodal Emotion Recognition Test (MERT). *Emotion*, *9*(5), 691–704.
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, *54*, 462–479.
- Bargh, J. A., Lombardi, W. J., & Higgins, E. T. (1988). Automaticity of chronically accessible constructs in person \times situation effects on person perception: It's just a matter of time. *Journal of Personality and Social Psychology*, *55*(4), 599–605.
- Bargh, J. A., & Williams, L. E. (2007). The nonconscious regulation of emotion. In J. Gross (Ed.), *Handbook of emotion regulation* (pp. 429–225). New York: Guilford Press.
- Bar-On, R. (1997). *Bar-On emotional quotient inventory: Technical manual*. Toronto: Multi-Health Systems.
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a "theory of mind"? *Cognition*, *21*(1), 37–46.
- Barrett, L. F. (2006). Solving the emotion paradox: Categorization and the experience of emotion. *Personality and Social Psychology Review*, *10*(1), 20–46.
- Barrett, L. F., Tugade, M. M., & Engle, R. W. (2004). Individual differences in working memory capacity and dual process theories of the mind. *Psychological Bulletin*, *130*(4), 553–573.
- Berridge, K. C. (2009). Wanting and liking: Observations from the neuroscience and psychology laboratory. *Inquiry*, *52*(4), 378–398.
- Berscheid, E., Graziano, W., Monson, T., & Dermer, M. (1976). Outcome dependency: Attention, attribution, and attraction. *Journal of Personality and Social Psychology*, *34*, 978–989.
- Bless, H., Clore, G. L., Schwarz, N., Golisano, V., Rabe, C., & Wölk, M. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness? *Journal of Personality and Social Psychology*, *71*(4), 665–679.
- Bodenhausen, G. V., Sheppard, L., & Kramer, G. P. (1994). Negative affect and social perception: The differential impact of anger and sadness. *European Journal of Social Psychology*, *24*, 45–62.
- Bonanno, G. A., Keltner, D., Holen, A., & Horowitz, M. J. (1995). When avoiding unpleasant emotions might not be such a bad thing: Verbal-autonomic response dissociation and midlife conjugal bereavement. *Journal of Personality and Social Psychology*, *69*(5), 975–989.
- Bryson, G., Bell, M., & Lysaker, P. (1997). Affect recognition in schizophrenia: A function of global impairment or a specific cognitive deficit. *Psychiatry Research*, *71*(2), 105–113.

- Bushman, B. J. (2002). Does venting anger feed or extinguish the flame? Catharsis, rumination, distraction, anger, and aggressive responding. *Personality and Social Psychology Bulletin, 28*, 724–731.
- Cervone, D., & Shoda, Y. (Eds.) (1999). *The coherence of personality: Social-cognitive bases of personality consistency, variability, and organization*. New York: Guilford Publications.
- Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual process theories in social psychology*. New York: Guilford Press.
- Chan, E., & Ybarra, O. (2002). Interaction goals and social information processing: Underestimating one's partners but overestimating one's opponents. *Social Cognition, 20*, 409–439.
- Chartrand, T. L., & Bargh, J. A. (1996). Automatic activation of impression formation and memorization goals: Nonconscious goal priming reproduces effects of explicit task instructions. *Journal of Personality and Social Psychology, 71*, 464–478.
- Cherniss, C. (2010). Emotional intelligence: New insights and further clarifications. *Industrial and Organizational Psychology, 3*, 183–191.
- Clark, M. S., & Isen, A. M. (1982). Toward understanding the relationship between feeling states and social behavior. In A. Hastorf & A. M. Isen (Eds.), *Cognitive social psychology* (pp. 73–108). New York: Elsevier.
- Clark, T. F., Winkielman, P., & McIntosh, D. N. (2008). Autism and the extraction of emotion from briefly presented facial expressions: Stumbling at the first step of empathy. *Emotion, 8*(6), 803–809.
- Conway, A. R., Kane, M. J., & Engle, R. W. (2003). Working memory capacity and its relation to general intelligence. *Trends in Cognitive Sciences, 7*(12), 547–552.
- Darley, J. M., & Batson, C. D. (1973). From Jerusalem to Jericho: A study of situational and dispositional variables in helping behavior. *Journal of Personality and Social Psychology, 27*, 100–108.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality and development*. Philadelphia: Taylor and Francis/Psychology Press.
- Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist, 49*(8), 709–724.
- Fiori, M. (2009). A new look at emotional intelligence: A dual process framework. *Personality and Social Psychology Review, 13*(1), 21–44.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226.
- Gable, P. A., & Harmon-Jones, E. (2008). Approach-motivated positive affect reduces breadth of attention. *Psychological Science, 19*(5), 476–482.
- Gawronski, B., & Bodenhausen, G. V. (2011). The associative-propositional evaluation model: Theory, evidence, and open questions. *Advances in Experimental Social Psychology, 44*, 59–127.
- Gawronski, B., & Payne, K. B. (2010). *Handbook of implicit social cognition: Measurement, theory and applications*. New York: Guilford Press.
- Goldstein, H. W., Zedeck, S., & Goldstein, I. L. (2002). g: Is this your final answer? *Human Performance, 15*, 123–142.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam.
- Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology, 5*(1), 95–110.
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology, 74*(1), 224–237.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*(2), 348–362.
- Hänggi, Y. (2004). Stress and emotion recognition: An internet experiment using stress induction. *Swiss Journal of Psychology, 63*, 113–126.
- Heider, F. (1944). Social perception and phenomenal causality. *Psychological Review, 51*, 358–374.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 133–168). New York: Guilford Press.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology, 30*, 1–46.
- Hunt, E. (2011). *Human intelligence*. New York: Cambridge University Press.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternate predictors of job performance. *Psychological Bulletin, 96*, 72–98.
- Iacoboni, M., Molnar-Szakacs, I., Gallese, V., Buccino, G., Mazziotta, J. C., & Rizzolatti, G. (2005). Grasping the intentions of others with one's own mirror neuron system. *PLOS Biology, 3*, 529–535.

- Isaacowitz, D. M., Löckenhoff, C. E., Lane, R. D., Wright, R., Sechrest, L., Riedel, R., & Costa, P. T. (2007). Age differences in recognition of emotion in lexical stimuli and facial expressions. *Psychology and Aging, 22*(1), 147–159.
- Izard, C., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*(1), 18–23.
- Job, V., Dweck, C. S., & Walton, G. M. (2010). Ego depletion—Is it all in your head? Implicit theories about willpower affect self-regulation. *Psychological Science, 21*(11), 1686–1693.
- Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 220–266). Washington, DC: Academic Press.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology, 95*(1), 54–78.
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.
- Keeley-Dyreson, M., Bailey, W., & Burgoon, J. K. (1991). The effects of stress and gender on nonverbal decoding accuracy in kinesic and vocalic channels. *Human Communication Research, 17*, 584–605.
- Kelly, G. A. (1955). *The psychology of personal constructs*. New York: Norton.
- Kross, E., & Ayduk, Ö. (2011). Making meaning out of negative experiences by self-distancing. *Current Directions in Psychological Science, 20*, 187–191.
- Kross, E., & Mischel, W. (2010). From stimulus control to self-control. Towards an integrative understanding of the processes underlying willpower. In R. Hassin, K. Ochsner, & Y. Trope (Eds.), *From society to brain: The new sciences of self-control* (pp. 428–446). New York: Oxford University Press.
- Larsen, R. J. (2000). Toward a science of mood regulation. *Psychological Inquiry, 11*, 129–141.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81*(1), 146–159.
- Lewicki, P., Hill, T., & Czyzewska, M. (1992). Nonconscious acquisition of information. *American Psychologist, 47*(6), 796–801.
- Magnusson, D., & Endler, N. S. (1977). Interaction psychology: Present status and future prospects. In D. Magnusson & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology* (pp. 3–31). Hillsdale, NJ: Lawrence Erlbaum.
- March, J. G. (2010). *The ambiguities of experience*. Ithaca, NY: Cornell University Press.
- Matsumoto, D., LeRoux, J., Wilson-Cohn, C., Rarogue, J., Kooken, K., Ekman, P., Yrizarry, N., Loewinger, S., Uchida, H., & Yee, A. (2000). A new test to measure emotion recognition ability: Matsumoto and Ekman's Japanese and Caucasian brief affect recognition test (JACBART). *Journal of Nonverbal Behavior, 24*, 179–209.
- Mauss, I. B., Bunge, S. A., & Gross, J. J. (2007). Automatic emotion regulation. *Social and Personality Psychology Compass, 1*, 146–167.
- Mauss, I. B., Cook, C., & Gross, J. J. (2007). Automatic emotion regulation during anger provocation. *Journal of Experimental Social Psychology, 43*, 698–711.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *The Mayer-Salovey-Caruso emotional intelligence test (MSCEIT)*, version 2.0. Toronto, Canada: Multi Health Systems.
- Meehl, P. E. (1986). Causes and effects of my disturbing little book. *Journal of Personality Assessment, 50*(3), 370–375.
- Metcalfe, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review, 106*(1), 3–19.
- Millar, M. G., & Tesser, A. (1989). The effects of affective-cognitive consistency and thought on the attitude-behavior relation. *Journal of Experimental Social Psychology, 25*, 189–202.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.
- Mischel, W. (1973). Toward a cognitive social learning re-conceptualization of personality. *Psychological Review, 80*(4), 252–283.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102*(2), 246–268.
- Moll, G., & Tomasello, M. (2006). Level 1 perspective-taking at 24 months of age. *British Journal of Developmental Psychology, 24*, 603–613.
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources. Does self-control resemble a muscle? *Psychological Bulletin, 126*(2), 247–259.
- Neisser, U., Boodoo, G., Bouchard, T. J., Boykin, A. W., Brody, N., Ceci, S. J., Halpern, D. F., Loehlin, J. C.,

- Perloff, R., Sternberg, R. J., & Urbina, S. (1996). Intelligence: Knowns and unknowns. *American Psychologist, 51*, 77–101.
- Neuberg, S. L., & Fiske, S. T. (1987). Motivational influences on impression formation: Outcome dependency, accuracy-driven attention, and individuating processes. *Journal of Personality and Social Psychology, 53*(3), 431–444.
- O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior, 32*, 788–818.
- Onishi, K. H., & Baillargeon, R. (2005). Do 15-month-old infants understand false beliefs? *Science, 308*(5719), 255–258.
- Orgeta, V., & Phillips, L. H. (2008). Effects of age and emotional intensity on the recognition of facial emotion. *Experimental Aging Research, 34*(1), 63–79.
- O'Sullivan, M. (1982). Measuring the ability to recognize facial expressions of emotion. In P. Ekman (Ed.), *Emotion in the human face* (pp. 281–317). Cambridge, UK: Cambridge University Press.
- Park, D. C. (2000). The basic mechanism, accounting for age-related decline in cognitive function. In D. C. Park & N. Schwarz (Eds.), *Cognitive aging: A primer* (pp. 3–21). Philadelphia: Psychology Press.
- Pitterman, H., & Nowicki, S. (2004). A test of the ability to identify emotion in human standing and sitting postures: The Diagnostic Analysis of Nonverbal Accuracy-2 Posture Test (DANVA2-POS). *Genetic, Social, and General Psychology Monographs, 130*(2), 146–162.
- Plotkin, H. (2002). Intelligence as predisposed skeptical induction engines. In R. J. Sternberg & J. C. Kaufman (Eds.), *The evolution of intelligence* (pp. 339–358). Mahwah, NJ: Erlbaum.
- Posner, M. I. (2012). *Attention in a social world*. New York: Oxford University Press.
- Posner, M. I., & Snyder, C. R. R. (1975). Attention and cognitive control. In R. L. Solso (Ed.), *Information processing and cognition: The Loyola symposium*. Hillsdale, NJ: Erlbaum.
- Qureshi, A. W., Apperly, I. A., & Samson, D. (2010). Executive function is necessary for perspective-selection, not level-1 visual perspective-calculation: Evidence from a dual-task study of adults. *Cognition, 117*(2), 230–236.
- Rothbart, M. K., Posner, M. I., & Boylan, A. (1990). Regulatory mechanisms in infant development. In J. T. Enns (Ed.), *The development of attention: Research and theory* (pp. 47–66). Amsterdam: Elsevier.
- Rusting, C. L., & Nolen-Hoeksema, S. (1998). Regulating responses to anger. *Journal of Personality and Social Psychology, 74*(3), 790–803.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*, 185–211.
- Sanchez-Burks, J. (2002). Protestant relational ideology and (in) attention to relational cues in work settings. *Journal of Personality and Social Psychology, 83*(4), 919–929.
- Sanchez-Burks, J. (2005). Protestant relational ideology: The cognitive underpinnings and organizational implications of an American anomaly. *Research in Organizational Behavior, 26*, 265–305.
- Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. *Journal of Personality and Social Psychology, 85*(3), 440–452.
- Schmeichel, B. J. (2007). Attention control, memory updating, and emotion regulation temporarily reduce the capacity for executive control. *Journal of Experimental Psychology: General, 136*(2), 241–255.
- Schmidt, F. L., & Hunter, J. (2004). General mental ability in the world of work: Occupational attainment and job performance. *Journal of Personality and Social Psychology, 86*(1), 162–173.
- Schutte, N., Malouff, J., Hall, L., Haggerty, D., Cooper, J., Golden, C., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167–177.
- Sloman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin, 119*, 3–22.
- Smith, E. R., & DeCoster, J. (2000). Dual process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality and Social Psychology Review, 4*, 108–131.
- Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning. Implications for the rationality debate. *Behavioral and Brain Sciences, 23*(5), 645–726.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88*(3), 500–517.
- Tett, R. P., Fox, K. E., & Wang, A. (2005). Development and validation of a self-report measure of emotional intelligence as a multidimensional trait domain. *Personality and Social Psychology Bulletin, 31*(7), 859–888.
- Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality, 34*, 397–423.
- Tiedens, L. Z., & Linton, S. (2001). Judgment under emo-

- tional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of Personality and Social Psychology*, 81(6), 973–988.
- Tobin, R. M., Graziano, W. G., Vanman, E. J., & Tassinari, L. G. (2000). Personality, emotional experience, and efforts to control emotions. *Journal of Personality and Social Psychology*, 79(4), 656–669.
- Tracy, J. L., & Robins, R. W. (2008). The automaticity of emotion recognition. *Emotion*, 8(1), 81–95.
- Van Rooy, D., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65, 71–95.
- Vonk, R. (1999). Effects of outcome dependency on correspondence bias. *Personality and Social Psychology Bulletin*, 25, 382–389.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573.
- Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory of mind development: The truth about false belief. *Child Development*, 72(3), 655–684.
- Whalen, P. J., Rauch, S. L., Etkoff, N. L., McInerney, S. C., Lee, M. B., & Jenike, M. A. (1998). Masked presentations of emotional facial expressions modulate amygdala activity without explicit knowledge. *Journal of Neuroscience*, 18(1), 411–418.
- Winkielman, P., Berridge, K. C., & Wilbarger, J. (2005). Emotion, behavior, and conscious experience: Once more without feeling. In L. F. Barrett, P. M. Niedenthal, & P. Winkielman (Eds.), *Emotion and consciousness* (pp. 335–362). New York: Guilford Press.
- Zeidner, M., Matthews, G. M., & Roberts, R. D. (2003). Development of emotional intelligence: Towards a multi-level investment model. *Human Development*, 46, 69–96.



Oscar Ybarra (oybarra@umich.edu) is a professor of psychology at the University of Michigan and directs the Adaptive Social Cognition Lab. He also is a faculty associate at the Research Center for Group Dynamics, Organizational Studies, and the Center for Entrepreneurship. His research focuses on the interplay between decision-making/problem-solving and social-relational processes. See also www.oscarybarra.com.

Ethan Kross (ekross@umich.edu) is an assistant professor of psychology at the University of Michigan and directs the Emotion and Self-Control Laboratory. He is also a faculty associate at the Research Center for Group Dynamics and the Depression Research Center. His research examines the psychological processes that underlie self-control. See also selfcontrol.psych.lsa.umich.edu.

Jeffrey Sanchez-Burks (jeffreysb@umich.edu) is an associate professor of management and organizations at the University of Michigan Ross School of Business and a faculty associate at the Research Center for Group Dynamics. His research focuses on the psychology of ideation, curation, and social-emotional and cross-cultural dynamics in organizations. See also [www.jeffreysanchezburks.com](http://jeffreysanchezburks.com).

