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## Development and Psychometric Properties of the Emotional Intelligence Admission Essay Scale

Sharon A. Gutman  
Columbia University - USA, [sg2422@columbia.edu](mailto:sg2422@columbia.edu)

Janet P. Falk-Kessler  
Columbia University - USA, [jf6@cumc.columbia.edu](mailto:jf6@cumc.columbia.edu)

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## Development and Psychometric Properties of the Emotional Intelligence Admission Essay Scale

### Abstract

The purpose was to describe the development and psychometric properties of the Emotional Intelligence Admission Essay scale. The authors developed an admission essay question and rating scale designed to provide information about applicants' emotional intelligence (EI). Content validity, convergent validity, interrater reliability, and internal consistency were established. The scale was also examined to determine if it could discriminate between students with and without professional behavior problems in the academic and fieldwork settings. Content validity was found to be high by a panel of three experts in EI (content validity index = 1.0). Convergent validity with the Assessing Emotions Scale was moderate ( $r = .46, p < .02$ ). Interrater reliability between two trained faculty raters was high ( $ICC = .91, p < .000$ ). Internal consistency of the scale was high with a Cronbach's alpha of .95. This version of the scale was not able to discriminate between students with and without professional behavior problems. The moderate to strong psychometric properties suggest that the EI Admission Essay Scale has the ability to provide information about applicants' EI. The wording of the essay question must be modified to better instruct applicants to address interpersonal conflict.

### Keywords

admission selection, instrument development, occupational therapy

### Cover Page Footnote

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### Credentials Display and Country

Sharon A. Gutman, PhD, OTR, FAOTA

Janet P. Falk-Kessler, EdD, OTR, FAOTA

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Emotional intelligence (EI) is a form of social intelligence that involves the ability to (a) recognize and appraise emotions in oneself and others, (b) regulate and manage emotions in oneself and others, and (c) use emotion-based information to guide behavior and problem solving (Arora et al., 2010). Salovey and Mayer (1990) first developed the term and argued that EI was a distinct set of skills that were separate from personality traits and previously identified types of intelligence. Later researchers extended the definition of EI by dissecting the construct into inter- and intrapersonal intelligences, wherein interpersonal intelligence involves the ability to (a) accurately read and assess other's verbal and nonverbal expressions; (b) easily build rapport with others using an open, compassionate countenance that demonstrates interest in others; and (c) successfully diffuse and negotiate interpersonal conflict (Carrothers, Gregory, & Gallagher, 2000; McQueen, 2004). Intrapersonal intelligence involves the ability to (a) recognize emotion in oneself and understand its origin, (b) be aware of how one's emotions impact one's behaviors and influence others, and (c) monitor and regulate one's emotions to enhance emotional stability and wellness (Elam, 2000; McQueen, 2004). Research examining EI is relatively new and debate exists regarding whether EI is a personality trait that can be shaped within a set of parameters rooted in genetics and environment, or whether EI is a skill that can be taught and learned without a ceiling for potential (Petrides & Furnham, 2001).

EI is a critical skill for occupational therapists, and clinical competencies relating to EI involve the ability to work collaboratively with a team of health care professionals; identify and manage patient emotions to adeptly address patient concerns and needs; identify and manage team member emotions to promote patient advocacy and diffuse possible professional domain conflicts; communicate with patients, family members, caregivers, health care providers, and insurers to ensure optimal patient care; educate caregivers who may feel overwhelmed and ill-prepared to assume caregiving responsibilities; and work cooperatively and compassionately with people from varied and diverse cultural groups (McQueen, 2004; Victoroff & Boyatzis, 2013). Given the great extent of clinical competences that directly relate to EI, it is surprising that this construct has not been formally examined in occupational therapy admission selection criteria.

Occupational therapy program admission selection criteria have traditionally relied on the cognitive measures of cumulative grade point average (GPA), prerequisite GPA, science GPA, and preadmission standardized tests, such as the Graduate Record Exam (GRE) (Romanelli, Cain, & Smith, 2006). Traditionally used noncognitive measures have included interviews, personal statements and essays, volunteerism, and prior service and health care experience (Jones-Schenk & Harper, 2014). While the above cognitive and noncognitive measures have been shown to provide accurate predictive information about an applicant's

academic performance in graduate school (Carr, 2009), they do not provide information about an applicant's potential clinical performance and professional behaviors in the academic program and fieldwork experiences. Given the large number of occupational therapy clinical competencies that relate to EI, it seems prudent to have an admission criterion that measures an applicant's EI and can identify students who have both the academic skill and EI needed to succeed in an occupational therapy program and career. The need for an EI measure in the admission selection process has been elevated by the growing number of occupational therapy school applications in the last decades (American Occupational Therapy Association [AOTA], 2014); the inflation of academic grades at the college and university level, which lessens the rigor of GPA as a reliable assessment measure (Jewell, McPherson, & Tieslau, 2013); and the generational difference in students applying to health care programs, as the students may have values and professional behaviors that are incongruent with health care professions and which may be qualitatively different from applicants of past decades (Romanelli et al., 2006). The *U.S. News and World Report* (2015) ranked occupational therapy ninth among the best health care jobs. Further, applications to occupational therapy schools have more than doubled in the last decade (AOTA, 2014). Applicants who may not have the propensity for a health career, but who are attracted to the job security and higher salaries that health careers provide, have increasingly applied to health care

schools in the last decade (Buerhaus, Auerbach, & Staiger, 2009). It has been the authors' experiences that some students have professional behavioral problems related to EI throughout the academic and fieldwork curricula. In the Occupational Therapy Program at Columbia University Medical Center (CUMC), we receive a high amount of applications but are only able to admit 10% of our applicant pool. Our desire to identify students with higher levels of EI—and flag students who may not be adequately suited for an occupational therapy career—underpins our effort to develop an EI admission assessment that can be used adjunctly with traditional cognitive and noncognitive measures. Occupational therapy programs that identify students with limited EI may prefer to help students develop EI in the occupational therapy curriculum.

Other health care professions have begun to recognize the value of using EI measures in the admission selection process. Much of the literature addressing the EI of health care student applicants has been generated by the professions of medicine, nursing, dentistry, and pharmacy (Arora et al., 2010; Lyon, Trotter, Holt, Powell, & Roe 2013; Romanelli et al., 2006; Victoroff & Boyatzis, 2013). These studies have found that students with high levels of EI as measured on standardized assessments demonstrate higher levels of clinical performance (Codier, Kofoed, & Peters, 2015; Hannah, Lim, & Ayers, 2009; Rankin, 2013), are more highly rated by clinical supervisors and patients (Arora et al., 2010; Hannah et al., 2009;

Rankin, 2013; Victoroff & Boyatzis, 2013), are more likely to complete their professional health care education programs (Jones-Schenk & Harper, 2014; Rankin, 2013), and are better able to work collaboratively on treatment teams as assessed by supervisors (Arora et al., 2010; Victoroff & Boyatzis, 2013). Most of the EI measures used in these studies were administered to students already matriculated in health care programs, and all of the authors supported the need for the incorporation of EI measures administered during the admission process.

Although the need for and value of EI measures used during the admission selection process of health care programs is clear, the most practical and reliable type of EI measure is of debate. The most commonly available form of EI measure is a paper and pencil or computer-generated test (Arora et al., 2010). Such assessments either (a) pose scenarios and ask respondents to identify the most emotionally intelligent answer through a multiple choice format or (b) are self-report measures that ask respondents to identify to what extent they identify with a specific skill (e.g., “I am able to read other’s facial expressions to determine their mood.”) (Fiori & Antonakis, 2011). Another form of EI assessment that is gaining interest among health care programs is the structured interview, in which a specific set of questions is asked of all applicants (Latif, 2004; Levashina, Hartwell, Morgeson, & Campion, 2014; Pau et al., 2013). In the structured interview, applicants may be consecutively interviewed by

several interviewers who are all trained in interview administration and have established interrater reliability in the use of a standardized EI rating scale. While the use of face-to-face structured interviews and standardized paper and pencil or computer-generated tests are often reliable and valid, they can be costly and labor intensive. Most EI measures with established reliability and validity are expensive and an administration fee is charged per student. Structured interviewing is time and labor intensive and requires the training of interviewers in both administration and assessment.

In response to the need to incorporate a practical and reliable EI measure into the admission selection process, the faculty in the Occupational Therapy Program at CUMC have developed an essay question and rating scale—the EI Admission Essay Scale—which may have the ability to provide information about an applicant’s EI. The essay question asks applicants to describe:

1. A conflict situation in a work, school, or personal event.
2. How the applicant knowingly or unknowingly contributed to the conflict.
3. How he or she attempted to resolve the conflict based on the ability to use emotion-based information to guide problem solving.

The instrument used to assess the applicant’s essay is a 5-item, 4-point Likert scale with a range from 0 (*no evidence*) to 3 (*strong evidence*). The purpose of the present study was to develop the pilot version of the EI Admission Essay Scale, and to establish content and convergent validity, interrater

reliability, and internal consistency. We also hoped to determine whether the scale is able to discriminate between students who have professional behavior problems in the academic and fieldwork setting and students who do not.

The research questions were:

1. Can an admission essay question and rating scale be developed to provide information about an applicant's EI?
2. Using a panel of three experts in EI research, what is the content validity of the EI Admission Essay Scale?
3. Does the EI Admission Essay Scale have convergent validity with the Assessing Emotions Scale (Schutte, Malouff, & Bhullar, 2009; Schutte et al., 1998)?
4. Can interrater reliability be established for the EI Admission Essay Scale using trained occupational therapy faculty raters?
5. What is the internal consistency of the EI Admission Essay Scale using data from first-year students in the CUMC Occupational Therapy Program?
6. Can the EI Admission Essay Scale discriminate between students who have professional behavior problems in the academic and/or fieldwork setting and students who do not?

## Method

### Research Design

This study described the development of a pilot assessment intended to measure EI in occupational therapy program applicants.

Psychometric properties of the pilot instrument that were established included content and convergent validity, interrater reliability, and internal consistency, as described below. We also examined whether the EI Admission Essay Scale could discriminate between students with and without professional behavior problems. The CUMC IRB approved this study and all of the participants provided consent.

### Phase 1: Content Validity

**Participants.** To establish content validity of the EI Admission Essay Scale we assembled a panel of three professionals with expertise in EI research and literature. One expert was a physician educator who developed and implemented admission interview procedures for medical school applicants to ascertain information about EI. A second expert was a director of student wellness at a large, urban, northeastern university and specialized in EI. A third expert was a professor in the Center for Educational Research and Evaluation at CUMC and taught coursework in EI.

**Procedures.** To develop the essay question and rating scale, the authors completed a literature review of EI research and divided the construct into its component parts of intra- and interpersonal intelligence. Since successful conflict negotiation is a key determinant of higher levels of EI (McQueen, 2004; Victoroff & Boyatzis, 2013), we developed a question in which applicants were asked to describe a conflict situation that occurred in a work, school, or personal situation. To gain insight into the applicant's awareness of ways in which his or her

behavior and emotions impacted others (intrapersonal intelligence), applicants were asked to describe how they may have knowingly or unknowingly contributed to the conflict. To gain information about the applicant's ability to consider others' emotions and work collaboratively (interpersonal intelligence), we then asked applicants to describe their attempts at conflict resolution. Applicants were asked to address this question in 750 words. The question read as follows: "Describe a conflict that existed in a class, job, or life event in which you were a participant. How did you contribute wittingly or unwittingly to this conflict? How was the conflict handled by all involved parties?"

To develop a rating scale that could evaluate the EI content of the essay, we returned to our list of component parts of EI and formulated five scale items that addressed both intra- and interpersonal intelligence, as described below. The scale items more heavily focus on interpersonal skills since such skills underlie a majority of clinical professional behaviors (McQueen, 2004; Victoroff & Boyatzis, 2013).

1. The applicant was able to place self in others' shoes to understand others' experiences, emotions, and perspectives in a conflict situation. (interpersonal intelligence)
2. The applicant was able to understand how one's own actions contributed to a conflict. (intrapersonal intelligence)

3. The applicant attempted to understand the conflict situation without blaming others for the conflict. (interpersonal intelligence)

4. The applicant attempted to create a resolution that benefitted all parties of a conflict to an extent possible. (interpersonal intelligence)

5. The applicant was able to cooperate equally with others in a conflict situation to problem solve and form a resolution to the conflict (i.e., did not monopolize problem solving or present oneself as hero). (interpersonal intelligence)

**Data collection.** The expert raters were then provided with the essay question, a list of scale items, and a rating scale form and were asked to complete and return the rating form via email. The experts did not consult with one another or have access to each other's scores.

**Data analysis.** We then completed a content validity ratio (CVR) (Lawshe, 1975) by asking the three experts to determine whether each scale item was congruent with the construct of EI. The experts rated each scale item using a 3-point scale where 0 = *not essential*, 1 = *useful*, and 2 = *essential*. The CVR for each item was calculated using a formula (see Figure 1) where *ne* is the number of experts who rated the item as essential and *N* is the total number of experts.

$$\text{CVR} = \frac{ne - N/2}{N/2}$$

Figure 1. Content validity ratio.

A content validity index (CVI), the score for the entire instrument, was then calculated by determining the mean for all retained items (Lawshe suggested that items receiving a 0 be discarded). Using a CVI, items require a .83 level of endorsement to establish content validity (DeVon et al., 2007); however, if four or fewer raters are used, the CVR for each item must be 1 to demonstrate content validity.

After establishing content validity for the five scale items, we developed a 4-point rating scale for all of the items where 0 = *no evidence*, 1 = *minimal evidence*, 2 = *moderate evidence*, and 3 = *strong evidence*. Possible total scores range from 0 to 15 with higher scores indicating higher EI.

**Results.** All three of the experts rated each of the five essay scale items as essential (2.0), which resulted in a CVR of 1.0 for each item and a CVI of 1.0 for the entire scale. As a result, this pilot version of the scale was determined to have high content validity with the construct of EI.

### **Phase 2: Convergent Validity**

**Participants.** To enroll in this study, participants had to be matriculated first- or second-year students in the CUMC Occupational Therapy Program who completed the EI Admission Essay Scale as part of their application process. Participation was voluntary and the students could choose not to participate. The students were recruited through an email invitation with an embedded link to an online version of the Assessing Emotions Scale (Schutte et al., 1998, 2009). We retrospectively collected the admission essay

questions of applicants enrolled as current first- and second-year students.

**Procedures.** To establish convergent validity, we correlated EI Admission Essay Scale scores of 40 first- and second-year students with their scores on the Assessing Emotions Scale (Schutte et al., 1998, 2009). The Assessing Emotions Scale is a self-report measure of EI based on Salovey and Mayer's (1990) original model of EI (Mayer & Salovey, 1993). The scale has 33 items, uses a 5-point scale (1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, 5 = *strongly agree*), and requires approximately 5 min to complete. Total scores range from 33 to 165, with higher scores indicating higher levels of EI.

Internal consistency of the scale was reported to be high with a Cronbach's alpha of .90 (Schutte et al., 1998, 2009). Schutte also reported that test-retest reliability was moderately high ( $r = .78, p < .05$ ). Convergent validity with the Emotional Quotient Inventory (Bar-On, 1997) was found to be moderate ( $r = .43, p < .05$ ) (Schutte et al., 1998, 2009).

**Data collection.** Both the first- and second-year participating students completed the Assessing Emotions Scale during the same 1-month period; however, the first-year students completed the scale in the first semester of their academic program, while the second-year students completed the scale in the third semester of their academic program. To determine that length in the academic program did not influence student EI scores, we analyzed whether a statistically significant difference existed



between first- and second-year student scores on both the EI Admission Essay Scale and the Assessing Emotions Scale.

An admissions coordinator retrieved the essay questions, which the students had completed as part of the application process, from the students' files and coded and masked them. The students completed the Assessing Emotions Scale anonymously using their university ID numbers as codes. The admissions coordinator maintained the master list linking codes to student names on a password protected and encrypted computer.

Both of the authors rated all 40 student EI Admission Essay Scales, first separately and then together to establish consensus when disagreement occurred. All of the essays were masked and the authors were blinded to each other's initial scores. Interrater reliability between both of the authors was found to be high for separate, blinded ratings ( $ICC = .94, p < .01$ ).

**Data analysis.** Data were entered into SPSS version 21 and level of significance was set at .05. To determine if EI Admission Essay Scale scores correlated with scores of the Assessing Emotions Scale, a Spearman rho correlation coefficient was used (Portney & Watkins, 2013).

**Results.** The data from 27 first-year and 13 second-year students ( $N = 40$ ; male = 7, female = 33; White = 31, Asian = 5, African American = 2, Native American = 1, Hispanic = 1) were used to establish convergent validity between the EI Admission Essay Scale and the Assessing Emotions Scale. Convergent validity between these two

scales was found to be moderate at  $r = .46, p < .02$ . Because the first- and second-year students completed the Assessing Emotions Scale at different times in their curricula, we used a Mann Whitney U test to examine whether the first- and second-year students differed in their EI levels (Portney & Watkins, 2013). A difference found may have been attributed to the year in program; however, no statistically significant difference was found between the first- and second-year students on both their EI Admission Essay Scale scores and the Assessing Emotions Scale scores.

### **Phase 3: Interrater Reliability**

**Participants.** To establish interrater reliability of the EI Admission Essay Scale, two faculty members of the CUMC Occupational Therapy Program volunteered to serve as raters. These faculty members responded to an email invitation sent by the first author to all 10 full-time faculty members of the CUMC Occupational Therapy Program.

**Procedures.** The two faculty members received one hour of training in EI Admission Essay Scale rating procedures. The first author provided the training. After training, the raters were asked to separately rate three masked essays randomly selected from the total pool of 54 essays submitted by the first-year class; the authors randomly selected the essays using a table of random numbers.

**Data collection.** The raters' scores for the three essays were completed separately and submitted by email one day after their training

period. The raters were blinded to each other's scores.

**Data analysis.** Data were entered into SPSS version 21 and level of significance was set at .05. An intraclass correlation coefficient was used to determine interrater reliability between the two trained raters (Portney & Watkins, 2013).

**Results.** Interrater reliability was found to be high ( $ICC = .91, p < .000$ ).

#### **Phase 4: Internal Consistency**

**Participants.** To determine the internal consistency of the EI Admission Essay Scale, we used the retrospectively collected admission essays of the 54 applicants admitted as current first-year students (male = 10, female = 44; White = 44, Asian = 4, African American = 4, two or more races = 2).

**Procedures.** The admissions coordinator retrieved, masked, and coded the essays of the 54 matriculated first-year students. The authors had already rated all of the essays during the procedures used to establish convergent validity. As stated above, both of the authors rated the essays, first separately while blinded to each other's scores, and then together to address the existence of differences until they reached consensus. Achieving consensus was important to create one score for each essay item so that internal consistency could be determined. Interrater reliability between both of the authors for blinded rating was high ( $ICC = .94, p < .01$ ). After both authors rated the essays of all 54 first-year students and one score was established for each item (for all essays), the item scores for all

essays were compared to determine internal consistency.

**Data collection.** The students completed the EI essays approximately 6 to 8 months earlier as part of their admissions application. This data set was retrospectively collected for this study by the admissions coordinator. The essays were masked and the authors were blinded to each other's scores in the initial phase of rating.

**Data analysis.** Data were entered into SPSS version 21 and level of significance was set at .05. To determine if a correlation existed between scale items, a Cronbach's alpha correlation coefficient was used (Portney & Watkins, 2013).

**Results.** Internal consistency was found to be high with a Cronbach's alpha of .95.

#### **Phase 5: Discrimination between Problematic and Nonproblematic Students**

**Participants.** Data were the retrospectively collected admission essays of 54 admitted first-year students.

**Procedures.** One objective of this study was to determine if the EI Admission Essay Scale could discriminate between students who demonstrated professional behavior problems in the academic and fieldwork environments and those who did not. We decided not to determine if EI Admission Essay Scale scores correlated with student scores on the American Occupational Therapy Association (AOTA) Fieldwork Evaluation (AOTA, 2002) because the raters of the AOTA assessment had not attained interrater reliability with each other. Instead, we first identified those

students who demonstrated problematic professional behaviors in the academic and fieldwork environments and then determined if a statistically significant difference existed between their EI Admission Essay Scale scores and the scores of students who did not demonstrate professional behavior problems. The students who were identified as having problematic professional behaviors in the academic setting had received professional development forms and counseling from advisors. The students identified as exhibiting problematic professional behaviors in the fieldwork setting (Level I or II) had received behavioral contracts or had been withdrawn from or failed fieldwork.

**Data collection.** Data used to determine whether EI Admission Essay Scale scores could discriminate between problematic and nonproblematic students were the (a) student EI Admission Essay Scale scores, (b) student records of professional development forms (indicating that an academic advisor counseled the student as a result of problematic professional behaviors), and (c) documentation of fieldwork behavioral contracts or withdrawal/failure. Examining whether the EI Admission Essay Scale could discriminate between students with and without professional behavior problems required that we unmask and link essays with academic and fieldwork performance information. For this reason, we completed this step as a final study activity to avoid biasing the procedures used to establish convergent validity, interrater reliability, and internal consistency.

**Data analysis.** To determine if the EI Admission Essay Scale could discriminate between students who experienced professional behavior problems and those who did not, we used a Mann Whitney U test (Portney & Watkins, 2013).

**Results.** Five students demonstrated problematic professional behavior in the academic and fieldwork settings during the first-year curriculum. A Mann Whitney U test showed no statistically significant difference between the EI Admission Essay Scale scores of these five students and the remaining 49 of the first-year class. Despite a lack of statistical significance, however, it is interesting to note that these five students all obtained scores of 0 on their EI Admission Essay Scales, indicating the lowest possible score. Other students, however, also obtained scores of 0 because they either failed to answer the question or showed no evidence of EI in their essays. When examining the 54 essays as a whole we found that only 18 (33.33%) answered the question and wrote about an experience of interpersonal conflict. Sixteen (29.62%) misinterpreted the question and wrote about an internal conflict that did not involve the ability to interpret and address others' emotions. Twenty (37.03%) did not answer the question and wrote about their background, achievements, and career goals (see Table 1). Because of the large number of students who did not adequately answer the question and received a low score or a score of 0, it was difficult to statistically discriminate between students who possessed professional behavior problems and those who did not.

**Table 1***Distribution of EI Admission Essay Scale Scores*

Participant	EI Admission Essay Scale Score
1	14*
2	13*
3	13*
4	12*
5	11*
6	11*
7	10*
8	10*
9	9*
10	7*
11	6*
12	6*
13	3*
14	3*
15	2*
16	2*
17	2*
18	2*
19	2**
20	2**
21	2**
22	1**
23	1**
24	1**
25	1**
26	1**
27	1**
28	1**
29	1**
30	1**
31	0**
32	0**
33	0**
34	0**
35	0***
36	0***
37	0***
38	0***
39	0***
40	0***

41	0***
42	0***
43	0***
44	0***
45	0***
46	0***
47	0***
48	0***
49	0***
50	0***
51	0***
52	0***
53	0***
54	0***

*Note:* \*Indicates scores of applicants (n = 18, 33.33%) who answered the question and wrote about an experience of interpersonal conflict. \*\*Indicates scores of applicants (n = 16, 29.62%) who misinterpreted the question and wrote about an internal conflict that did not involve the ability to interpret and address others' emotions. \*\*\*Indicates scores of applicants (n = 20, 37.03%) who did not answer the question and wrote about their background, achievements, and career goals.

## Discussion

This study aimed to determine if an admission essay scale could be developed that could capture information about an applicant's EI. The study also sought to establish the psychometric properties of content validity, convergent validity, interrater reliability, and internal consistency for this pilot version of the EI Admission Essay Scale. Because high content validity was established with a panel of experts and moderate convergent validity was found between the EI Admission Essay Scale and the Assessing Emotions Scale, we suggest that

the EI Admission Essay Scale can yield information about an applicant's EI.

Although we hoped that the EI Admission Essay Scale could discriminate between students with and without professional behavior problems, we found that this version of the essay question was not able to do so, primarily because a large number of student applicants misinterpreted the question and wrote about an internal conflict rather than an interpersonal one. Although student essays addressing internal conflicts did provide some

information about EI, the essay content failed to address information about interpersonal intelligence. We realize that our question must be rewritten to provide clearer instructions about required essay content, particularly addressing interpersonal conflict (see Figure 2). Once the question is rewritten, we believe that the essay will have greater potential to yield information about EI and possibly predictive validity with classroom and fieldwork professional behaviors.

Describe an interpersonal conflict in which you were involved during the past year or two. An interpersonal conflict is a situation in which you and others experienced discord and disagreement with each other due to differences in perceptions and opinions related to the conflict area. The conflict could be one that occurred in school, work, family life, or recreation. The conflict should not be an internal conflict that you alone experienced.

Please address the following:

- a. Describe the conflict and how it came to occur.
- b. Describe individual emotions, needs, and desires each person had regarding the conflict and its outcome (including your own).
- c. Describe how you knowingly or unknowingly contributed to the conflict.
- d. Describe whether a resolution was achieved and how the resolution was generated.
- e. Describe the conflict outcome.

*Figure 2.* Revised essay question with emphasis on the description and resolution of an interpersonal conflict that the applicant experienced with other people.

The high level of interrater reliability, internal consistency, and content validity established for this pilot version suggest that the scale items are easily measured and address the construct of EI. Further refinement of the actual question has the potential to produce an admission selection measure that can help occupational therapy programs more effectively identify students with higher levels of EI.

Although we did not examine the use of the question and scale as an interview procedure, there may be potential for the instrument to be used in this way. There is some evidence that interview procedures are able to capture applicant EI more effectively than written essays due to the interviewer's ability to redirect applicants when they do not answer the question (Latif, 2004; Levashina et al., 2014; Pau et al., 2013). In our study, we found that approximately one-third of the

applicants misinterpreted the question. Another third chose not to address the question and instead wrote about a subject of their own choosing. In an interview situation, such applicants could be redirected by the interviewer. Structured EI interviews—in which the interviewer asks structured questions about specific scenarios to yield EI information—have been found to be more time consuming than typical admission interviews because of the time needed to redirect applicants to address desired content (Levashina et al., 2014; Pau et al., 2013). In a high-stakes situation, such as a college interview, applicants may be more guarded and hesitant to talk about their experience of interpersonal conflict. The same may be true with the question when it is used in an essay format. In our study, two thirds of the applicants wrote about situations they may have perceived as safe content for a college essay, such as experiencing an internal desire to change careers. It may be likely that students with lower levels of EI are less comfortable talking about their emotions and interpersonal conflict. Further testing of the conflict question used in a face-to-face interview may provide information about which format (essay or structured interview) yields greater information about an applicant's EI.

### **Limitations**

One limitation of the study was the small sample size and the predominance of white females as participants. Although the CUMC Occupational Therapy Program has a more diverse student population compared to the national average of

occupational therapy schools (AOTA, 2014), our study sample nevertheless consisted largely of young adult white females. While our sample reflects the national average, having a more diverse and larger sample would likely yield greater information about EI in student applicants. A larger sample size would also enhance statistical power and rigor of results. Although our expert panel rated the scale items as having high content validity, we only used three experts. Content validity would be stronger if repeated with five or more experts.

### **Future Research**

While the initially established psychometric properties of the EI Admission Essay Scale were moderate to strong, we realize that the wording of our question must be made more specific and direct applicants to write about an interpersonal conflict. Once our question is rewritten for the subsequent scale version, it will be important to reassess psychometric properties. Future research is also needed to understand if the next scale version can discriminate between students with and without professional behavior problems in the academic and fieldwork settings. Additional research could also be undertaken to understand if the question can be used in a structured admission interview format to yield information about applicant EI.

### **Summary**

This study described the development of an admission essay scale designed to yield information about applicant EI and reported the scale's initial psychometric properties. Although initially established psychometric properties of the scale

were moderate to strong, the wording of the essay question must be modified to help applicants focus their writing on interpersonal conflict. Despite the need for modification of question wording, findings of this study demonstrate that the EI Admission Essay Scale, once revised, has the potential to be used as an admission selection criterion that can help occupational therapy programs better identify students with higher levels of EI.

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