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Priming ability emotional intelligence

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ABSTRACT

Two studies examined whether priming self-schemas relating to successful emotional competency results in better emotional intelligence performance. In the first study participants were randomly assigned to a successful emotional competency self-schema prime condition or a control condition and then completed an ability measure of emotional intelligence (the MSCEIT). Participants in the emotional competency prime condition performed significantly better on the emotional intelligence tasks comprising the MSCEIT than those in the control condition. Participants in the second study were randomly assigned to conditions designed to prime one of the following: 1) success-related aspects of the emotional competency self-schema, 2) motivation-related aspects of the emotional competency self-schema, 3) a general emotional competency schema, or 4) attention to the self as a control condition. Participants primed for emotional competency success showed better emotional intelligence performance as assessed by the MSCEIT compared to the attention to the self control condition. The successful emotional competency prime most influenced strategic emotional functioning. These findings extend knowledge regarding the range of intelligence that can be primed and add to information relating to priming different aspects of the self-schema.

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1. Priming emotional intelligence

Emotional intelligence describes the process that connects cognitive ability with emotion to enhance thinking (Mayer, Roberts, & Barsade, 2008). The influential four-branch model of emotional intelligence posits that emotional intelligence consists of the abilities to accurately perceive emotions, use emotions to assist thinking, understand the nature of emotions and the communication aspects of emotion, and manage emotions (Mayer, Salovey, & Caruso, 2004, 2008). These abilities apply to perception, understanding and management of one's own and others' emotions. Mayer, Caruso, and Salovey (1999) argued that emotional intelligence meets the criteria for a type of intelligence in that it reflects mental performance, consists of related abilities, and develops with age. In line with this performance conceptualization, Mayer et al. (2004, 2008) recommended that emotional intelligence is best assessed through performance test measures.

Early criticism of the emotional intelligence construct suggested that it might not be a distinct construct that can be validly assessed (e.g., Roberts, Zeidner, & Matthews, 2002). Even though questions remain regarding the specific nature of emotional intelligence and how best to assess it, accumulating empirical evidence suggests that emotional intelligence can be reliably and validly assessed and that it can add predictive variance to other constructs (Joseph & Newman, 2010; Mayer, Roberts, et al., 2008, Mayer, Salovey, et al., 2008; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2010; Rossen & Kranzler, 2009; Song et al., 2010). Performance test measures of emotional intelligence are being used in applications varying from personnel evaluation (Antonakis, Ashkanasy, & Dasborough, 2009) to assessing social and cognitive deficits in schizophrenia (Eack et al., 2010). It is important to note that not all recent studies have found empirical support for unique contributions of the emotional intelligence construct (Lindebaum & Cartwright, 2010; Zeidner & Olnick-Shemesh, 2010). In a recent review, Zeidner, Matthews, and Roberts (2012) point out that while accumulated empirical evidence indicates that emotional intelligence is connected to a variety of mental health and socio-emotional outcomes, most emotional

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intelligence research is structural in nature in that it focuses on stable aspects of the individual and that a useful future direction would be to examine processes involved in the manifestation of emotional intelligence.

The present research examined whether emotional intelligence ability can be primed through self-generated cues relating to emotional competency self-schemas. Wheeler, DeMarree, and Petty (2007) argued that such inputs can directly activate behavior and can activate schemas relating to a realm of functioning, and these activated schemas in turn influence performance. Priming has been examined for performance in various important realms of functioning (Dijksterhuis & Bargh, 2001), but priming has not previously been examined for performance of the interrelated abilities comprising emotional intelligence.

The Mayer, Caruso and Salovey Emotional Intelligence Test (MSCEIT; Mayer, Salovey, Caruso, & Sitarenios, 2003) was designed to measure emotional intelligence ability and has been used in numerous studies. The overall results of these studies indicate that emotional ability as assessed by the MSCEIT is a unified concept with sub-factors (Fan, Jackson, Yang, Tang, & Zhang, 2010; Mayer et al., 2003; Rossen, Kranzler, & Algina, 2008). The highest level sub-factors are experiential and strategic functions. The experiential sub-factor, which includes perceiving and using emotions, lies at a more basic level of functioning than the strategic sub-factor, which includes understanding and managing emotions.

Studies have found higher emotional intelligence ability as assessed by the MSCEIT to be related to various positive characteristics, such as greater subjective well-being, better relationships, and better health, that one might expect to be associated with greater emotional ability (Brackett & Mayer, 2003; Brackett, Mayer, & Warner, 2004; Ciarrochi, Forgas, & Mayer, 2006; Lopes et al., 2004; Schutte, Malouff, & Hine, 2011; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). Studies of intensive skills training (Kotsou, Nelis, Grégoire, & Mikolajczak, 2011; Nelis et al., 2011) designed to increase emotional intelligence have found that these training interventions led to significantly improved outcomes in subjective well-being, social relationships, mental and somatic health, and employability. If priming is another mechanism through which emotional intelligence can be increased, this would present a promising complementary avenue for increasing beneficial outcomes associated with increased emotional intelligence.

Priming theories and research on priming in other realms of functioning provide rationales for expecting primes to influence emotional intelligence ability. Exposure to primes may make constructs related to the prime more generally accessible, and this access to constructs can impact subsequent behavior (Loersch & Payne, 2011). Priming can influence behavior both in beneficial and detrimental fashions. For example, Harris, Bargh, and Brownell (2009) found that food advertising can substantially increase snacking on both healthy and unhealthy foods. Just as individuals have constructs or schemas for other abilities, such as cognitive or athletic ability (Markus & Wurf, 1987), individuals may have in their self-schema system representations of the interrelated emotional abilities thought to comprise emotional intelligence, and activating these schemas may influence performance.

A number of studies have found that activating schemas through priming influences individuals' behavior and performance, ranging from altered facial expressions, to changed reaction time, to increased performance on mathematics problems, to changes in visual acuity (Dijksterhuis & Bargh, 2001; Langer, Djikic, Pirson, Madenci, & Donohue, 2010). For example, Langer et al. (2010) primed participants' mindset that pilots have better vision through asking them to role play being pilots by flying a simulator and found that these participants afterwards had better vision than participants in a control condition. Activating a stereotype schema of women having poor mathematics performance leads women to show poorer mathematics performance (Oswald & Harvey, 2001; Spencer, Steele, & Quinn, 1999). Importantly, priming a schema relating to good intelligence or mental performance can improve relevant performance (Burns & Isbell, 2007; Dijksterhuis & van Knippenberg, 1998; Lowery, Eisenberger, Hardin, & Sinclair, 2007; Wheeler et al., 2007). For example, Dijksterhuis and van Knippenberg (1998) primed participants' cognitive abilities by asking them to imagine and list, for 5 min, the behaviors, lifestyle and other attributes of either a professor or a secretary, while another group of participants received no prime. Participants who received the professor prime performed significantly better on a test of general knowledge than those who received the secretary prime or no prime. Burns and Isbell (2007) primed their participants to access malleable or fixed schemas of math intelligence and found that these primes interacted with participants' implicit theories of intelligence in influencing performance.

In a review of priming processes, Wheeler and DeMarree (2009) proposed that intelligence primes can operate through multiple paths, including direct activation of behavior, activation of a goal or motivation relating to a behavior, and activation of a self-schema that leads to a behavior. Based on a detailed analysis of literature on primes and behavior, Wheeler et al. (2007) suggested the following relationships between primes and self-schemas. As well as having a relatively static self-concept or schema, individuals have an active self-schema that is linked to the static self-schema. The static self-schema consists of a relatively stable representation of aspects of the self. The active self-schema is the individual's current state and draws on aspects of the static self-schema in response to situational inputs. The active self-schema responds to external stimuli, such as primes, that relate to the static self-schema. The change in the active self-schema then prompts changes in behavior. Research supports the proposal that primes that directly draw attention to the self are most likely to impact subsequent behavior (DeMarree & Loersch, 2009).

Priming aspects of the self-concept related to the set of interrelated emotional abilities described as emotional intelligence may have similar effects to those of priming schemas relating to other abilities. With the exception of the priming of cognitive intelligence, much priming research has focused on the priming of relatively uni-dimensional abilities. Emotional intelligence consists of interrelated facets, as does cognitive intelligence. Just as priming schemas relating to good performance of cognitive tasks may increase cognitive performance, so priming schemas relating to emotional competencies may improve performance on emotional intelligence. As with the priming of self-schemas relating to other abilities (Wheeler et