

Consumer Emotional Intelligence: Conceptualization, Measurement, and the Prediction of Consumer Decision Making

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This research details the development of the Consumer Emotional Intelligence Scale (CEIS), which was designed to measure individual differences in consumers' ability to use emotional information. Scale development procedures confirmed the theoretical structure of the 18-item scale. Results supported the scale's reliability and its discriminant and nomological validity. Our consumer domain-specific measure predicted food choices better than a more domain-general alternative. Furthermore, consumer emotional intelligence (EI) predicted food choices beyond cognitive knowledge. Finally, consumer EI was found to generalize to product-based decision making. Theoretical implications of consumer EI are discussed along with areas of future research.

Despite the importance of emotion in decision making (Luce 1998; Pham 1998; Ruth 2001), research has yet to fully understand how consumers use emotional information to make effective decisions. A growing body of research continues to focus on the emotions present in consumption situations; a better understanding of emotional processing abilities may have important effects on consumer performance outcomes. Our current research focuses on emotional intelligence (EI) in the consumer domain in light of past research focusing solely on general emotional intelligence. Consumer emotional intelligence is defined here as a person's ability to skillfully use emotional information to achieve a desired consumer outcome. Consumer EI comprises a set of first-order emotional abilities that allow individuals to recognize the

meanings of emotional patterns that underlie decision making and to reason and solve problems on the basis of these abilities (Mayer and Salovey 1997).

This ability-based conceptualization of EI has been largely ignored in the marketing literature, although a few attempts have been made to identify how people use emotion to influence performance. Ruth (2001) suggested that the presence of emotional information (i.e., emotional benefits) facilitated access to categorical knowledge of an emotion and types of experience associated with this knowledge. This emotional information can then be used to evaluate a brand, favorably or unfavorably. Other research has applied the concept of emotional trade-off difficulties to choice behavior (Luce 1998; Luce, Payne, and Bettman 1999). Luce et al. (1999) suggest that a consumer's ability to resolve emotion-laden trade-offs can have an important impact on the consumer's choice strategy. Their model of trade-off difficulty proposed that consumers appraise choice situations in light of goals and emotional content. Appraisals of emotional information to cope were found to influence assessments of trade-off difficulty. These studies provide initial evidence of the importance of using emotional information to improve the quality of consumer decision making. However, more research is needed to categorize levels of consumer emotional processing and to provide a scale to effectively and efficiently measure these abilities.

A better understanding of emotional ability can have considerable value in extending our knowledge of consumer behavior, providing answers to such questions as how emo-

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tional processing influences purchase decisions, which decisions high- versus low-consumer-EI consumers make more readily, and how consumer EI might influence relationships between key consumer variables such as impulsivity and purchase intention. In addition, with this knowledge of emotional ability, we may be able to identify consumers who make the highest-quality (and lowest-quality) consumer decisions. For example, consumers who possess a high level of nutrition knowledge but who lack an ability to identify and use the relevant emotions to manage their unhealthful eating are likely to make poor-quality decisions. Understanding these emotional abilities can provide a means to subsequently improve the quality of consumption decisions.

In this research, we develop and validate a measure of emotional intelligence (the Consumer Emotional Intelligence Scale—CEIS®; <http://www.ceis-research.com>) in hopes that these and other consumer issues might be thoroughly examined. In the next sections, we provide an overview of emotional intelligence, ability-based models of EI, and the four-dimension structure underlying this model, along with a rationale for how the consumer domain provides a unique context in which domain-specific EI measurement is needed.

THEORETICAL BACKGROUND

Emotional intelligence is a relatively new domain, having recently gained widespread international attention (Roberts, Zeidner, and Matthews 2001), with momentum in part because of the importance of emotion in everyday life (Goleman 1995). However, some researchers have questioned whether EI is anything more than a set of existing personality variables (Davies, Stankov, and Roberts 1998). As a result, Mayer, Salovey, and Caruso (2000) distinguished between *ability models* and *mixed models* of EI. They focused their research on the development and validation of models of emotional ability (Mayer, Caruso, and Salovey 1999) and warned that models that “mixed” abilities lacked internal consistency since they included mental abilities along with a variety of personality dispositions and trait characteristics. Mayer et al. (2000, 413) subsequently concluded that only models of mental ability can be appropriately termed emotional intelligence since mixed models “offer a more general perspective than a definition of intelligence would suggest.” These authors argue that it is more useful for researchers to take a “reasoned, thoughtful approach to studying human effectiveness under various conditions” by employing mental ability models of emotional intelligence (416).

Ability Model of Emotional Intelligence

Ability models define EI as a set of skills concerned with the processing of emotion-laden information—skills that can be measured with ability-based scales (Mayer, Salovey, and Caruso 2002). The ability model is a more restrictive framework of EI that considers emotions not as a single trait or ability but as a composite of distinct emotional reasoning

abilities (Mayer et al. 2000). In this sense, emotional ability may at times be thought of as the mental ability to recognize and use emotional information.

With the recent development of a comprehensive EI measure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer et al. 2003), the relationship between general EI and performance can be more thoroughly examined. The MSCEIT is a measure of an individual’s ability to perceive, facilitate, understand, and manage emotions. This instrument has been found to be a valid and reliable measure of EI (Mayer et al. 2003). However, despite the advantages of the MSCEIT and its acceptance as the state-of-the-art assessment of emotional ability, this instrument has disadvantages that limit its usefulness, including cost, length, and format inflexibility, making it difficult to administer in conjunction with additional measures. Most important, however, the MSCEIT is designed to be a general measure of emotional ability in a wide range of interpersonal contexts. Little is known about its appropriateness for assessing specific emotional abilities involved in domains such as consumer behavior.

Domain Specificity of Consumer Emotional Intelligence

Specific domains represent adaptations from more general domains in order to evolve the understanding of the construct and to provide further problem-solving ability in specific areas. Domain-general scales sacrifice specialization for generalization and are often unable to overcome the unique contextual distinctions within a domain (Bearden, Hardesty, and Rose 2001). For example, knowing which emotions will be useful when interacting with an aggressive salesperson and how to manage emotions when making purchases involves more specialized emotional abilities than understanding and managing emotion in general. That is not to say that someone who is emotionally skilled in general cannot perform well in specific situations; rather, assessing one’s specific emotional abilities likely provides a more accurate assessment of that unique domain. Just as verbal ability scales assess language competencies better than general IQ tests, some domain-specific competencies may be too sophisticated to be assessed with a domain-general scale. For example, a person may understand the emotions involved in the workplace but not understand emotions related to a shopping experience. Thus our domain-specific scale of consumer EI seeks to identify unique competencies that people possess that make them more effective consumers.

To provide evidence of domain specificity, we validate the CEIS by comparing it with a domain-general alternative (MSCEIT). We expect a domain-specific scale of consumer EI to predict consumer outcomes better than a domain-general alternative. Development of the CEIS may provide researchers with a more manageable tool that also better predicts consumer-related outcomes.

Dimensionality of the CEIS

Borrowing from the discussions on general cognitive ability, *g*, we might expect a general measure of emotional ability similarly to be a superordinate factor, indicated by other, narrower dimensions. Since consumer emotional ability is a subset of the more general emotional ability construct described by Mayer and colleagues, the same dimensionality is expected within the more specific consumer decision-making context. The CEIS is expected to elicit a higher-order factor structure with four reflective first-order dimensions—*perceiving*, *facilitating*, *understanding*, and *managing*. These four dimensions are represented by a second-order factor of consumer EI. Each ability dimension is described in turn.

Perceiving emotions is the ability to perceive, appraise, and express emotions accurately (Mayer et al. 1999). Implicit in this dimension of EI is the individual's awareness of both the emotions and the thoughts that accompany them, the ability to monitor and differentiate among emotions, and the ability to adequately express them (Roberts et al. 2001). *Facilitating* emotion is the ability to access, generate, and use emotions to facilitate thought (Mayer and Salovey 1997). This dimension of EI involves assimilating basic emotional experiences into mental processes (Mayer et al. 2000), which includes weighing emotions against one another and against cognitions allowing emotions to direct attention. With this ability, emotions are marshaled in the service of a goal, which is an essential component for selective attention and self-motivation, among others (Roberts et al. 2001). *Understanding* emotion is the ability to analyze complex emotions and to form emotional knowledge (Mayer and Salovey 1997). This dimension of EI involves reasoning and the understanding of emotional problems, such as knowing what emotions are similar and what relation they convey. Finally, *managing* emotion is the ability to regulate emotions to promote a desired outcome (Mayer and Salovey 1997) by understanding the implications of social acts on emotion and the regulation of emotion in the self and in others. This dimension involves knowing how to relax after stress or how to alleviate the stress and emotion of others. This component of EI allows impulse control, social adaptation, and problem solving (Roberts et al. 2001).

Each dimension varies in level of abstraction relative to the domain. Perceiving emotion is highly abstract, such that a person's ability to perceive emotions is not likely to vary extensively across domains, although, with our focus on product packaging, our items are specific to the domain of consumer behavior. For example, a person who can accurately appraise emotion in general is also likely to accurately appraise emotion in a consumer setting. Facilitating emotion is also abstract, although less so than perceiving. A person who is able to assimilate basic emotional experiences into mental processes in a specific setting will more effectively use those emotions to direct thinking in that setting. For example, a consumer who is faced with an aggressive salesperson but who knows that hostility is useless will be more likely to access, generate, and use emotions of relaxation. Understanding emotion is somewhat less abstract in that forming emo-

tional knowledge about a specific domain can be highly effective in making good decisions in that domain. For example, consumers who understand that individuals may feel guilt and depression after indulging in desserts should avoid situations in which they are tempted to make poor decisions—such as asking for a dessert menu. Managing emotion is the least abstract dimension in that one's ability to regulate emotion is highly domain specific. Knowing how to adapt to specific social situations can be quite effective in influencing the quality of decisions in those situations. For example, a consumer may be adept at controlling feelings of hostility toward a salesperson but not at controlling feelings of excitement toward buying a new outfit. One implication of this variation in abstractness is that dimension-level EI is likely to exhibit unique relationships with outcomes in specific domains.

Predictive Nature of Specific Emotional Abilities

The four emotional processing abilities of EI are similar to cognitive processing abilities (i.e., attention, perception, reasoning, and problem solving) in that they are present across every domain but are likely to elicit different magnitudes based on the unique context (Bettman, Payne, and Staelin 1986). Certain contexts create unique needs to access and interpret emotional information, while others require more comprehension and regulation of complex emotional information. For example, while perceiving emotion in product packaging may be highly predictive of consumer preferences for products, the ability to manage emotion may not be. Likewise, while the ability to manage emotion is likely to be predictive in situations where control over one's emotion is necessary, perceiving emotions in objects is not likely to be. Consequently, these emotional abilities should uniquely apply to distinct consumer outcomes, just as cognitive processing applies to distinct cognitive tasks. We further explore the predictive nature of specific emotional ability dimensions in the nomological and discriminant validity sections and in studies 4 and 5. Next, the development and psychometric validation of the Consumer Emotional Intelligence Scale (CEIS) is provided, including an examination of the scale's structure, followed by a series of studies examining the scale's reliability and validity.

DEVELOPMENT OF THE CEIS

The research reported in the remainder of this article relates to the development and validation of multiple measures for the dimensions of consumer EI. To begin, we describe the procedures used to generate and purify our initial item pool. Next, we use data from studies 1 and 2 to select items, based on a battery of psychometric criteria. Study 3 data are subjected to confirmatory factor analysis to provide evidence regarding the factor structure, scale reliability, and discriminant validity of the dimensions. Then evidence is provided for construct validation in a food choice (study 4) and a digital camera purchase (study 5) context.

Specifically, in study 1, evidence is provided that the CEIS discriminates from self-monitoring and is predictive

of compulsive consumption. In study 2, we show that the CEIS predicts consumer food choice better than does the existing general EI scale (MSCEIT) and that CEIS is distinct from MSCEIT. Study 3 tested the structural validity of the CEIS, and in study 4, the CEIS is shown to predict food choice beyond the effects of cognitive ability. In the fifth study, we demonstrate the generalizability of the CEIS in an additional consumer domain, examining how higher levels of consumer EI predict intentions to purchase the best product despite strong branding influences of alternative options.

Item Generation

An initial pool of 112 items was generated based on research identifying the underlying dimensional structure of emotional ability (Mayer et al. 2003). Several pretests were conducted to derive domain-specific content for each item and dimension. For example, for managing emotion, participants were asked to describe emotion-evoking consumption situations and then to describe how they reacted to and dealt with these emotions. For understanding emotion, they were asked to describe how they felt in various consumer settings and how those emotions changed over time. For facilitating emotion, they were asked to list the most useful emotions to feel in several consumer situations that provoked emotion, such as poor customer service. Finally, for perceiving emotion, participants were asked to describe the emotions that they felt were expressed by faces and products presented in various pictures. Items were generated to tap both positive and negative emotions encountered in consumption settings, as well as emotions related to both individual decisions and interpersonal interactions.

Ability-based scales of EI use a response scoring method that captures the degree of response correctness. Correctness values assigned to each specific response are based on expert judgments. Our scoring method follows the procedure used in the MSCEIT, in which expert judges determine the weights that each response option receives. For example, if 80% of the judges indicated the correct response was "D," then any respondent choosing "D" would receive .80 toward his or her overall CEIS score. An alternative scoring method, consensus scoring, suggests accumulating the scores for the CEIS across all existing studies and using the respondent percentages as the weights for each response option. The consensus score associated with the CEIS has a correlation of .92 with the expert judging scoring method. All results reported remain unchanged in terms of direction and significance using the consensus scoring procedure in place of the expert-judging scoring method. Consistent with the methodology used in scoring the MSCEIT, 16 individuals with expertise in emotion and behavioral research were asked to determine the weight assigned to each response option for each of the 112 items in the initial pool. These individuals had at least 2 years of graduate training in areas of emotional expression and behavior, including specialized training in either clinical counseling or emotional research. Three of the experts had over 10 years of experience study-

ing emotions and behavior. Items that failed to have a response option with at least 50% of the judges indicating that the option was the appropriate response were deleted to exclude items with a best response that included less than the majority of expert judges. This resulted in two items being removed and a reduced set of 110 items.

Scale Purification: Studies 1 and 2

In study 1, the 110-item measure was administered to a sample of 104 undergraduate business students at Virginia Tech in an effort to purify the pool of items. Two additional measures were also collected to assess the validity of the scale. In study 2, the items were administered to 100 Virginia Tech undergraduate business students, and additional scales (as described later) were administered to further assess scale validity. Across both studies, items were evaluated for each of the four lower-order dimensions, using principal-axis factor analysis and assessing factor loadings and corrected item-to-total correlations. Kaiser-Meyer-Olkin tests of sampling adequacy and Bartlett tests of sphericity indicated that the data were appropriate for factor analysis. The final version of the CEIS includes 18 items (five items for perceiving, four for facilitating, five for understanding, and four for managing). The CEIS items tap each of the four dimensions and include items representing both positive and negative emotions and emotions related to individual decisions and interpersonal interactions. A new sample was collected to validate the structure of the CEIS and to demonstrate its reliability. This study is described next.

Scale Validation: Study 3

To validate the internal scale structure and provide estimates of scale reliability, 219 undergraduate students at the University of Kentucky completed the 18-item CEIS. The theoretical model specifying a higher-order factor structure with four lower-order dimensions underlying the CEIS was assessed by performing confirmatory factor analysis on the variance-covariance matrix using AMOS 5.0 (Arbuckle 2003). To assess the structure of the CEIS, the fit of the higher-order factor model was compared against a one-factor model, a four-factor uncorrelated model, and a four-factor correlated model. Consistent with the theoretical model specifying a higher-order factor structure, the second-order model fit ($\chi^2 = 148.61$, $df = 121$, $p < .05$, CFI = .92, RMSEA = .03) demonstrated a superior fit to the one-factor model ($\chi^2 = 197.60$, $df = 125$, $p < .01$, CFI = .78, RMSEA = .05) and the four-factor uncorrelated model ($\chi^2 = 193.97$, $df = 125$, $p < .01$, CFI = .79, RMSEA = .05). Moreover, the fit of the higher-order model was as good (i.e., the chi-square difference was nonsignificant, $p > .05$) as the fit of the four-factor correlated model ($\chi^2 = 145.27$, $df = 119$, $p < .05$, CFI = .92, RMSEA = .03). Therefore we chose the higher-order factor structure, as it is empirically similar in fit to the four-factor correlated model and theoretically consistent with the proposed factor structure of the CEIS.

Further assessment of the higher-order solution indicated

that all estimates were of the proper sign, with an average item-level standardized factor loading of .42. In addition, the standardized factor loadings with the second-order emotional ability factor were also all of the proper sign, and the average standardized factor loading was .57. The CFI of .92 met the .90 cutoff recommended by Bentler (1992), and the RMSEA of .03 indicated a good fit (Byrne 1998). To evaluate the reliability of the CEIS, split-half reliabilities were used as a result of item format heterogeneity (Mayer et al. 2002, 2003; Nunnally and Bernstein 1994). The split-half reliability for the total CEIS was .83. The split-half reliabilities at the dimensional level were .78 for perceiving, .68 for facilitating, .69 for understanding, and .81 for managing.

Evidence of discriminant validity for the four first-order dimensions was provided by the chi-square difference tests recommended by Anderson and Gerbing (1988), in which one- and two-factor models for each possible pair of measures are estimated. For all six pairwise comparisons, the two-factor model chi-square value was significantly smaller than the one-factor model fit (all $\Delta\chi^2$'s from 12.95 to 32.70, p 's < .01).

Construct Validity

As indicated earlier, two measures were included in study 1, along with the CEIS items, to provide an initial assessment of the validity of the CEIS. Participants were asked to read and sign a consent form and were provided with general instructions on how to enter password information in order to be administered the CEIS. Prior to receiving the instrument, participants were asked to report demographic information. To assess discriminant and nomological validity, scales measuring self-monitoring and compulsive consumption were administered (a discussion of the predicted relationships is contained in the next section). Self-monitoring was assessed using the 13-item measure ($\alpha = .62$) developed by Lennox and Wolfe (1984). The measurement of compulsive consumption consisted of 14 items ($\alpha = .81$) from the scale developed by Faber and O'Guinn (1989). Once these measures were completed, the CEIS was then administered online via desktop computer in a lab setting. In a follow-up data collection of 115 undergraduates, three additional measures were included to further assess the discriminant validity of CEIS. Specifically, the 19-item self-report MSCEIT ($\alpha = .74$) from Brackett et al. (2006) was administered along with the 12-item Need for Emotion Scale ($\alpha = .92$; Raman, Chattopadhyay, and Hoyer 1995) and the 20-item Affect Orientation Scale ($\alpha = .86$) from Booth-Butterfield and Booth-Butterfield (1990).

Discriminant Validity. To assess discriminant validity, we initially assessed whether the CEIS is related to self-monitoring. Lennox and Wolfe (1984) define self-monitoring as the capacity to modify self-presentation and exhibit sensitivity to the expressive behaviors of others. While the self-monitoring scale may correlate moderately with self-report scales of emotional intelligence (Livingstone and Day 2005), it is unlikely that an ability-based scale such as the

CEIS will be correlated with self-monitoring. As expected, the correlation between self-monitoring and the CEIS ($r = .06$, $p > .05$) was nonsignificant, providing support for discriminant validity. Next, we identified three emotion-oriented scales to further assess the discriminant validity of the CEIS. Self-report measures of subjective-based EI (Brackett et al. 2006) have often been compared with ability-based scales, eliciting only modest correlations (Mayer et al. 2003). Thus we expected CEIS to discriminate from a self-report EI scale with the same dimensional structure as the CEIS. Discrimination is likely due to differences in self-report versus ability scales and to the domain specificity of the CEIS. Next, the Need for Emotion Scale (NFE; Raman et al. 1995) and the Affect Orientation Scale (AOS; Booth-Butterfield and Booth-Butterfield 1990) were also expected to discriminate from the CEIS. Need for emotion is defined as the tendency or propensity for individuals to seek out emotional situations, enjoy emotional stimuli, and exhibit a preference to use emotion in interacting with the world (Raman et al. 1995). Affect orientation is defined as the degree to which individuals are aware of and use affect cues to guide communications (Booth-Butterfield and Booth-Butterfield 1990). Results revealed that the CEIS was positively related to the self-report EI measure ($r = .19$, $p < .05$), need for emotion ($r = .39$, $p < .05$), and affect orientation ($r = .28$, $p < .05$), but only at modest levels, providing additional support for the discriminant validity of the CEIS. In addition, initial exploratory dimension-level analyses revealed that the perceiving and managing dimensions were marginally related to need for emotion. Scales attempting to assess the degree to which individuals are aware of and use emotion are considered to assess aspects of EI, and thus discriminant validity between these instruments and the CEIS is noteworthy. While these instruments tap similar elements of emotional ability, variables known to be related to EI, such as impulsivity and compulsivity, provide a means to assess the nomological validity of the CEIS.

Nomological Validity. Nomological validity was partially assessed by evaluating the relationship between the CEIS and a criterion measure known to be theoretically related to emotional ability. Instruments of EI should be related to scales that assess aspects of one's behavior that result from the use or misuse of emotional information and the regulation of subsequent emotions (Mayer et al. 2003). Thus, nomological validity is tested here by relating the CEIS to the Compulsive Behavior Scale (Faber and O'Guinn 1989).

Compulsive consumption is characterized as chronic episodes of a somewhat stereotyped fashion in which the consumer feels unable to stop or moderate the behavior. Although compulsive behaviors may produce some short-term positive emotions, the behavior produces a variety of negative consequences (Faber and O'Guinn 1989). Because the ability to use emotional knowledge is an important element of EI, individuals with higher EI are likely to display lower levels of compulsive consumption (Bearden, Netemeyer, and Mobley 1999). As expected, com-

pulsive consumption and CEIS were negatively related ($r = -.23, p < .05$), providing initial, albeit modest, evidence supporting the nomological validity of the CEIS. In addition, exploratory dimension-level analyses revealed that the perceiving, understanding, and managing dimensions were also marginally related to compulsive consumption.

Socially Desirable Responding

As discussed, the CEIS is not considered a subjective response-based self-report scale. Self-report scales of EI are considered measures of what people think they know about their emotional competencies (i.e., subjective emotional knowledge). Many of the self-report EI scales (Brackett et al. 2006) have been compared with ability-based models and have been found to correlate at nearly .3, consistent with correlations between .2 and .4 found in the articles examining differences between subjective and objective cognitive knowledge (Alba and Hutchinson 2000). Ability-based items are developed so that respondents who answer in socially desirable ways are unlikely to guess the correct answer. However, to ensure that social desirability did not affect the CEIS, we investigated the potential for social desirability bias.

Undergraduate business students at the University of Kentucky ($n = 58$) participated in a study collected as part of an unrelated research project. Respondents provided their answers to the Crowne-Marlowe Scale (Crowne and Marlowe 1960; $\alpha = .59$) as well as to the CEIS. Results revealed that the CEIS was not significantly correlated with the social desirability scale ($r = .05, p > .05$). These findings suggest that the CEIS does not appear to be susceptible to social desirability bias.

Test-Retest Reliability

To assess test-retest reliability, responses to the CEIS items were collected on two occasions separated by 1 week from a sample of 21 undergraduate business students at the University of Kentucky who earned course credit for participating. The CEIS demonstrated high test-retest reliability ($r = .84$), providing further support for the stability of the newly developed CEIS. In the next section, three studies that further evaluated the nomological validity of the CEIS are described.

NOMOLOGICAL VALIDITY STUDIES

Study 2: Individual Consumer Decision Making: CEIS versus MSCEIT

Using the data described earlier ($n = 100$), the goal of study 2 is to test the ability of the CEIS to predict consumer performance beyond the MSCEIT. If the CEIS predicts consumer performance outcomes over and above the MSCEIT, then additional confidence will be gained in the value of the CEIS. It should be noted that past research on EI has not previously investigated the impact of EI on individual de-

cision making. We expect that the domain-specific CEIS will outperform the general MSCEIT on a consumer performance outcome in which the quality of the decision is assessed via a healthful food choice task. Thus, we expect the following:

H1: The CEIS will predict consumer performance beyond the effects of the MSCEIT.

From a menu of options, individuals selected food alternatives that would enable them to maintain a healthful diet. This consumer task was used because it involves decisions that people make daily and because emotions often underlie food choices. When deciding which foods to consume, one likely considers cognitive information about nutritional factors (e.g., is this healthful for me?) as well as emotional information about how one feels about the consumption (e.g., will this make me feel happy?). Thus one's ability to use emotions skillfully when making food choices may be critical in maintaining a healthful diet, and therefore this provides a means to test the relative impact of both instruments of EI on consumer performance.

Sample and Data Collection. Respondents were given a scenario in which their goal was to decide what foods to eat for an entire day from a menu at a fictitious local restaurant that offers a wide range of healthful to unhealthy food options. While not told explicitly to choose items low in calorie content, the respondents were instructed to choose for their daily food intake from a computer-administered menu of items that would help them maintain a healthful diet: entrees (including salads, wraps, burgers, sandwiches, and pasta), appetizers (including soups, salads, chicken strips, nachos, wings, cheese sticks, chili, and cheddar and veggie potatoes), drinks (including water, soft drinks, diet soft drinks, hot and iced tea, coffee, beer, and mixed drinks), and desserts (including cakes, pies, brownies, and cookies). Price considerations were accounted for by eliminating prices on the menu, and participants were instructed to ignore price considerations. Once participants selected foods, they were instructed to click "submit," which closed the window and opened a new window that debriefed them. The performance measure used was the total calories associated with participant food choices. Total fat values were also gathered and yielded similar results to total calories ($r = .92$). Therefore, only the total calorie results are presented in the remainder of the article. The number of calories present in the foods selected was calculated based on quantities cross-referenced from multiple nutritional guides. The total calorie measure should be minimized to maintain a healthful diet. Total calories yielded a mean of 3,008.03 calories and ranged from 562 to 7,894 calories.

As stated earlier, a total of 100 undergraduate business students participated in study 2. In the first experimental session, participants were randomly selected to receive either the CEIS (split-half reliability = .87) or the MSCEIT scale (split-half reliability = .92). Approximately 1 week later, the instrument that was not received in the first session was administered in the second session. The order of computer

administration was counterbalanced to reduce likelihood of alternative explanations (e.g., fatigue, testing effects). Subsequently, no order effects were evidenced ($t(98) = .12$, $p > .05$).

Preliminary Results. We expected that both the MSCEIT and the CEIS would be negatively related to total calories of participant food choices but that the CEIS would be more negatively related to total calories as food choice decisions are specific to the consumer domain. It is important to note that the total score for the MSCEIT was significantly correlated with the CEIS ($r = .51$, $p < .01$). Hence, while the two scales are related, neither appears to measure the identical underlying domain.

To ensure that participants made food choices while keeping a healthful diet in mind, they were asked to respond to this statement: "I intend to make healthful food choices that are low in calories," and differences across individuals on this item were assessed. Findings indicated no significant differences on the total calories ($r = -.06$) variable across intentions. As a further check that the goal level did not influence responses, we examined emotional ability across goal items. Findings indicated a nonsignificant correlation between the CEIS and the goal level ($r = .10$, $p > .05$). Thus, the likelihood of respondents selecting foods based on the alternative goal of selecting low-calorie foods was eliminated as a potential alternative explanation in this study.

Validity Results. The relationship between EI and individual consumer performance was tested by comparing the CEIS and MSCEIT. Hierarchical regression was used first to determine the relationship between the MSCEIT and total calories. As displayed in table 1, this regression resulted in a significant effect of MSCEIT on total calories ($\beta = -.50$, $p < .01$). The MSCEIT explained an initial 25% of the variance in total calories. A second set of regressions including both MSCEIT and CEIS were conducted next. For total calories, both the MSCEIT ($\beta = -.27$, $p < .01$) and CEIS ($\beta = -.45$, $p < .01$) were significant predictors. The CEIS added an additional 15% explanatory power ($F(2, 97) = 32.47$, $p < .01$). It is important to note that the beta coefficient associated with the CEIS was larger than that of the MSCEIT. A test for differences between beta coefficients for the CEIS and MSCEIT was significant ($t(97) = -2.03$, $p < .05$). No effects of multicollinearity were exhibited between the CEIS and MSCEIT ($r = .51$, $VIF < 10$). Thus, these results provide support for hypothesis 1 and the validity of the CEIS. Individuals possessing greater consumption-related EI were more effective in minimizing their caloric intake. In the next study, we consider both emotional ability and cognitive ability in predicting food choices.

Study 4: Individual Consumer Decision Making: CEIS versus Cognitive Ability

The purpose of study 4 is to further examine the nomological validity of the CEIS in an individual consumer

TABLE 1
COMPARISON OF OUTCOMES IN THE NOMOLOGICAL VALIDITY STUDIES

	Study 2 Calories		Study 4 Calories	
	M1 ^a	M2	M1 ^b	M2
CEIS		-.45*		-.26*
MSCEIT	-.50*	-.27*		
Cognitive ability			-.43*	-.41*
R^2	.25	.40	.18	.25
F -statistic (M1 vs. M2)	$F(1, 97) = 26.88^*$		$F(1, 228) = 20.65^*$	

^aM1 = beta coefficient for regression with only MSCEIT as independent variable; M2 = beta coefficient for regression with both MSCEIT and CEIS as independent variables.

^bM1 = beta coefficient for regression with only cognitive ability as independent variable; M2 = beta coefficient for regression with both cognitive ability and CEIS as independent variables.

* $p < .01$.

choice context, focusing on the influence of EI beyond the effects of cognitive ability. The construct of cognitive ability is prevalent in marketing research (Ariely 2000), with much of this work focusing on an individual's ability to acquire (Capon and Davis 1984), process (McCarthy and Mothersbaugh 2002), and use (Ariely 2000) information to make better consumer-related decisions. In line with these conceptualizations, *cognitive ability* is defined as the amount of domain-specific knowledge acquired through experience, training, or innate individual differences (Spence and Brucks 1997).

Consumer research has indicated that more knowledgeable consumers make higher-quality decisions and conduct more thorough searches for additional product information because they are more aware of existing attributes (Brucks 1985). Furthermore, more knowledgeable individuals ask more effective questions and are more able to identify relevant information (Johnson and Russo 1984). Thus, cognitive ability is likely an important predictor of consumer performance. In study 4, cognitive ability is incorporated in our framework to account for the impact of objective knowledge on food choice.

A consumer's ability to skillfully assess and manage emotions in a purchase or consumption situation can be highly beneficial. For example, the decision on whether to order dessert after a meal in a restaurant may rely heavily on one's EI. After consuming tasty but unhealthful food, an individual who is struggling to diet will likely feel guilt, which can lead to deeper feelings of regret, frustration, and even depression. Such at-risk individuals must be able to effectively employ EI to understand which emotions they might feel during and after consumption and thereby manage their pleasure-seeking impulses through self-reward goals (Ramathan and Menon 2006). If they cannot do so, they are likely to make poor decisions regardless of their level of cognitive knowledge. A person can know a lot about nutrition and know what foods are unhealthful but can still make poor decisions when unable to recognize, reason, and solve prob-

lems based on emotional patterns. As such, consumers with higher levels of EI will likely perform better than those with lower levels of EI, even after controlling for cognitive knowledge. Thus, we predict the following:

- H2:** Emotional ability will positively influence consumer decision quality beyond the effects of cognitive ability.

Sample and Procedures. A total of 231 undergraduate business students at Virginia Tech (53% female) participated in study 4. Data were collected using procedures and measures similar to those used in study 2. Participants were provided with a Web address and password and were asked to complete an online survey that consisted of the CEIS (split-half reliability = .83), an assessment of cognitive ability (discussed below), and demographic items. Then they were administered the performance task used in study 2. For the performance task, respondents were asked to choose from an online menu those food items that they would eat in a typical day, within the constraints of the goal, which was to maintain a healthful diet. Total calories yielded a mean of 2,685.95 calories and ranged from 523 calories to 9,162 calories. We expect that both emotional ability and cognitive ability should be negatively related to total calories of the participants' food choices.

The cognitive ability measure was generated for use in this study and is a formative measure (see Hardesty, Bear-den, and Carlson 2007; Moorman et al. 2004). The 40-item nutrition knowledge measure is similar to measures widely used in consumer research (Brucks 1985; Moorman et al. 2004) and assesses objectively defined right or wrong responses. Thus, cognitive ability items represent general and specific nutrition knowledge of different food types, including fruits, grains, meats, dairy, and condiments. Respondents were asked to provide true/false responses to each knowledge question regarding whether one food has more calories than another. Answers were assessed as right or wrong based on a nutrient analysis provided by USDA guidelines. The percent of questions answered correctly ranged from 38% to 88%, with a mean of 72%. Reliability for the objective nutrition index was assessed using the proportional reduction in loss (PRL) measure developed by Rust and Cooil (1994) and employed recently by Hardesty et al. (2007). For the study 4 data, the PRL reliability estimate was .91, supporting the reliability of the nutrition knowledge measure. Decision-making performance was assessed using the same procedures used in study 2.

Results

As in study 2, predictions were tested in an individual decision-making context using hierarchical regression analysis. As displayed in table 1, initial regressions including only cognitive ability as an independent variable resulted in significant effects on total calories ($\beta = -.43, p < .01$). Cognitive ability explained an initial 18% of the variance in total calories. A second set of regressions including both cognitive

ability and the CEIS were conducted next. Both cognitive ability ($\beta = -.41, p < .01$) and CEIS ($\beta = -.26, p < .01$) were significant predictors, as shown in table 1. The CEIS added an additional 7% explanatory power ($F(1, 228) = 20.65, p < .01$). These findings provide support for hypothesis 2. The beta coefficient associated with cognitive ability was not significantly larger than that for the CEIS ($t(228) = 1.95, p > .05$), suggesting similar effects on total calories. Since the objective of the study is to evaluate the overall construct validity of the CEIS, we evaluated the moderated impact of EI on the relationship between cognitive ability and total calories to further examine how EI and cognitive ability are related to consumer decision making. Findings revealed that EI significantly moderated the relationship between cognitive ability and total calories ($\beta = .14, t(227) = 2.36, p < .05$), such that, when EI was high, cognitive ability had a significant impact on total calories ($\beta = 3,609.14, t(227) = 2.15, p < .05$).

Exploratory Dimension-Level Analyses. Next, we conducted exploratory analyses of the CEIS dimensions to determine which dimensions are predictive of food choices. The four subdimensions had an average correlation of .66 with overall CEIS. Each dimension had an average inter-correlation of .25. The split-half reliabilities were .75, .72, .68, and .78 for the perceiving, facilitating, understanding, and managing dimensions, respectively. As stated earlier, certain contexts can create unique needs to access and interpret emotional information, while others require more comprehension and regulation of complex emotional information. For example, knowing how one might feel after consuming a delicious but highly unhealthy meal and being able to control impulses toward unhealthy items are consistent with understanding and managing dimensions being most predictive of total calories. The results revealed that both the understanding ($\beta = -.16, p < .01$) and managing ($\beta = -.18, p < .01$) dimensions significantly predicted total calories beyond cognitive ability (see table 2). These find-

TABLE 2

DIMENSION RESULTS ON CONSUMER DECISION QUALITY AND PRODUCT CHOICE

	Coefficient	t-Value	p-Value
Study 4:			
Perceiving	-.05	-.78	.44
Facilitating	.02	.24	.81
Understanding	-.16	-2.65	.01
Managing	-.18	-2.88	.00
Cognitive ability	-.42	-7.27	.00
	Coefficient	Wald	p-Value
Study 5:			
Perceiving	.73	5.53	.02
Facilitating	.12	.18	.67
Understanding	.50	3.07	.08
Managing	.44	2.40	.12
Cognitive knowledge	.73	5.02	.03

NOTE.—Study 4: $R^2 = .26$. Study 5: Nagelkerke $R^2 = .27$.

ings support the predictive nature of EI, in which certain abilities are more appropriate for specific contexts. Other consumer contexts, such as product selection behavior, may elicit different dimensional inputs. For example, selecting a lesser-known brand with superior attributes instead of well-known brands with modestly inferior attributes is likely to be influenced by how well individuals perceive their emotions toward these brands. This issue is examined further in study 5.

Finally, gender was analyzed as a control variable. Past research on the effects of gender on performance suggests that males and females may differ relative to their performance outcomes on a variety of tasks, particularly with regard to emotional tasks (Pritchard and Wilson 2006). We examined the moderated influence of gender on the relationship between emotional ability and consumer performance. Regression analyses with emotional ability, gender, and the product term of gender by emotional ability as independent variables were conducted for total calories. The moderated influence of gender was not significant ($\beta = -.35, p > .05$). Gender had little effect on college students' emotional abilities related to consumer performance outcomes. Moreover, females and males had similar nutrition knowledge ($t(229) = -.60, p > .05$).

Study 5: Examination of Scale Generalizability

The goal of study 5 was to test the generalizability of the CEIS by examining its effects on product choice of digital camera brands. Consumers' evaluations of products are often influenced by affect related to brand information (Barone, Miniard, and Romeo 2000; Thomson, MacInnis, and Park 2005), particularly their influence on weighing important product attributes (Adaval 2001). Brands have been shown to generate high levels of commitment and loyalty and thus generate strong emotions that affect product choice decisions (Adaval 2003). For example, Thomson et al. (2005) indicated that emotional attachment to brands was related to brand loyalty and that stronger attachment was related to more intense feelings of brand loyalty. However, it is unknown how an individual who is adept at using emotional information might be able to resist the allure of intense feelings of attachment and loyalty in situations where a lesser-known brand is the "best" product. In study 5, we examine how the emotions evoked via brand information can be accessed and used effectively to make high-quality product choices. Better products, based on objectively superior attributes, are likely to be selected by individuals who are more adept at using their emotional knowledge to make a decision despite the appeal of strong branding information and the likely accompanying emotional attachment.

A second goal of this study was to address a potential alternative explanation in studies 2 and 4 that the measurement of consumer EI prior to the performance outcome could have artificially inflated the saliency of emotions and caused respondents to perform differently on the choice task. Thus, we varied the presentation order of the CEIS before and after the performance task in study 5 to address this issue.

Sample and Procedures. A total of 86 business undergraduates at the University of Kentucky participated in study 5. Data were collected in a lab setting using paper-and-pencil procedures. Participants were asked to complete the survey, which consisted of the CEIS (split-half reliability = .82), an assessment of cognitive knowledge about digital cameras, and a product selection task of a digital camera among four options with the Omega brand as the objectively best option. As described previously, the CEIS was counterbalanced for presentation before and after the performance task.

For the performance task, respondents were asked to indicate the digital camera brand they were most likely to purchase from the four options presented. Three of the options were well-known digital camera brands (Nikon, Canon, and Olympus), and the other (Omega) was a lesser-known brand as revealed in initial ratings. Participants indicated in a pilot study ($N = 27$) that the Omega brand was the least familiar ($M = 2.8$) relative to Nikon ($M = 6.7$), Canon ($M = 6.1$), and Olympus ($M = 4.8$). Information was provided in the instructions regarding the important attributes for selecting a digital camera, including image resolution, storage capacity, focus and zoom capabilities, and weight. This description was followed by four ads for digital cameras, one camera per page. The Omega brand appeared third to reduce the likelihood of primacy and recency effects (Haugtvedt and Wegener 1994). Each ad included a picture and a short description, followed by bulleted information and unique values for each attribute listed above. The attributes were varied slightly to be inferior on the well-known brands and modestly superior on the lesser-known brand (Omega). A second pilot study ($N = 24$) confirmed the objective superiority of the attributes listed under the Omega brand. When branding information was withheld, respondents indicated that Omega's (88%) attributes were superior to the attributes listed under Nikon (8%), Canon (0%), and Olympus (4%). Respondents were asked to assess which digital camera they would purchase. This item was dummy coded to reflect a "1" for selecting the Omega brand and a "0" for the three options. In addition, attitude toward the brand was used as a control for the influence of prior brand attitudes. Attitude was assessed using a four-item, seven-point scale (1 = bad to 7 = good; 1 = unfavorable to 7 = favorable; 1 = negative to 7 = positive; 1 = unsatisfactory to 7 = satisfactory). Coefficient alphas averaged .96 for all four brands.

The cognitive knowledge items used in this study were based on self-report items from Moorman et al. (2004). The reflective scale items were modified to assess the context of digital cameras. Respondents were asked to indicate the degree to which they agree/disagree (seven-point Likert-type scale) with three statements similar to the following item: "Among the people I know, I'm one of the 'experts' on digital cameras." The coefficient alpha was .93. Both consumer EI and cognitive knowledge were expected to be positively related to selection of the Omega digital camera, representing the highest-quality decision.

Results

As expected, attitude toward Omega ($M = 4.08$) was significantly lower than attitude toward Olympus ($M = 4.97$; $t(170) = 5.99$, $p < .01$), Canon ($M = 5.95$; $t(170) = 12.51$, $p < .01$), and Nikon ($M = 5.13$; $t(170) = 7.65$, $p < .01$). Logistic regression was used to estimate the influence of CEIS on the product selection task, including attitudes for each of the four brands included in the full model to control for prior brand attitudes. Findings indicated that CEIS ($\beta = .85$, Wald = 7.56, $p < .01$) significantly predicted intention to purchase the Omega digital camera brand, representing the highest-quality decision despite being the lesser-known brand. Cognitive knowledge was a marginally significant predictor of purchase intention ($\beta = .55$, Wald = 3.42, $p = .06$). Notably, similar to study 4, CEIS predicted beyond cognitive knowledge (13.0% additional explained variance; $p < .01$).

Next we conducted an analysis of the CEIS dimensions to determine their impact on digital camera purchase intention. The results revealed that the perceiving dimension ($\beta = .73$, Wald = 5.53, $p < .05$) significantly predicted purchase intention beyond cognitive knowledge ($\beta = .73$, Wald = 5.02, $p < .05$; see table 2). These findings support the generalizability of the CEIS in a product choice context and provide further support for the predictive nature of consumer EI. Specifically, our findings in study 5 indicated that a person's ability to perceive emotion—ability to accurately decode emotions in one's environment—was important in skillfully choosing a camera despite the influence of emotional attachment toward well-known brands.

Finally, to assess the potential limitation of artificially inflating the saliency of emotions and thereby influencing response on the performance task, we examined the order of CEIS administration on the performance task. Omega camera purchase intention did not depend on whether the CEIS appeared before ($M = .37$) or after the task ($M = .39$; $t(84) = -.22$, $p > .05$).

GENERAL DISCUSSION

Despite the importance of emotion in consumer decision making (Luce 1998; Pham 1998; Ruth 2001), our understanding of consumers' use of emotional information is limited. The current research has focused on the influence of emotional processing abilities on important consumer performance outcomes including food and product choices. We created an ability-based scale of consumer EI to enable a more thorough examination of the influence of EI on consumer outcomes. The general nature of the MSCEIT, along with the length, cost of administration, and difficulty of adding follow-up instruments and/or items adds to the contribution of the newly developed CEIS, which provides an effective and psychometrically sound means of assessing emotional ability in the consumer domain. It is important to note that this instrument is not intended to replace more general measures of emotional ability but rather to serve as a more domain-specific instrument that can be used to assess

consumer outcomes. Understanding the role of emotional ability could lead to an array of favorable outcomes, including a richer knowledge of how consumers think and feel when making a variety of decisions (e.g., selection of foods, restaurants, and products) and when interacting with other consumers. Furthermore, consumers who understand emotional ability can make higher-quality decisions related to their health and to product choices.

Summary of Findings

Findings regarding the development and assessment of the CEIS were detailed in this article. The CEIS was created and compared with the leading psychological instrument of EI called the MSCEIT (Mayer et al. 2003). The instruments were moderately correlated, suggesting that both are measures of EI, but they were sufficiently different enough to support the domain-specific utility of the CEIS. After a series of tests confirmed the scale's structure and yielded acceptable reliability, the CEIS's validity was supported in several additional studies.

In study 1, the CEIS was found to display adequate nomological validity in predicting compulsive consumption. Findings from study 2 indicated that the CEIS successfully predicted consumer performance better than the MSCEIT for a consumer food choice task. In addition, two alternative explanations were ruled out in study 2. We tested for effects across the order of administration and found no evidence of bias. Furthermore, we examined the goal level of consumers to insure that respondents' decision making on the performance task was not biased by their intentions to select foods for reasons other than maintaining a healthful diet. Study 3 confirmed the higher-order factor structure of the CEIS and elicited acceptable split-half reliability estimates for each dimension and overall CEIS. In addition, in study 3, discriminant validity was provided among CEIS dimensions.

Findings in study 4 indicated that emotional ability predicts consumer performance beyond the effects of cognitive ability, supporting the importance of emotional ability in consumer behavior and the nomological validity of the CEIS. On exploration of the predictive ability of the four dimensions, it was found that, for a food choice task involving people's healthful eating behaviors, total calories was predicted by the abilities to understand and manage emotion.

In study 5, we evaluated CEIS in an additional consumer context by investigating digital camera choice decisions. Individuals with higher consumer EI were found to make better choices than those with lower levels of EI. In this product choice task, exploration of CEIS dimensions revealed that, for deciding which digital camera was preferred, consumers' ability to perceive emotion was predictive of their decision. This represents a different type of decision than food choice, in which regulating desires is more important to the decision than preferences. Specifically, while food choices represent consumers' understanding and management of their emotions related to overcoming desires for tasty but unhealthful foods, a product choice task involves less management of emotion and more consideration of how

consumers feel about each brand relative to the unique attributes. For a lesser-known digital camera brand with superior attributes, consumers were able to access and use emotional knowledge to choose the best product despite their branding influences. Individuals who were unable to effectively perceive their emotions were too heavily persuaded by brand information and were unable to resist the comfort of the well-known brands despite their inferior product attributes. Accurate appraisal of emotions begins with attending to the emotional environment. If consumers are uncomfortable when dealing with lesser-known products, they are likely to resist searching product information adequately. In turn, they are unlikely to make the highest-quality decision because they have not considered available information, such as the possibility that the lesser-known product may in fact be the “best.” This supports our findings, in which those high in consumer EI were better able to resist the lure of branding information and were more likely to select the product with objectively superior attributes despite less familiarity with the brand.

Finally, in study 5, an alternative explanation was assessed, in which the order of presentation of the CEIS was counterbalanced to reduce potential for artificial inflation of emotional influence on responding to the performance outcomes in studies 2 and 4. No order effects were found when the order of administration was rotated. Gender was not a significant influence between emotional ability and consumer performance, and this provided evidence that gender, at least among college-aged individuals, had little impact on emotional reasoning abilities. In sum, studies 4 and 5 provided preliminary evidence for the differential impact of specific dimensions, although future research is needed to elucidate the dimensions further in terms of their relationships with various outcomes.

Directions for Future Research

The importance of emotional ability in decision making is only beginning to be realized in the consumer literature. The domain of consumer behavior offers numerous important decisions that consumers make daily that can profoundly influence people's lives, including choices about the foods they eat, the money they spend, and the products they buy. With the newly developed CEIS, the current research has shown that both food and product choices are influenced by one's emotional ability; however, other contexts exist in which consumer EI can be further explored. In the next few sections, several distinct contexts are discussed, and these may provide avenues for new research or additions to existing streams of research.

Affect as Information. The processing of visual and sensory information may greatly affect purchase intentions. Schwarz and Clore (1996) suggest that feelings are sources of information that can be applied to decision making. This may be an important area of consumer EI research to further explore how consumers process emotional information and incorporate their emotional processing abilities to make pur-

chase decisions. For example, Pham (1998) indicated that incidental moods often transfer to unrelated purchase intentions because of the HDIF (How-Do-I-Feel) heuristic, in which consumers use affect to provide information about their current situation. However, people with higher levels of EI are likely to be more adept at using the available EI and to be more able to apply it effectively to the consumption setting. As such, EI might make the emotions more salient to the individual and thus exacerbate the effect of mood on purchase intention. In this context, perceiving emotion and possibly facilitating emotion might be more influential. On the other hand, EI could act as a buffer to regulate the incidental effects of mood on unrelated consumer behaviors. Thus, consumers who are better able to manage and understand their mood in a particular consumption situation might be less likely to purchase because those incidental moods are salient to them. They may realize that their mood is irrelevant to the current setting. These interesting relationships need further examination.

Coping with Negative Emotion. Emotional intelligence can have an important impact on the welfare of consumers in numerous consumer contexts. A better understanding is needed of how EI can influence health behaviors, for example, the likelihood of undertaking medical tests such as mammograms or colonoscopies for the early detection of life-threatening illnesses. People who can overcome feelings of risk and fear might be more likely to pursue these preventive procedures. This taps an important area of research on coping with negative emotions. Specifically, when making decisions, people often anticipate how they will feel about future outcomes and then use those feelings as a guide for engaging in a behavior (Dowling and Staelin 1994). Decisions evoking negative emotion are often avoided as a means to cope with these feelings. For example, the emotional trade-off difficulty paradigm (Luce 1998; Luce et al. 1999) suggests that higher emotion-laden trade-offs among attributes can evoke higher levels of negative emotion. Furthermore, the probability of choosing to avoid the decision may increase for tasks involving higher levels of trade-off difficulty. Coping with negative emotions is likely to be related to individuals' ability to effectively employ their emotions. Thus, future research in this area might examine how consumers' ability to process and use emotional information might influence various aspects of emotional trade-offs. It could be expected that high-EI consumers would be more able to understand how they would feel during and after the decision and therefore would be more able to regulate their emotions so that less negative emotion would be felt toward the trade-off. Furthermore, low-EI consumers might be more likely to choose the status quo option to avoid these emotional trade-offs and might experience greater levels of negative emotion since they would be unable to effectively use their emotional knowledge.

Purchase Decisions. As we have shown in study 5, product choice decisions are influenced by levels of consumer EI, and the perceiving dimension was particularly important

in predicting the choice of a digital camera. However, a more thorough investigation is needed to understand how consumer EI affects different types of product choice decisions. For instance, are high- versus low-EI consumers more likely to purchase certain products? What attributes might appeal more to those who are unable to perceive or manage their emotions? And how do these individuals spend their money? Future research could potentially reveal that low-EI consumers overspend and overconsume certain products or make different decisions for utilitarian versus hedonic products. It should be noted that in study 5 actual camera purchases were not assessed; instead, respondents indicated which camera they would purchase if they were to buy one today. Future research should examine actual purchase.

In addition, research is needed to more fully investigate how EI influences loyalty to certain brands. Our initial findings in study 5 suggest that low-EI consumers tend to be more loyal to well-known brands. But questions remain: Are these consumers more risk averse or just unable to overcome the emotions associated with the risk in consuming an unknown brand even though the attributes are superior? What types of processes influence the brand loyalty of low-EI consumers?

Emotionally Intelligent Interpersonal Interactions. In the current research, we have demonstrated the influence of consumer EI on individual decision making; however, little is known about its impact on consumer interactions with others, who can include friends, partners, spouses, and even co-workers. Research might investigate the process through which dyads or groups differing in emotional ability reconcile differences when arriving at a decision. For instance, what forms of negotiation or bargaining might be effective when arriving at the group or dyadic decision? Furthermore, does the nature of this process differ based on whether the dyad or group is familiar (husband-wife or parent-child), a reference group (aspirational or participatory), or more transactionally oriented (customers and sales employees)? Understanding the role that susceptibility to interpersonal influence (Bearden, Netemeyer, and Teel 1989) plays in these group decisions and how this trait and EI are related would be fruitful.

Emotionally Calibrated Decisions. Recent interest in the emotional aspects of consumer self-confidence (Bearden et al. 2001) has highlighted the need to examine potential emotional biases in decision making and their influence on consumer outcomes. Alba and Hutchinson (2000) posit that judgments are routinely biased, which poses several problems, including lower-quality decisions due to inaccuracy. Individuals typically do not receive feedback regarding their judgments, so poor decisions become routine. Similarly, consumers who mistakenly believe that they possess high levels of emotional processing abilities may be at an even greater disadvantage because they are unaware of the power of their emotions as they make consumer decisions (Schwarz and Clore 1996). Emotionally calibrated consumers may be more motivated as a result of heightened confidence, and, also pos-

sessing objective emotional processing abilities, they may be better able to make high-quality decisions. Emotional processing biases that result from emotional miscalibration may also have important influences on consumer outcomes.

In summary, we have attempted to highlight the importance of consumer EI and to demonstrate its importance to the field of consumer behavior. Many areas of consumer research can be touched by this important construct. The goal of this research was not only to show the potential usefulness of the CEIS but also to provide an efficient and effective means to investigate consumer issues. We have demonstrated the reliability and validity of the CEIS and provided evidence of its ability to predict beyond a domain-general scale (MSCEIT). In addition, we have provided evidence that the CEIS predicts performance outcomes in multiple consumer contexts beyond cognitive knowledge. With the development of the CEIS, we provide scholars with a tool for investigating many areas of consumer research, for finding better ways to fulfill consumers' needs, and for communicating more effectively with consumer groups the need for accessing and using emotions in controlling their behavior as consumers.

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