

Appendix

What's next?

In the past few years, I have still been thinking about research projects on the emotional intelligence (EI) construct. There are at least three things I want to do, but not very successful up to now. The first thing is to build up a scientific theory of EI. All of the studies we had conducted were basically around the construct of EI. We are not able to build up a theory yet. Drawing from the overall perspective of human resource management, we made the argument that EI would interact with emotional labor in affecting job outcomes. This is just an application of an overall perspective but not a sophisticated theory. As discussed briefly in [Chapter 1](#), a theory should include at least some basic assumptions about the phenomena we encounter (e.g., human nature), constructs and their relationships, the rationale behind the relationships, and boundary conditions for the relationships.

The closest we get is the discussion about the performance model based on various functions of the human mind, that is, in the study on Chinese scientists reported in [Chapter 6](#). In fact, we got a best-paper award from the *Asia Pacific Journal of Management* for that year mainly because of the proposal of such a model. However, we did not test the model directly, and I myself would not regard the model as a sophisticated theory. For example, we discuss only performance as the dependent variable. This may be too narrow regarding the role of EI in the workplace. We may need much more work in order to build up a theory of EI.

This weakness of working on a construct instead of theory may be common in my area of study. When I was a doctoral student in the late 1980s, I remember that the focus of my major courses was more on various theories (e.g., learning and motivation, job design, and decision making) than individual constructs. However, studies reported in mainstream journals since the 1980s have usually been around a particular construct. Many new constructs have been proposed and studied, but relatively few theories have been developed. I believed that when we had sufficient knowledge about a construct, we should be able to develop a theory to help explain phenomena of a broader scope. I wish this would happen for the EI construct in the future.

The second thing I attempted to do is to study EI from the physiological perspective. My idea is that as EI involves brain activities, the most convincing evidence is to observe the brain activities when people are dealing with emotional issues or problems. Brain-imaging techniques may provide the opportunity to study EI from this physiological perspective. Thus, we can design experimental materials that can stimulate people's emotions and force them to face and handle emotional issues. Brain activities during the process of handling emotional issues can then be observed.

Unfortunately, after visiting some of the brain-imaging facilities and reading more about this technique, I found that it was not as sophisticated as I had imagined. While brain imaging could examine brain activities, it was still difficult to observe the reaction of the brain for a relatively long period of time. Usually, it would work best if we tried to spot the brain reaction at a particular point in time, but not the whole process. Despite this limitation, I wrote up a research proposal and tried to obtain research money to work on

brain-imaging projects. Research grants were necessary because it would be very costly to use brain-imaging machines.

The reviewers of the grant proposal had extreme opinions in opposite directions. In Hong Kong, reviewers used a 5-point scale to evaluate our grant proposal (1 means absolutely not suitable to be funded, while 5 means a project definitely should be funded). If the average score of a proposal was less than or equal to 4, it would not have a chance to be discussed by the panel making the final decision. The score of my proposal was 3 because reviewers gave it either a 5 or a 1. I am not sure if I should proceed further with this idea because I will retire within a few years. Perhaps it is better to let future scholars to work on it, especially when brain-imaging techniques become more advanced and not so costly. However, it may be an important step to uncover how human beings actually deal with emotional issues.

The third type of projects I wanted to do is how we could actually apply our understanding of the EI construct to help practitioners better utilize their human resources. One logical step is to help them select applicants with higher EI for jobs that have high emotional labor requirements. Existing measurements of EI may not be very suitable for various reasons such as cross-cultural generalizability, relatively high cost, and the ease with which job applicants can fake their responses. Human resource practitioners may also be skeptical about using a paper-and-pencil test to assess this type of construct.

Several years ago, my co-author and I came up with an idea that perhaps we could develop some job-specific EI interview questions. An interview is the most common selection tool that human resource practitioners are familiar with. If we could develop questions based on specific job contents and differentiate applicants' EI level based on

their answers, there would be a high chance that practitioners would adopt this selection mechanism.

The dilemma of going in this direction is that it would be a study on a particular technology rather than developing and testing scientific theories. As explained in previous chapters, the original purpose of scientific research is to develop and test scientific theories. To develop interview questions and a scoring mechanism for them for a particular job is basically a project that comes up with a specific technology. In the past 20 years, the academic discipline of management has been emphasizing the conceptual contribution of research papers. That is, our work should contribute to the advancement of conceptual arguments and theories. This viewpoint is accepted by many journal editors and reviewers. A research paper focusing on the development of a particular technique for a particular job would have great difficulty getting published in academic journals.

Despite this dilemma, we went ahead with conducting the project. One reason was that my co-author in Taiwan needed to supervise master's students. Many master's students did not have the intention to continue their studies and pursue an academic career. It would be more suitable to train some of them in the technology rather than on the theoretical side. The research project of developing specific interview questions and the rating mechanism would be suitable. We therefore completed some studies in this line and wrote a paper based on two master's theses. The training of the students was completed smoothly, but, as expected, we encountered great difficulties in trying to publish our work. The paper was rejected by three journals after one round of revision each.

Although we framed our study as trying to bridge the EI concept and the more practical emotional competency (EC) concept, we were able to persuade only one reviewer in each journal about the value of the paper. The editors and other reviewers had strong opinions about the limited conceptual contribution of our work. As this was the majority view, we were not successful in publishing our work on demonstrating how to develop interview questions to assess the EI level of customer service officers at a telecommunication company in Taiwan.

As a final record of my journey in studying the EI construct up to now, I attach the paper as the appendix in this book. In the future, if our field becomes more receptive to this type of technological instead of theoretical contributions, I hope we can see more projects on the application side of the EI construct.

Title: Assessing job applicants' emotional competency in interviews

Authors: Ching-Wen Wang, Kelly Z. Peng,
Chi-Sum Wong, Ya-Jing Gua, and Hsin-
Chieh Hsieh

Abstract. There is confusion between the concepts of emotional intelligence (EI) and emotional competency (EC) in the literature. Following the classification of [Ashkanasy and Daus \(2005\)](#), we define EI as a set of interrelated abilities, while EC refers to employees' behaviors that lead to high performance in a particular emotional job context. The present study attempts to bridge the theoretical foundation of EI with the practical concern of selecting people with the appropriate EC for a particular job by designing

interview questions based on specific job contexts. Using the customer service officer as example, we find that answers to carefully designed questions are related to the job applicant's EI, and the EC score assessed by interview questions can predict incumbent job performance and turnover intention. Implications are discussed.

Emotional intelligence (EI) has recently emerged as an important topic for management researchers and consultants because it is believed to be related to human performance in various job contexts. After some confusion and debates in its initial stage, academic researchers seem to have come to a consensus that EI should be defined as a set of interrelated abilities including (1) perception of emotion (in self and others), (2) assimilation of emotion to facilitate thoughts, (3) understanding of emotion, and (4) management and regulation of emotion in self and others (e.g., [Mayer, Salovey, & Caruso, 2002](#), [2004](#), [2008](#); [Wong & Law, 2002](#)). As abilities to handle emotional issues, EI will affect how people perform when they face situations that involve human emotions or interactions. For example, an employee with high EI should be able to remain calm and polite when an angry customer is complaining in a rude manner. Thus, for jobs that need employees to exhibit appropriate behaviors in emotional job contexts, employee EI level should have a positive effect on both job attitudes and performance. This conclusion is confirmed in different meta-analytic studies ([Joseph & Newman, 2010](#); [O'Boyle, Humphrey, Pollack, Hawver, & Story, 2010](#); [Van Rooy & Viswesvaran, 2004](#)).

Although the effect of EI on job attitudes and performance for jobs involving emotional job contexts is clear (e.g., [Wong & Law, 2002](#); [Wong, Wong, & Law, 2005](#)), there are at least two important issues that need to be addressed before this relationship can be applied by human resource practitioners in selection, placement, or other human

resource decisions. The first issue is the confusion in the definition of EI and the measurement methods in the literature ([Ashkanasy & Daus, 2005](#)), and its difficulties in being applied to human resources practices. The second issue is that, as a particular type of intellectual ability, while EI can certainly affect people's behaviors across different situations, its effect on specific job contexts may be vague. Thus, human resource practitioners may still need to find a way to predict people's behaviors in specific emotional job contexts although we know that the concept of EI may be helpful ([Meisler & Vigoda-Gadot, 2013](#)).

The purpose of this study is to address the above two issues so that we can bridge the theoretical foundation of the EI concept with the practical concern of human resource decisions. In the following paragraphs, we will first review the EI concept and its measurement methods as reported in the literature. Following [Ashkanasy and Daus's \(2005\)](#) classification, we then redefine emotional competency (EC) as people's behaviors in specific emotional job contexts. While this is related to EI, it should be more predictive of people's job attitudes and performance for a particular job context. We then propose the use of a structured interview to assess applicants' EC for particular jobs. Using a customer service officer (CSO) as an example, we designed a three-stage validation study. In the first stage, interview questions that may help assess applicant EC for this particular job are designed. We then compare the hiring decisions using EI measures versus selection interviews based on the questions developed in the first stage. Finally, we examine the relationship between interview question answers and EI measures in a student sample and the predictive validity of those answers on job performance and

turnover intention in an employee sample. The implications of our findings are then discussed.

Definition, domains, and measures of EI

The notion of EI originally appeared in two 1990 academic journal articles ([Mayer, Dipaolo, & Salovey, 1990](#); [Salovey & Mayer, 1990](#)). These early proponents of the concept defined EI as a set of interrelated human abilities used to deal with emotional issues. However, later researchers and practitioners gradually included other non-ability dimensions such as motivation and personality (e.g., [Bar-On, 1997](#); [Goleman, 1998](#)), which has created serious confusion concerning its definition. On the other hand, because EI measures developed before 1998 are unable to form a distinct factor when factor analyzed with the well-established Big Five personality measures, the validity of the EI construct has been seriously questioned ([Davies, Stankov, & Roberts, 1998](#)).

In response, two related lines of effort have been initiated. The first distinguishes between “trait EI” and “ability EI.” For example, [Petrides and Furnham \(2000a, 2000b, 2001\)](#) argued that trait EI (or emotional self-efficacy) refers to a constellation of behavioral dispositions and self-perceptions concerning one’s ability to recognize, process, and utilize emotion-laden information, which pertains to personality. On the contrary, ability EI (or cognitive-emotional ability) refers to one’s actual ability to recognize, process, and utilize emotion-laden information, as a kind of intelligence.

The second line of effort is to classify three streams of research based on various conceptual domains and measurements of EI ([Ashkanasy & Daus, 2005](#)). Stream 1 researchers define EI as a set of interrelated abilities and use the MSCEIT (Mayer–

Salovey–Caruso Emotional Intelligence Test; [Mayer, Salovey, & Caruso, 2002](#)), which is an ability-based measure with correct answers. Stream 2 researchers adopt a similar definition of the EI concept as above but use self- or peer-report measures with correct answers (e.g., [Schutte et al., 1998](#); [Law, Wong, & Song, 2004](#); [Wong & Law, 2002](#)). Stream 3 researchers expand the domains of the EI concept and include a mixture of personality and behavioral preferences items in their measurement scales, such as Goleman’s Emotional Competency Index (ECI; [Salas, 2002](#)) and the Emotional Quotient Inventory (EQ-I; [Bar-On, 1997](#)). Researchers have labeled this stream as the “mixed model of EI.” The term “emotional intelligence” should refer to people’s intellectual abilities instead of personality or behavioral preferences. Thus, trait EI or the mixed model of EI should not be labeled as EI, which created much confusion in the EI literature.

From a rigorous scientific point of view, the mixed model proposed by Stream 3 researchers is not an independent and distinct construct. It is a mixture of ability, personality, and behavioral preferences. Although it also has predictive validity on job attitudes and performance ([Joseph & Newman, 2010](#); [O’Boyle et al., 2010](#)), there are at least three weaknesses in applying this model and using the EQ-i or ECI in making selection or other human resource decisions for specific job positions. First, we are not sure about the underlying reason for its predictive validity. If its relationship with job outcomes is only because of personality, then it has added nothing new to our knowledge because the relationship between personality and job outcomes is well known.

Second, the measures of the mixed model are not targeted toward a specific job context. The effects of employee intellectual ability, personality, and behavioral

preferences on job outcomes may vary across specific job contexts. For example, the personality trait of agreeableness in general may be related to attitudes and performance in serving customers. However, if the specific job context requires the incumbent to uphold regulations, such as a police officer practicing law enforcement, the general trait of agreeableness may not lead to better job outcomes.

Third, the ECI and EQ-i consist of self-report items asking the respondents to evaluate their abilities, personality, and behavioral preferences using a Likert-type format. We have no objection to using this format for self-assessment, training and development, or purely research purposes. However, if the respondents know that their answers may affect their chance of getting a job, a better placement, or even a promotion, they may fake their answers, and they are perfectly capable of doing so under this reporting format. [Law, Mobley, and Wong \(2002\)](#) found that university graduates in Hong Kong would fake their answers even for self-report bio-data items when they were in a selection context. [Wong, Wong, and Law \(2007\)](#) demonstrated that even for forced-choice items, respondents would change their answers when they were told that they would receive a prize if an experienced recruiter selected them as the suitable candidates for further consideration in the recruitment process. Thus, if the respondents have an incentive to fake their answers, they will certainly say that they are good at understanding and regulating their own emotions.

Although the first two streams of EI research present a much more convincing definition and domain of the EI concept, they also share some of the shortcomings of the third stream if being applied to practical human resource decisions. First, as a general type of intellectual ability, EI's effect on job attitudes and performance may vary across

specific job contexts. It is difficult for practitioners to assess the strength of the predictive validity of the EI concept in their specific situation. Second, although the self-report measures developed by Stream 2 researchers have been shown to be distinct from personality constructs (e.g., [Wong & Law, 2002](#); [Law, Wong & Song, 2004](#)), they may be subject to the same risk of faking by respondents who want to affect the decision makers via their responses. For example, it is quite impossible for a job applicant to respond negatively to statements such as “I can control my emotions.” To avoid self-bias, rating by others may be a viable alternative. However, it may be very difficult for human resource practitioners to find relevant others to provide honest comments on the EI of the focal person.

Third, there is clear empirical evidence that the MSCEIT used by Stream 1 researchers is able to capture a distinct construct that is different from personality (e.g., [Brackett & Mayer, 2003](#); Ashkanasy & Daus, 2005; [Iliescu, Ilie, Ispas, & Ion, 2013](#)). The items of the MSCEIT that have a correct answer are more persuasive than self-evaluation items for measuring intellectual abilities, and respondents may not be able to fake their answers even if they want to. However, some of its items use the “rating-the-extent” scales (i.e., test takers rate the appropriateness, strength, or extent of each alternative, rather than selecting the correct option). MacCann and Roberts (2008) found that this response format would affect the final test scores, and this is why they attempted to develop alternative EI measures that are free from this response-format effect. Although there are reports on the reliability and validity of the MSCEIT (e.g., [Mayer, Salovey & Caruso, 2002, 2004, 2008](#)), it is quite inconvenient for practitioners to check the reliability and validity of the measure based on their own sample because the scoring

mechanism is not readily accessible. Finally, there is some preliminary evidence showing that the MSCEIT may not be universally applicable across cultures (e.g., [Law, Wong, Huang, & Li, 2008](#)). This is not very surprising as its scoring rubric is based on the consensus of expert or population-representative samples (MacCann & Roberts, 2008).

In short, while EI research has clearly laid down the theoretical foundation for the definition and domain of the EI concept as a particular type of intellectual ability and its potential effects on job attitudes and job performance, two issues have to be addressed before its utility in practice can be materialized. The first is to adapt the concept to specific emotional job contexts, and the second is to develop measurement methods to help practitioners make human resource decisions. To address these issues, we apply EC to address the two issues and then use a structured interview as its assessment method.

Proposed definition of EC and its assessment method

We totally agree with [Ashkanasy and Daus \(2005\)](#), p. 443) comments on Stream 3 EI research: “Our point here is to say to practitioners and researchers who wish to use and to further develop these measures and concepts, ‘Go ahead, by all means, but please do not confuse them with emotional intelligence.’” In this respect, we acknowledge that [Goleman \(1998, 1999\)](#) prefers to use the term “emotional competency” in his consulting applications (i.e., as in the ECI). However, defining EC as personality, motivations, and behavioral preferences is still too general to make the concept applicable to specific job contexts. Its overlap with personality and motivation will also fail to make it an independent concept. Goleman and a colleague ([Boyatzis & Goleman, 2002](#)) have

redefined EC as “a set of actual behaviors,” distinct from general intelligence, that involve a person’s interaction with self and others in successfully resolving environmental challenges.

To distinguish this EC concept from EI, [Boyatzis \(2009\)](#) and a colleague ([Boyatzis & Sala, 2004](#)) further point out that EC describes the actual use of EI behaviors that lead to superior performance, which means that EC constitutes EI in action and is the last side of the overall content domain of EI. Therefore, it is clear that EC is a set of actual emotional behaviors to recognize and manage the emotions of self and others to get superior performance in a specific context ([Seal & Andrews-Brown, 2010](#)). Thus, a counselor who is able to actively listen to the client and exhibit an empathic and willing-to-help attitude is high on EC for this particular job context; a bill collector who is able to stay firm in requiring the debtor to repay the debt on time and present an non-empathic attitude is high on EC for this particular job context. Some job positions may require the incumbent to exhibit high EC for multiple tasks. For example, a manager who is able to patiently encourage some subordinates who lack self-confidence and also able to force some subordinates who are over-confident to follow the rules and procedures strictly has high EC for the managerial job context. These examples indicate that EC may not be transferrable to all other job contexts. All other things being equal, an excellent counselor may have low EC to perform the bill collector job, while an outstanding bill collector may perform poorly in a counseling job.

Why will people vary in their EC level in a particular situation? Besides the important role of EI ([Seal, Sass, Bailey, & Liao-Torch, 2009](#)), personality, motivation, general behavioral preferences, and even professional training are all possible reasons.

However, their effects may vary depending on the exact situation. For example, EI, agreeableness, and the tendency to be friendly may be more strongly related to EC in the context of counseling than in the context of bill collecting. People can also be trained to engage in appropriate behaviors in specific situations. For examples, bank tellers can be trained to smile and greet the customers who show up at their counters in a prescribed way; bill collectors can be trained to ignore the explanations of the debtor and to look impatient by just repeating their demands again and again. Thus, it is quite clear that EC is job specific.

While EI predicts EC (Seal et al., 2009), EC should be more predictive of job attitudes and performance because it represents a set of actual behaviors that are appropriate to the specific emotional job context. Researchers have developed differential behavioral models of EC concerning different jobs, including retail jobs (Giardini & Frese, 2006), sales jobs (Vij, Sharma, & Sharma, 2010), managerial jobs (Bailesteanu & Burz, 2011), and nursing jobs (Yiu, Mak, Ho, & Chui, 2010). Although they have developed differential sets of EC behaviors for each specific job, translating the EC models into practices is necessary for particular practitioners. In the current study, we also would like to follow this practice through using a structured interview to capture the specific actual behaviors of EC as the process of developing a structured interview is the process of identifying behaviors. In the next section, we review the literature on structured interviews, the types of questions, and the process that can be used to develop the specific set of actual behaviors. Then we will report our three-stage validation of assessing EC for the job position of CSO.

Structured interviews and common types of questions

One message of the selection interview literature is clear: interview validity can be greatly improved when the interview is structured and the questions are relevant to the nature of the job. The predictive validity of an unstructured interview is close to zero; it has no predictive power on important job attitudes and performance. According to [Campion, Porsell, and Brown \(1988\)](#), a typical structured interview should include six steps: (1) develop questions based on job analysis, (2) ask the same questions of each candidate, (3) anchor the rating scales for scoring answers with examples and illustrations, (4) have an interview panel record and rate answers, (5) consistently administer the process to all candidates, and (6) give special attention to job-relatedness, fairness, and documentation in accordance with testing guidelines. It is very appropriate to use structured interviews in human resource selection and recruitment. First, studies have shown that interview performance is related to some components of EI, such as empathy and self-regulation of mood (e.g., [Fox & Spector, 2000](#)). Second, in comparison with other selection methods, such as developing specific role-playing exercises in an assessment center, interviews are a much more common and less costly selection practice ([Johnson, Wilding, & Robson, 2014](#)). Our proposal involves only a more careful design of the interview questions and their scoring mechanism based on our EI and EC knowledge. Third, the literature on structured interviews provides well-established recommendations concerning how the structured-interview questions can be developed for specific job positions.

The two types of questions most commonly used in structured interviews (Campion, Palmer, & Campion, 1997) are the situational interview (SI; Latham, Saari, Pursell, & Campion, 1980) and patterned behavior description interview (PBDI; Janz, 1982) questions. SI questions are based on goal-setting theory (Locke, 1968), which argues that human intention (i.e., goals) is the prerequisite for actual behavior (Latham & Skarlicki, 1995). Hence, SI questions attempt to capture how people intend to behave in a particular situation. To render these questions job related, Latham et al. (1980) suggest that the situation be developed through the critical incident technique (Flanagan, 1954) because critical incidents are actual situations that incumbents have to deal with in their jobs with specific behaviors.

PBDI questions are based on the assumption of behavioral consistency. In other words, past behavior is a good predictor of future behavior (Janz, 1982). Hence, by asking job applicants how they handled actual situations in the past, recruiters can predict how they will handle similar situations in the future (Pulakos & Schmitt, 1995). As for SI questions, the critical incident technique is recommended to develop situations similar to those encountered by job applicants in the past. To make sure that job applicants are referring to the intended experiences, interviewers usually probe more deeply into their responses (Klehe & Latham, 2005).

Thus, both SI and PBDI questions may be able to assess respondent EC levels for the specific job contexts, identified by the specific set of behaviors in the critical incidents. As stated above, EI should be an important factor behind EC in specific job contexts, and EC should contribute directly to job attitudes and performance with actual behaviors.

To assess EC, recruiters may use critical incidents of a particular job position that involves emotional issues to create SI and PBDI questions. The key is to follow the advice and procedures of [Campion, Pursell and Brown \(1998\)](#) to develop interview questions. To demonstrate this possibility, we conducted our validation study in three stages, which are described in the following sections.

Stage 1: development of interview questions

We chose the position of CSO in a large Taiwanese telecommunications company to develop SI and PBDI questions to assess the EC of this particular job. The major duty of a CSO is to handle customer inquiries and complaints through face-to-face and telephone conversations, and the key requirement is to maintain good customer relationships.

Because of its customer service nature, this is a high emotional labor job ([Hochschild, 1983](#)), and EI is therefore likely to be very important ([Wong & Law, 2002](#); [Joseph & Newman, 2010](#)).

Undergraduate seniors are recruited every year for this position. We interviewed the company's customer service department head, the person responsible for the recruitment and selection of applicants. We asked her to provide examples of critical incidents that CSOs face frequently in their jobs and to give us the actual interview questions used in selection interviews. We chose seven critical incidents that create emotional contexts. Based on each incident, we developed one SI and one PBDI question. As EI should have an important effect on job attitudes and performance for this particular job position, we developed anchor descriptions that should indicate high versus low EI

levels according to the EI definition and domains of Stream 1 and 2 studies, as classified by [Ashkanasy and Daus \(2005\)](#).

We followed [Klehe and Latham's \(2005\)](#) format and generated descriptions for the anchors of 1, 3, and 5 on a 5-point Likert-type scale. Two EI experts, who had published at least one journal paper in the past two years on the topic of EI, were asked to independently rate the suitability of the 14 questions and the anchors in evaluating the EI level of respondents on a 4-point scale ranging from “very unsuitable” to “very suitable.” The 10 questions with the highest ratings were selected for subsequent stages. The following paragraphs provide examples of the chosen critical incident, SI question, PBDI question, and evaluation anchors.

Critical incident

CSOs need to answer calls from customers. Sometimes these customers are in a bad mood. To express their frustration and dissatisfaction, these customers will verbally attack the CSO using very rude language. After handling these calls, some CSOs feel the need to get away from their desks for a short break. After calming down, they will go back to work and handle the next call normally.

SI question

Suppose a customer calls the complaints hotline and uses very rude language in expressing his/her dissatisfaction with the company's services. Your emotions are negatively affected. How would you handle this situation to ensure that you can answer the next call normally?

PBDI question

Please recall a real-life situation in which your emotions were negatively affected because a family member, teacher, friend, or customer scolded you harshly. You needed to calm down and return your emotions to a normal state in a short period of time to be able to handle something important. Can you describe the situation? What did you do? What were the final results?

Anchors for scoring

Three behavioral anchors are provided on the 5-point scale:

1. Anchor for 5: I would consider the situation from the frustrated customer's point of view. By using empathy, I can understand the customer's emotions, thereby ridding myself of the negative emotions brought on by the customer's rudeness and being able to get back to work normally.
2. Anchor for 3: Because of the unhappy feelings resulting from the exchange with the customer, I would try to be alone for a short while. Alternatively, I might talk to someone about the bad experience. Once I had managed to get rid of my unhappy feelings, I would be able to return to work normally.
3. Anchor for 1: Although I would feel negative emotions after being scolded by the customer, I would try to ignore or suppress these emotions and continue working.

Interview questions that do not involve an emotional context

From the actual interview questions used by the head of the company's CSO department, we identified four questions that do not involve emotional context, as follows.

- (1) Please give us three reasons for why we should hire you.
- (2) How much do you know about the position of CSO? Please describe as much as you can.
- (3) Is there any specialized training or experience from your studies and student life that will help you in the position of CSO?
- (4) To perform the duties of a CSO, you also need computer skills. Can you tell us what kind of computer skills you have?

These four questions primarily concern applicants' general characteristics, their understanding of the position, and their technical skills. We used them as the interview questions for the control group in stage 3. As there was no behavioral anchor for these four questions, the following rating anchors were used: 1 = very unsuitable for the job, 2 = unsuitable for the job, 3 = not sure, 4 = suitable for the job, and 5 = very suitable for the job.

Stage 2: hiring decisions based on EI measures and EC scores from interviews

The major purpose of this study is to examine the possibility of assessing job applicant EC in selection interviews based on our understanding that EI should be important for the job position. If the two decisions do not converge at all, then the selection interviews may have failed to assess the job applicant EC levels for this job. Therefore, we conducted selection interviews using the questions developed in stage 1 to examine whether the decisions made by interviewers would be similar to those based on EI measures.

Sample and procedure

One hundred undergraduate seniors at a large Taiwan university were invited to participate in the study. They completed two EI measures which were developed based on the definition and domains of Stream 1 and 2 studies. They also responded to an application form with items related to their backgrounds. From the scores of these two EI measures, we randomly selected 10 students from above and 10 students from below the mean of both scales. These students were told that their backgrounds were judged to be suitable for the position of CSO, and they were further invited to participate in a face-to-face interview. They were encouraged to try their best in the interview so that they could better equip themselves for other job interviews. In each interview, the interviewers asked two SI questions and two PBDI questions. The four questions were randomly selected from the 10 questions developed in stage 1, and the interviewers were instructed to complete the interview within 20 minutes.

Measures

EI scales

Participants completed two EI scales developed from Chinese respondents with evidence of reliability and validity in multiple Chinese samples. The first was the 16-item Wong and Law Emotional Intelligence Scale (WLEIS; [Law, Wong & Song, 2004](#); [Wong & Law, 2002](#)). The second was the 40-item forced-choice Wong's Emotional Intelligence Scale (WEIS; [Wong, Law et al., 2004](#); [Wong, Wong, & Law, 2007](#)).

Hiring decisions

An experienced human resource practitioner and a doctoral student in management, who did not know the 20 interviewees, served as interviewers. They were briefed with information about the CSO position. After the briefing, a discussion session was held to make sure they were familiar with the EI concept, the 10 questions, and evaluation anchors. Right after each participant interview, the interviewers were asked to provide scores for each question. After all interviews were completed, they made a hiring decision based on their scores and a short discussion. They were asked to provide a consensus decision for each interviewee.

Analysis and results

To assess the inter-rater agreement on the answer scores, we added up the scores for the two SI questions for each interviewer and came up with a total SI score for each interviewee. The same procedure was also carried out for the two PBDI questions. The correlations between the two interviewers' total SI and PBDI scores were .52 ($p < .01$)

and .77 ($p < .01$), respectively, which indicates good agreement between the two interviewers. We then averaged the two interviewers' SI and PBDI scores to examine their correlations with the two EI measures. The correlations between the SI questions and the interviewees' WEIS and WLEIS were both .41 ($p < .05$) and .41 ($p < .05$). For the PBDI questions, they were .52 ($p < .01$) and .49 ($p < .01$), respectively. Hence, the interview scores appear to be related to the scores on the two EI measures.

The final hiring decisions made jointly by the two interviewers were 80% consistent with the classification of high- versus low-EI groups according to the two EI measures. The results are shown in **Table A.1**. The χ^2 statistic (7.20, $p < .01$) indicated that the decisions were significantly associated with the original EI classification.

[Insert Table A.1 Here]

Table A.1. Hiring Decisions in Stage 2		
Hiring Decisions	High-EI Interviewees (n = 10)	Low-EI Interviewees (n = 10)
Hired	8 (80%)	2 (20%)
Not hired	2 (20%)	8 (80%)

χ^2	7.20** (d.f. = 1)
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Notes: EI = emotional intelligence.

*p < .05; **p < .01.

Stage 3: answers to interview questions, EI measures, and job outcomes

Stage 2 provided evidence that decisions made based on carefully designed interview questions could be similar to those based on EI measures for this job position in which EI should be an important concern. However, during interviews, interviewers can probe into questions and observe information not provided by interviewee answers, such as that gleaned from tone, gesture, and facial expression. In addition, as we could not conduct a large number of interviews owing to interviewer fatigue, we chose only 10 high-EI and 10 low-EI interviewees; we therefore needed more evidence to show that the questions developed in stage 1 are in fact related to EI measures. To qualify these interview questions as a selection instrument, we also needed evidence that they are related to important job attitudes and performance. In stage 3, respondents answered the questions in written format using a computer-assisted environment. If the markers' evaluation was related to EI measures and job outcomes, then this would provide stronger evidence for the validity of the questions developed in stage 1.

Samples and procedure

We employed a student and incumbent sample in this stage. The student sample was used to investigate the relationship between EI measures and markers' evaluations of each type of interview question. The incumbent sample was used to examine the relationship between markers' evaluations of interview answers and two important job outcomes, namely, turnover intention and job performance. For the student sample, we invited 186 undergraduate seniors (81 males and 105 females) from two Taiwanese universities to participate. These students were instructed to complete the two EI measures, then provided with some information about the CSO job and asked to play the role as if they were applying for the position. When the students were ready, they were asked to type their answers to the questions provided on the computers within 20 minutes.

Student participants were randomly assigned one of the three sets of computer-assisted questions developed in stage 1. The first set consisted of the five SI questions, and the second set included the five PBDI questions. The four non-EI-related questions used by the company were included in the third set. As our sample size was not very large, the chance of being assigned the last set of questions was only half that of the other two sets, creating a control group with the purpose of providing a basis of comparison for the other two groups. The final sample sizes for the SI, PBDI, and control groups were 73, 72, and 38, respectively.

We obtained help from the company for the job incumbent sample. During one week's office hours, 87 CSOs were invited to a conference room equipped with personal computers. We assured them that the study's sole purpose was research and that

individual responses would not be provided to company management. On a voluntary basis, all 87 CSOs agreed to participate. They were asked to respond to three SI and three PBDI questions developed in stage 1. The six questions were projected on a large screen one by one. They typed their answers in a Word document using personal computers and saved the documents under their names, with a maximum of four minutes to answer each question. After completing the questions, they were also asked to respond to three items on turnover intention and three items on their sex, age, and tenure. The information was all emailed to one of the authors. The annual job performance data of these CSOs were obtained from the company three months after they participated in the study.

Measures

EI scales for the student sample

Student participants completed the WLEIS and WEIS scales.

Scoring of the student answers

Three Taiwanese master of business administration students who did not know about the design of this study were invited to be markers. They were briefed on the EI concept and provided with the three sets of questions and the evaluation anchors developed in stage 1. Each marker was responsible for marking two-thirds of the student participants, covering all three experimental conditions and using the evaluation anchors. In so doing, each student participant's answers were marked by two markers, and the agreement was calculated. The average of the scores provided by the two markers was used as the final mark for the student participants.

Scoring of the incumbent answers

Four company supervisors were invited to evaluate the incumbent participants' answers to the six SI and PBDI questions. These supervisors did not know the identities of the incumbent participants; instead, they were briefed about the definition and domains of EI and were asked to compare the incumbent participants' written answers with the evaluation anchors developed in stage 1 to decide on answer marks. Two raters were assigned to mark the 44 CSOs' answers, and the other two raters marked the other 43 CSOs' responses.

Turnover intention of the incumbents

Turnover intention was measured by the four-item scale developed by [Chatman \(1991\)](#). A sample item is "To what extent have you thought seriously about changing organizations since beginning work here?" with a 5-point Likert-type scale, and the coefficient alpha for this sample was .70.

Job performance of the incumbents

Annual job performance data were obtained from the company records at the end of the year – about three months after the incumbent participants responded to the interview questions and turnover intention items. When we interviewed the department head at stage 1, she told us that the company attempts to evaluate CSOs according to objective indicators instead of supervisors' subjective judgments. Three components make up the job performance ratings of the CSOs: punctuality and attendance; the quantity of work, which basically amounts to the total number of customers served; and the quality of work, which is rated by supervisors but largely determined by the number and nature of

customer complaints and compliments. The supervisors compile the scores for the three components every three months, and an annual total score is calculated as the formal yearly performance rating. The highest score is 100.

Analysis and results

For the student sample, the inter-rater correlations for the marks of the SI and PBDI question groups were both .41 ($p < .01$). Markers appeared to reach reasonable agreement on their judgment for the SI and PBDI questions, but they did not show significant agreement on their marks ($r = -.11$, n.s.) for the control group. We conducted an analysis of variance (ANOVA) to examine whether student participants in the three experimental conditions differed in their WEIS and WLEIS scores (see [Table A.2](#)). The differences are not statistically significant, which indicates that the random assignment was successful.

[Insert Table A.2 Here]

Table A.2. EI Scores of Student Participants in Stage 3

EI Measures	SI Group (n = 73)	PBDI Group (n = 72)	Control Group (n = 38)	ANOVA F-Statistics
1. WEIS	Mean = 27.08 (S.D. = 3.41)	Mean = 26.18 (S.D. = 3.83)	Mean = 27.75 (S.D. = 3.83)	2.051

2. WLEIS	Mean = 3.61 (S.D. = 0.44)	Mean = 3.62 (S.D. = 0.42)	Mean = 3.60 (S.D. = 0.37)	0.027
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Notes: EI = emotional intelligence; SI = situational interview; PBDI = patterned behavior description interview; WEIS = Wong’s Emotional Intelligence Scale; WLEIS = Wong and Law Emotional Intelligence Scale.

*p < .05; **p < .01.

The relationship between the EI measures and the markers’ SI and PBDI question scores are shown in **Table A.3**. The final mark of the PBDI questions is significantly related to WEIS, whereas that of the SI is significantly related to both WEIS and WLEIS.

[Insert Table A.3 Here]

Table A.3. Criterion-Related Validity in Stage 3			
EI Measures	SI Group (n = 73)	PBDI Group (n = 72)	Control Group (n = 38)
1. WEIS	r = .11	r = .26*	r = .01
2. WLEIS	r = .28*	r = .27*	r = .17

Notes: EI = emotional intelligence; SI = situational interview; PBDI = patterned behavior description interview; WEIS = Wong's Emotional Intelligence Scale; WLEIS = Wong and Law Emotional Intelligence Scale.

* $p < .05$; ** $p < .01$.

As for the incumbent sample, the inter-rater correlations for the two pairs of raters were .63 ($p < .01$) and .51 ($p < .01$), indicating substantial agreement between raters. Hence, we used the average marks of the two raters to represent the final scores of the incumbent participants. The descriptive statistics and correlations are shown in [Table A.4](#). As expected, the interview answer scores are significantly related to turnover intention and the company record of job performance. To further examine this predictive validity, we conducted regression analyses on turnover intention and company record of job performance by first entering sex, age, and tenure as control variables. Even after controlling for these three variables, the interview answer scores still showed significant effects on job performance and turnover intention.

[Insert Table A.4 Here]

Table A.4. Descriptive Statistics and Correlations among Variables for the Incumbent Participants in Stage 3

	M ea n	S . D .	1	2	3	4	5	6
1. Sex	0.88	0.38	1.00					
2. Age	31.69	6.44	.26*	1.00				
3. Tenure	3.74	0.75	.04	.29*	1.00			
4. EC-interview scores	3.88	0.59	.21	.18	.05	1.00		
5. Turnover intention	2.59	0.63	-.05	-.05	.10	-.33**	1.00	
6. Job performance	82.04	9.03	-.02	-.38**	.01	.47**	-.22	1.00

Notes: n = 87. For sex, female = 0, male = 1. EC = emotional competency.

*p < .05; **p < .01.

Discussion

This study contributes to the literature on EI and EC in three ways. First, from our study, it appears clear that both EI and EC are important concepts and have their unique roles in the area of human resource management. While EI helps us to conceptualize a type of basic ability, its application to specific job positions is relatively limited when compared to EC. EC is a set of behaviors needed to perform well in specific emotional contexts so that employee performance will be more predictable by EC in the workplace.

Second, there is a clear relationship between EI and EC. EI is the foundation for EC, while EC describes the actual use of EI behaviors that lead to superior performance.

In other words, EC constitutes EI in action and is the last side of the overall content domain of EI. Our current study also supports these assertions. Future research in the field should consider both concepts instead of debating which one is more relevant and valid.

Third, we showed that EC could be measured with a structured interview. Both SI and PBDI questions seem valid in predicting job incumbents' turnover intention and company record of job performance. As a single predictor, the validity coefficient is already large enough to justify using it as a selection instrument (e.g., [Pearman, Schmidt, & Hunter, 1980](#); [Schmidt, Hunter, McKenzie, & Muldrow, 1979](#)). Interview scores evaluated by interviewers using the face-to-face format also appear to be highly correlated with results using EI measures reported in the literature. Unfortunately, we were not able to conduct a study similar to stage 3 because the supervisors were familiar with the job incumbents, and conducting too many interviews might have tired them. However, all of the evidence gathered for this study indicates that if face-to-face interviews are conducted with both SI and PBDI questions, then supervisors should be able to select candidates with a lower turnover intention who can be expected to exhibit good performance in the future.

In a practical sense, it should be noted that for each specific job, the same procedure to develop the interview questions and the rating forms can be studied and validated. The written answers may be used for preliminary screening when a large number of applicants have to be evaluated. Future research may examine the possibility of developing a computer-aided marking system for large numbers of applicants. Face-to-face interviews may be conducted in the second stage with a limited number of applicants

who have high scores on their SI and PBDI answers. The results from the student sample in stage 3 indicate that although either SI or PBDI questions alone are related to EI measures, their relationship is relatively weak. When both SI and PBDI questions were used in the face-to-face interview and the incumbent sample, the validity appeared to be much higher. Hence, practitioners should consider incorporating both SI and PBDI questions if they are going to assess applicant EC in the selection process for job positions in which EI is an important concern.

Some limitations of this study should be noted before closing. First, although we investigated only one job position, we are confident that similar validity can be found for other positions in which EI is an important concern. Whether our findings are generalizable to other job positions should be investigated further in future research. Our study has demonstrated how this can be done by utilizing our EI knowledge in developing questions from critical incidents and anchors for evaluation. This should be valuable for human resource practitioners.

Second, we used students instead of a true job applicant sample. Therefore, some of them may not have been interested in the CSO position, which may have led to random error in their interview responses. Future research may use actual job applicants to cross-validate our results.

Third, the size of our sample of job incumbents in stage 3 was only 87. Although relatively small in a statistical sense, this number is quite large for a single job position in one company. Future research may consider studying positions from a job family to allow a larger-scale study that can provide stronger evidence for the generalizability of the findings.

Fourth, our interview questions assess behavioral intentions and past behaviors in specific emotional contexts. It is our judgment from EI knowledge that guides us to develop interview questions and the scoring anchors. Our results support this initial judgment that EI is related to EC for this job position. However, we have little idea concerning how other factors such as personality, behavioral preferences, and training and development experiences will affect this specific EC. Future research may investigate this issue.

Fifth, it may be argued that the supervisors' evaluations of the employee answers to interview questions in the incumbent sample were affected by their job knowledge. In the most extreme case, supervisors may have been evaluating employee performance instead of employees' answers. Although we cannot rule out this possibility completely, we do not believe this alone can account for the observed correlation for three reasons. First, the behaviorally anchored evaluation form provided clear instructions for the supervisors to rate employees accordingly. Supervisors were asked to compare the written answers with the behavior anchors tightly. There was very little room for the supervisors to relate the written answers to their job knowledge or performance standards. Second, company performance records are based on objective indicators (such as punctuality and attendance). Finally, if the ratings on employees' answers reflected only the supervisors' performance judgment, then they would have been unlikely to have a significant relationship with employees' turnover intention.

Despite these limitations, we believe the evidence found in this study is sufficient to justify the value of using computer-assisted and face-to-face interviews to assess job applicants' EC for job positions where EI is an important concern. More research in this

direction would be worthwhile, and it is hoped that organizations will eventually benefit by investing in the design of appropriate interview questions for job positions that require employees to perform in emotional job contexts.