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Emotional Intelligence and the Honors Student

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ABSTRACT

Over the past decade the construct of emotional intelligence has captured the public imagination and become a hot topic in the popular media. While the extravagant claims for the importance of emotional intelligence have little empirical support, evidence has been growing for the existence of the construct. This study is an attempt to relate emotional intelligence to the decision of first-year college students to enroll in an honors program.

A measure of emotional intelligence was devised made up of four different Likert-type scales measuring different components of the construct. These scales were administered to 72 freshman students at a selective, private, liberal arts college. All 72 students were eligible for the college's honors program, but only 44 students chose to be a part of the program. Discriminant analysis confirmed that emotional intelligence, as measured by these 4 scales, was a significant predictor of the decision to enroll in the college honors program, predicting honors program involvement 76% of the time. This research indicates that differences in emotional intelligence may be a significant factor discriminating between honors students and their equally academically adept peers.

Few areas of psychology have generated as much popular interest and hyperbolic distortion as emotional intelligence. *Time* and *Newsweek* magazines have run cover stories on emotional intelligence and Oprah Winfrey has dedicated a show to the topic. The *Utne Reader* and *Parade Magazine* have both published "tests" of emotional intelligence which result in an "emotional quotient" that is, presumably, more predictive of real life outcomes than one's intelligence quotient. The International Society of Applied Emotional Intelligence exists to help the world raise its "EQ" and thus increase global harmony. *The Journal of Principled Conscience* offers "EQ activity books" for sale to help parents raise their children to have higher EQ. School curricula in over 700 school districts have been developed to help raise children's EQ (Goleman, 1997). Emotional intelligence is big business for consultants and education gurus. However, as a useful, valid psychological construct, emotional intelligence has a much more muted history.

EMOTIONAL INTELLIGENCE AND THE HONORS STUDENT

The relationship of reason with emotion has been a topic of inquiry for millennia. Commonly, emotion has been thought to be an impediment to reason, while some kinds of decision-making and ways of knowing were thought to be opaque to reason and known only to “the heart” (Mayer, Salovey, & Caruso, 2000). However, while Pascal wrote “The heart has its reasons of which reason knows not” (1966, p. 113), it may be that the reasons of the heart are an integral part of the mind’s ability to reason.

The genesis of the emotional intelligence construct is located in the history of intelligence theory and the study of individual differences. Most research on emotional intelligence uses an understanding of intelligence that follows Wechsler’s (1987) definition of intelligence as the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with the environment. This definition of intelligence is mirrored in the more recent definition of intelligence proposed by the American Psychological Association Task Force on Intelligence (Neisser, Boodoo, Bouchard, Boykin, Brody, Ceci, Halpern, Loehlin, Perloff, Sternberg, & Urbina, 1996): intelligence is the “ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, and to overcome obstacles by taking thought” (p. 77).

This concept of general intelligence focuses on a person’s overall intellectual functioning and has often been used to successfully predict academic and occupational achievement (Matarrazzo, 1972; Neisser, et al., 1996; Ree & Earles, 1992). However, it says little about the specific abilities of which such overall intellectual functioning is comprised. Therefore, a number of psychologists have sought to divide general intelligence into more specific intelligences that represent either groups of abilities or specific abilities (e.g., Cattell, 1963; Ceci, 1990; Gardner, 1983; Guilford, 1967; Sternberg, 1988; Thorndike, 1920; Wechsler, 1987). One early and influential division of general intelligence posits three classes of abilities (Mayer & Geher, 1996; Thorndike, 1920). These three classes of intelligence typically involve 1) abstract, analytic, and/or verbal intelligences, 2) mechanical, performance, visual-spatial, and/or synthetic intelligences, and 3) social and/or practical intelligences.

This third class of intelligences, the social intelligences, has been the least well studied of the three, perhaps because it has been the hardest to distinguish, theoretically and empirically. As a result, the psychological study of intelligence and subsequent tests of intelligence growing out of that study have tended to focus on “verbal” and “performance” elements, a focus with which many researchers and lay people are dissatisfied (Bar-On, 1997; Ciarrochi, Chan, & Caputi, 2000; Cooper & Sawaf, 1997; Goleman, 1995; Mayer & Salovey, 1997; Salovey & Mayer, 1990). Over the past two decades, however, the construct of social intelligence has been gaining more attention (Cantor & Kihlstrom, 1987; Gardener, 1983; Mayer & Geher, 1996; Sternberg & Smith, 1985). The idea of emotional intelligence is a part of this resurgent interest in social intelligence.

In the late 1980s two psychologists, Peter Salovey at Yale and John Mayer at the University of New Hampshire, began developing a construct that would allow them to organize the growing body of research on the importance of understanding and

LAIRD R. O. EDMAN AND SALLY OAKES EDMAN

using emotions and emotion-based information. Their construct, emotional intelligence, was first introduced in a somewhat obscure journal, *Imagination, Cognition, and Personality* (Salovey & Mayer, 1990), because no larger, more prestigious journals would accept their article (Salovey, 1998). In their 1990 article, Salovey and Mayer presented a conceptual framework for emotional intelligence and reported a study employing the first empirical test of emotional intelligence. In a follow-up editorial in 1993, in the journal *Intelligence*, Mayer and Salovey argued that emotional intelligence is an actual intelligence and that it may have better discriminant validity from general intelligence (that is, be a more completely separate construct) than the older, more common construct of social intelligence.

In 1995, Daniel Goleman, a science journalist, published a book that would go on to become the largest selling non-fiction book dealing with a psychological topic ever, *Emotional Intelligence*. In this book Goleman used Mayer and Salovey's work, but went far beyond Mayer and Salovey's rather modest suggestions about the existence and potential usefulness of the construct of emotional intelligence. The cover of Goleman's book made the audacious claims that emotional intelligence "redefines what it means to be smart" and "can matter more than IQ." Goleman's book was published a year after Murray and Herrnstein's controversial *The Bell Curve* (1994). Perhaps the American public was ready for a comforting antidote to Murray and Herrnstein's assertions in *The Bell Curve* about the genetic inevitability, immutability, and profound influence of IQ. Goleman's definition of emotional intelligence seemed to include personality factors that were not related to analytic IQ but which helped people get along in the world. Goleman reassured us that nice guys can finish first and that "book-smarts" aren't all they are cracked up to be.

While Goleman started an industry of self-help books, business consulting opportunities, and a new bandwagon for educators, Mayer, Salovey, and a number of other psychologists continued to refine and research the construct of emotional intelligence. Salovey and Mayer (1990) originally defined emotional intelligence as a type of emotional information processing that includes accurate appraisal and expression of emotion in the self and others; effective regulation of emotion in the self and others; and utilization of emotion in adaptive ways. The early definition used a two-part approach, first relating the general processing of emotional information and second specifying the abilities involved in such processing. Forming the groundwork for the emerging concept, emotions are considered as organized responses that are adaptive and can potentially lead to a transformation of personal social interaction into an enriching experience (Salovey & Mayer, 1990).

In 1997, Mayer and Salovey revised their definition to correct problems of vagueness: "Emotional intelligence refers to an ability to recognize the meanings of emotions and their relationships and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them" (Mayer & Salovey, 1997, p. 267). The revised definition encompassed a model involving the ability to perceive, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and employ emotional knowledge; and the ability to regulate emotions

EMOTIONAL INTELLIGENCE AND THE HONORS STUDENT

to promote emotional and intellectual growth. The key point in Mayer and Salovey's conception of emotional intelligence, and one echoed by other researchers, is the idea that emotion makes thinking more intelligent and that one thinks intelligently about emotions (Mayer & Salovey, 1997). This definition creates four branches of emotional intelligence which are hierarchical, moving from more basic psychological processes to higher processes, in a theoretically developmental way (Mayer, Caruso, & Salovey, 2000; Martinez-Pons, 1997; Mayer & Salovey, 1997).

The first and most basic component of emotional intelligence is the perception, appraisal, and expression of emotion. This involves the ability to perceive and identify emotional content in a variety of situations and from many different stimuli, within both the self and others (Mayer et al., 2000). This branch of the emotional intelligence construct also includes the ability to express emotion accurately and the ability to discriminate between accurate and inaccurate, or honest versus dishonest, expressions of feeling (Mayer & Salovey, 1997).

The second component of emotional intelligence concerns emotion acting on intelligence—that is, emotional events that assist intellectual processing. Abilities included in this branch of emotional intelligence include the ability to use emotions to prioritize thinking by directing attention to important information, the ability to generate emotions vividly so as to aid in judgment and recall, the ability to use emotion to help one consider multiple perspectives, and the ability to recognize different emotional states which facilitate different problem approaches (Mayer & Salovey, 1997; Mayer, et al., 2000; Salovey & Mayer, 1990).

The third component of emotional intelligence is the ability to understand emotions and use emotional knowledge. This includes labeling emotions and recognizing relations among the emotions. It also subsumes the ability to interpret the meanings that emotions convey regarding relationships, to understand complex feelings, and to recognize likely transitions among emotions, such as the transition from anger to satisfaction (Mayer & Salovey, 1997).

The fourth and highest branch of emotional intelligence is the reflective regulation of emotions to promote emotional and intellectual growth. This branch starts with the ability to stay open to feelings, both positive and negative. This progresses to the ability to reflectively engage or detach from an emotion, the ability to reflectively monitor emotions in oneself or others, and the ability to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant emotions without repressing or ignoring or exaggerating the information the emotions may convey (Mayer & Salovey, 1997; Mayer et al., 2000).

Emotional intelligence should help individuals to understand and predict aspects of everyday life, including emotion-eliciting life events, enable better adaptation to life events, and aid in life outcomes of mental health, relationship quality, work success, or physical health (Ciarrochi, Chan, Caputi, & Roberts, 2001; Mayer & Salovey, 1997). Individuals with low emotional intelligence are expected to adapt poorly to stressful life events, while individuals with high emotional intelligence should show more adaptive responses to stressful life events. Emotional intelligence is not only expected to relate to adaptation, but it is also expected to directly relate to life events and life outcomes. Ciarrochi, Chan, Caputi, and Roberts (2001) expect

LAIRD R. O. EDMAN AND SALLY OAKES EDMAN

that individuals high in emotional intelligence “will arrange their lives in such a way that they experience fewer negative life events. They may also be more skilled at establishing and maintaining high-quality relationships” (p. 27).

Research support for the construct of emotional intelligence is growing. The ability to extract emotional information from faces, colors, and even abstract designs has been found to be related to empathy (Mayer et al., 1990), indicating that the ability to perceive emotions is related to the ability to use emotional information. Styles of affect regulation have been found to be related to empathy and alexithymia (the inability to recognize or express emotions) (Bekendam, 1997). The ability of subjects to accurately judge the emotions of an individual based upon that individual's thoughts is related to self-reported measures of empathy and to reported SAT scores while it is negatively related to defensiveness (Mayer & Geher, 1996), findings which are congruent with the theory of emotional intelligence and support the emotional intelligence framework. Higher emotional intelligence covaries with greater internal openness and empathy for the feelings of others (Mayer & Geher, 1996; Mayer & Salovey, 1993). The ability to identify emotion in others is correlated with measures of tacit knowledge, social skills, constructive thinking, and academic success (Stewart, 1997). Emotional intelligence has been found to be a significant predictor of concern with task mastery, life satisfaction, and depression symptomatology in the manner expected (Martinez-Pons, 1997). Level of emotional intelligence is also related to the achievement and development patterns of academically successful women who were disadvantaged as children (LePage-Lees, 1997). Finally, individuals who experience their feelings clearly and who are confident about their abilities to regulate their affect seem to be able to repair their moods more quickly and effectively following disturbing experiences (Salovey, Mayer, Goldman, Turvey, & Palfai, 1993).

Given the nature of the construct, it seems possible that emotional intelligence may be one of the elusive factors that distinguishes students who choose to participate in honors programs from those who, when given the opportunity, decline honors participation. Very little research has been done concerning the characteristics of those who choose to enroll in college or university honors programs (Clark, 2000). The research that does exist is often focused on personality characteristics of students in honors versus those not in honors, rather than on measures of ability or emotional function. Examining personality variables has not yielded robust or consistent results (Clark, 2000). Another failing of much of this research is reliance on measures of dubious theoretical or psychometric value, such as the ubiquitous Myers-Briggs Type indicator.

Most college and university honors programs require enrollees to have some minimum standardized achievement test scores coupled with meeting criteria for high school class rank and/or grade point average and, in some cases, an interview or special application and essay (Schuman, 1989). However, not all students who qualify academically for enrollment into honors programs choose to do so. Anecdotal evidence suggests that students who choose to enroll in honors tend to be more highly motivated, more curious, and more optimistic than those who decline honors participation (Harte, 1994; Link, 1994; Schuman, 1989). Honors students also tend to

EMOTIONAL INTELLIGENCE AND THE HONORS STUDENT

exhibit more self-control and self-discipline and tend to be more reflective concerning their own and others' experiences than their equally academically adept counterparts (Rhode, 1994).

Emotionally intelligent people are predicted to have greater self-knowledge, self-discipline, and self-confidence, as well as more success and satisfaction in social relationships than those with low emotional intelligence. Therefore participants high in emotional intelligence could be expected to be more likely to embrace the challenge of honors. It is the hypothesis of this study that level of emotional intelligence can be used to predict the likelihood of a student choosing to enroll in collegiate honors coursework.

METHOD

PARTICIPANTS

Seventy-two first semester college students (30 males and 42 females) from a Midwestern liberal arts college completed the four measures. Their ages ranged from 17 to 20 years. All were eligible for the college's freshman honors program by virtue of graduating from high school in the top five percent of their graduating class. Forty-four of the eligible participants were actually enrolled in the college's liberal arts honors program while twenty-eight had declined.

MEASURES

Four Likert-type scale measures were used to assess emotional intelligence. The Hope Scale (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harney, 1991) is a 12-item scale, with 8 items measuring the disposition to be optimistic or hopeful, such as "There are lots of ways around any problem" and 4 filler items. The Activity-Feeling States Scale (Reeve & Sickenius, 1994) is a 13-item scale assessing the perceived benefits of participating in an activity or program in terms of increasing the subject's feelings of competence, relatedness with others, tension, and self-determination. It includes questions regarding how much being a part of a particular activity leads one to feel capable, pressured, and part of a team, among other items. The Learning Motivation Questionnaire (Ryan & Connell, 1989) consists of 16 items assessing subjects' motivation for furthering their education and for studying (i.e., the reason I go to school is so people in my life won't be disappointed in me). Finally, the Trait Meta-Mood Scale (Salovey, Mayer, Goldman, Tuvey, & Palfai, 1995) is a 30-item scale designed to measure the more enduring qualities of one's reflection on his or her mood states, including paying attention to one's mood (13 items), clarity of identification of mood (11 items), and ability to repair negative mood states (6 items).

RESULTS

A discriminant analysis was conducted to explore the ability of the emotional intelligence data to predict the choice to enroll in the honors program. Discriminant analysis is a procedure used to predict group membership from a set of predictors (in

this case, the scores on the four measures administered to the participants). Based upon the measures used in this study, emotional intelligence scores predicted the decision to enroll in honors courses 76% of the time, and predicted non-involvement 63% of the time, for an overall 71% prediction rate. These results are statistically significant ($p < .01$).

DISCUSSION

The results of this study are good news for honors programs and colleges because they suggest that students in honors are not only bright but also likely to have desirably high emotional intelligence as well. That level of emotional intelligence, as measured in this study, is a significant predictor of a student's decision whether or not to enroll in an honors program lends empirical support to the anecdotal evidence available from honors directors and deans about the characteristics of honors students. Students in honors often are not only talented intellectually but also motivated, curious, and apparently more mature than their peers. Such a presentation of maturity may be a result of an ability to perceive, understand, and manage emotions and emotional information. Because of their ability to manage their own emotional responses, emotionally intelligent people should exhibit more self-discipline and greater self-knowledge than less emotionally intelligent people. The students who embrace the added challenge of an honors program or college often exhibit more self-discipline and self-knowledge than their peers, perhaps because of their greater emotional intelligence.

Higher emotional intelligence should enable students to better control and use stress to their advantage and to use their own emotional responses to increase their motivation to work when they need to work. Students with high levels of emotional intelligence should be less defensive and thus be more open to new experiences. They should also be more socially skilled and thus more interested in and successful at the community created in many honors programs and colleges. Students with better ability to repair their own mood should be more willing to challenge themselves. These are all desirable traits that many honors directors and deans have noted in their honors students. The results of this study may also be a clue as to why so many honors programs seem to appeal to women more than to men. Research has repeatedly shown women to score higher on measures of emotional intelligence than do men (Martinez-Pons, 1997; Mayer & Salovey, 1997).

The results of this study are also good news for those of us interested in the construct of emotional intelligence because the hypothesis was supported. This lends more evidence for the validity and usefulness of the construct. This research bolsters the growing body of research in support of the theory of emotional intelligence.

A note of caution concerning the results must be voiced, however. Defining a construct as ambiguous and sizable as emotional intelligence is difficult. Accurately measuring the construct is even more difficult. The measures used in this study assess a conglomerate of skills that, theoretically, are a part of emotional intelligence. However, all the measures used in this study are self-report measures. While most existing measures of emotional intelligence are self-report measures, this does not

EMOTIONAL INTELLIGENCE AND THE HONORS STUDENT

seem to be the best way to measure an ability or intelligence (Mayer, 1998; Mayer, Salovey, & Caruso, 2000). While self-report measures are prevalent in emotional intelligence research, their use allows for the possibility that the measures have actually tapped into personality variables, for instance by measuring general level of ambition or emotion, rather than the ability to manage one's ambition or motivation through managing one's emotional responses. This subtle but important distinction would be addressed through replication of the study using ability measures. Therefore it is clear that replication is necessary to bolster our confidence in our conclusions about the relationship between emotional intelligence and honors participation. Additional research should be conducted using other measures of emotional intelligence and involving research designs that enable the researcher to determine the relative importance of personality and ability factors in students' decision to enroll in honors and in their ability to succeed in honors.

Another caution is in order. While the measurement issue might raise concerns about the internal validity of this study, the great variety of honors programs and colleges, as well as the great variety of honors students across the country, raises questions about the study's generalizability. Different honors programs and colleges have different missions, different methods of recruiting and selecting students, different pedagogies, and different requirements for admission to and completion of honors curricula. Again, more research is necessary before we can confidently generalize the results of this study to other honors contexts.

The results of this study are encouraging, however. If emotional intelligence is indeed a significant factor in distinguishing honors students from their non-honors peers, perhaps refining our measurement procedures could lead to better ways of selecting those students who will succeed in honors. If emotional intelligence is a learnable skill, then we may be able to increase honors participation and success by teaching incoming, academically talented students better emotional intelligence skills. If honors students do have higher emotional intelligence skills than their peers, then by being aware of this difference we may be able to capitalize on those skills in our curriculum and program development.

Emotional intelligence is an interesting, new, and potentially valuable construct that adds to our understanding of how people think and behave. It helps us to better understand what abilities are useful in enabling people to negotiate the complex inner world of the self and outer world of the other. If, as the present data suggest, honors students have high emotional intelligence, then knowing what emotional intelligence is and understanding how it works in the lives of our students will help us to better serve and challenge them. Learning about this seems an intelligent thing to do.

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LAIRD R. O. EDMAN AND SALLY OAKES EDMAN

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EMOTIONAL INTELLIGENCE AND THE HONORS STUDENT

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