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BEING EMOTIONAL DURING DECISION MAKING—GOOD OR BAD? AN EMPIRICAL INVESTIGATION

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This paper examines the link between affective experience and decision-making performance. In a stock investment simulation, 101 stock investors rated their feelings on an Internet Web site while making investment decisions each day for 20 consecutive business days. Contrary to the popular belief that feelings are generally bad for decision making, we found that individuals who experienced more intense feelings achieved higher decision-making performance. Moreover, individuals who were better able to identify and distinguish among their current feelings achieved higher decision-making performance via their enhanced ability to control the possible biases induced by those feelings.

Folk theories abound when it comes to the topic of how feelings affect decision making (Slovic, 2001). Traditionally, emotionality has been portrayed as the opposite of rationality and/or effectiveness in a managerial setting (Ashforth & Humphrey, 1995; Putnam & Mumby, 1993). Organizations have frequently asked their employees and managers to keep their affective experiences at work within a relatively neutral range or to express their feelings only according to narrowly defined organizational rules (Hochschild, 1983; Morris & Feldman, 1996). A similar prescription is popular in the field of finance. Investors are frequently instructed to put their feelings under control, meaning that they need to avoid or suppress strong feelings (Babin & Donovan, 2000).

Scientific debate over whether subjective experiences of emotion are functional or maladaptive has been ongoing (Gohm & Clore, 2002). Some argue that feelings are a source of unwanted bias (Shiv, Loewenstein, Bechara, Damasio, & Damasio, 2005; Slovic, Finucane, Peters, & MacGregor, 2002) and thus need to be properly regulated (Gross & John, 2003). Others maintain that feelings play an adaptive role in decision making (Damasio, 1994) and benefit personal well-being (Aspinwall & Taylor, 1997; Fredrickson, 2001). In the present study, we provide evidence that might help to resolve this debate by suggesting that whether affective feelings are functional or dysfunctional for decision making is largely dependent upon how people experience those feelings and what they do about them during decision making. On the basis of a broad perspective on individual differences in affective information processing (Gohm, 2003; Gohm & Clore, 2000), we propose that individuals can experience intense feelings during decision making while simultaneously regulating the possible biases induced by those feelings, both of which may positively contribute to their decision-making performance. We empirically examined the proposed relationships in a stock investment simulation combined with an experience-sampling procedure.

This study extends previous research on affect and decision making in three ways. First, it provides direct empirical evidence regarding how feelings influence individuals' decision-making performance in a high-fidelity simulation that simultaneously captures the aspects of psychological realism (Berkowitz & Donnerstein, 1982) and the benefits of experiments (such as internal validity). Second, we examine contrasting perspectives in the literature—the potentially functional and dysfunctional (bias-inducing) roles of feelings in decision making—in a single study design. Finally, this study demonstrates that the degree to which

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affective feelings are functional or dysfunctional for decision making varies considerably between individuals in a predictable way. In this article, we use "feelings" as a broad term referring to various affective states, including mood, viewed as a prolonged and diffuse affective state associated with no particular object, and discrete emotions, viewed as intense prototypical affective experiences directed toward certain objects, such as anger and fear (Forgas, 1995; Russell, 2003).

LITERATURE REVIEW AND HYPOTHESES

The literature on affect and decision making points to two contrasting perspectives regarding the role of affective experience in decision making. The first, which we call *feeling-as-bias-inducer*, suggests that individuals' feelings induce various forms of bias into the decision-making process that skew their decisions in certain ways. In this view, feelings can be harmful to decision-making performance. There are several ways that affective feelings can bias decision making. First, feelings can affect the content of information retrieved in the brain during decision making (e.g., Erber, 1991; LeDoux, 1993; Meyer, Gayle, Meeham, & Harman, 1990). For example, a body of research supports a "mood congruence recall effect," which refers to people's tendency to recall materials from memory that are consistent with their affective state at the time of recall (e.g., Meyer et al., 1990). Second, feelings can directly color cognitive judgments required for decision making. Numerous studies have shown that momentary feelings influence various social judgments (see Forgas [1995] for a review). For example, one general effect, the "mood congruence judgment effect," is that people tend to make judgments that are consistent with their affective states at the time of judgment (e.g., Johnson & Tversky, 1983; Meyer et al., 1992). A third body of research suggests that affective feelings can directly bias individual choices (e.g., Gray, 1999; Shah, Friedman, & Kruglanski, 2002). For example, studies have shown that intense unpleasant feelings often lead people to favor short-term enhancements, focusing on what is best in the moment, regardless of possibly negative long-term consequences (Gray, 1999).

Other researchers have proposed a *feeling-as-decision-facilitator* view. That is, affective feelings can improve decision-making performance by facilitating and even enabling decision-making processes. Researchers have identified several ways though which feelings can facilitate decision making. First, scholars from several disciplines have suggested that affective reaction is a core driver of conscious attention and allocation of working memory, both of which are necessary for the extensive cognitive processes involved in decision making (Damasio, 1994; Kitayama, 1997; Wells & Matthews, 1994). For example, Damasio (1994) asserted that feelings boost the conscious attention and continued working memory required for any reasoning or deciding. Ketelaar and Clore (1997) also suggested that an important function of momentary feelings is to shift attention from less-pressing goals to more urgent ones.

Second, feelings can facilitate the decision-making processes involved in selecting and prioritizing choices relevant to situational requirements (e.g., Damasio, 1994; Ketelaar & Clore, 1997; Schwarz, 1990; Schwarz & Clore, 1988). One of the common dilemmas a decision maker faces is that potentially infinite factors and options surround every decision, each with conflicting advantages and disadvantages, making it extremely difficult or even impossible to make an optimal decision within a given time frame (Ketelaar & Clore, 1997). Pleasant and unpleasant feelings can help decision makers to resolve this dilemma by invoking distinguishable frames of mind (Morris, 1989; Schwarz, 1990; Schwarz & Clore, 1983, 1988; Raghunathan & Pham, 1999) that in turn enable and facilitate their selectively attending to and efficiently prioritizing cues in terms of their relevance to the adaptive requirements in a given situation (e.g., Ketelaar & Clore, 1997). In particular, Damasio (1994) argued that the human affective system plays a critical role in people's quickly generating and selecting among a potentially infinite number of alternative options by providing immediate affective evaluations of each option's relative goodness or badness for their personal well-being.

Finally, considerable evidence exists that momentary feelings influence how people process information during decision making, which in turn promotes decision-making effectiveness in particular contexts. For example, people in pleasant affective states tend to categorize stimuli in a broader, more inclusive, and more flexible fashion (Murray, Sujan, Hirt, & Sujan, 1990), which often enhances creativity (Isen, Daubman, & Nowicki, 1987) and performance on complex tasks (Isen & Means, 1983; Staw & Barsade, 1993). In contrast, people in unpleasant affective states tend to engage in more effortful, systematic, piecemeal information processing (Conway & Giannopoulos, 1993; Edwards & Weary, 1993), which leads to effective decision making when decisions require accurate, unbiased, and realistic judgments (e.g., Sinclair, 1988) or systematic execution of a structured decision protocol (Elsbach & Barr, 1999).

Reconciliation: Individual Differences in Affective Information Processing

These two streams of research suggest that at any given moment, affective experience has the potential to both help and hurt those making important decisions. We argue that whether affective feelings actually hurt or help decision making can be largely determined by how individuals experience and handle those feelings in more or less functional or dysfunctional ways. This stance is consistent with a broader perspective on individual differences in affective information processing (Barrett, 1998; Feldman, 1995; Gohm, 2003; Gohm & Clore, 2000, 2002). According to this perspective, individuals differ not only in how they experience feelings—for example, in the extent to which they experience intense feelings—but also in what they do about those feelings: that is, in the extent to which they attend to the information feelings convey and integrate it into their judgments, decisions, and behaviors. More importantly, this framework suggests that how people experience their feelings and what they do with their feelings are conceptually separate and relatively independent processes (Gohm, 2003; Gohm & Clore, 2000).

We argue that the two competing perspectives in the research literature on emotion focus on the two different processes in affective information processing within individuals. The feeling-as-decision-facilitator perspective focuses on *how* people experience their feelings during decision making, since it suggests that feelings per se inherently facilitate decision making, regardless of what people do about those feelings (feelings per se may, for example, facilitate decision making by enhancing working memory capacity [Damasio, 1994]). In contrast, the feeling-as-bias-inducer perspective focuses on the other process, what people *do* about their experienced feelings. For example, a number of studies have evidenced that the bias-inducing effects of feelings disappear when people attribute their current feelings to the correct causes (Forgas & Ciarrochi, 2002; Schwarz & Clore, 1983). This view implies that not all experienced feelings introduce bias to decisions; the effects of feelings depend on how people handle those feelings during decision making.

We attempt to reconcile and integrate the two competing perspectives within the broader framework of individual differences in affective information processing by proposing that individuals can experience intense feelings during decision making and simultaneously regulate the possibly bias-inducing effects of those feelings on their decisions. Moreover, we hypothesize below that both the degree to which individuals experience intense feelings during decision making, which is called *affective reactivity* (e.g., Larsen, 2000), and the degree to which they regulate the bias-generating influences of their current feelings, which we call *affective influence regulation* (e.g., Forgas, 2000; Gohm, 2003; Gohm & Clore, 2000), independently and interactively contribute to more favorable decision-making outcomes. In addition, we propose that another dimension of individual differences in affective information processing, "emotion differentiation" (also called "emotion granularity" [Barrett, 2004] or "emotional clarity" [Gohm & Clore, 2000]), is an important predictor of affective influence regulation. *Emotion differentiation* is defined as the degree to which an individual can identify, distinguish, and describe specific feeling states (Barrett, 1998; Barrett, Gross, Christensen, & Benvenuto, 2001; Feldman, 1995; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). We hypothesize below that emotion differentiation positively and indirectly affects decision-making performance via its positive influence on affective influence regulation.

Affective Influence Regulation and Decision-Making Performance

A number of scholars have found that individuals differ in how they regulate their affective experience and its broader consequences in their judgments, choices, and behaviors (Erber & Erber, 2000; Gohm, 2003; Gottman & Fainsilber-Katz, 1989; Gross, 1998; Larsen, 2000). Of particular importance to decision making is affective influence regulation. Forgas and his colleagues (e.g., Forgas, 2000; Forgas & Ciarrochi, 2002) provided a theoretical explanation of why and how individuals differ in affective influence regulation. They argued that individuals constantly engage in two types of affective information processing modes in a temporal sequence. One is open, constructive processing (called "substantive processing") in which people process both affective and nonaffective information extensively and in an open-ended fashion. However, they are generally unaware of their current feeling states and their possibly bias-inducing influences and thus experience extensive and direct infusion of their affective feelings into their judgments and choices (e.g., mood congruence judgment). The other kind of processing (called "motivated processing") is a more controlled, directed information-processing strategy in which the bias-inducing effects generally disappear or are reversed as people become aware of and actively manage their affective experience. Forgas (2000) further suggested that although people constantly and extensively use both types of processing in processing affective information, they may differ in the extent to which they make transitions from the open, substantive processing to the controlled, motivated processing of their affective information and thus differ in the degree to which their current feelings induce biases into their judgments and decisions during decision making.

The judgments and choices of individuals high in affective influence regulation are less likely to be influenced by their affective feelings during decision making. The feeling-as-bias-inducer perspective discussed above would suggest that such individuals are likely to achieve higher performance in most decision-making tasks in which decision makers' accurate and unbiased judgments in given situations are the primary determinant of decision performance, because their decisions will be more protected from the possible biases induced by their feelings. In contrast, individuals low in affective influence regulation may perform worse than others in decision making, because their current feelings constantly influence their judgments and choices to greater degrees. These judgments and choices in turn hinder them from basing decisions on an accurate mental representation of reality. Therefore, we hypothesize that affective influence regulation is positively related to decision-making performance:

Hypothesis 1. Individuals higher, rather than lower, in affective influence regulation achieve higher decision-making performance.

Affective Reactivity and Decision-Making Performance

A number of researchers have suggested that individuals differ in how they respond to various affective cues in their environments (Gohm & Clore, 2000, 2002; Larsen, 2000). For example, some people are more reactive to negative environmental cues than to positive ones (e.g., Larsen & Ketelaar, 1991). Some people react with more intense feelings to both pleasant and unpleasant events in their lives (Larsen, Diener, & Emmons, 1986). In this study, we focus on a general dimension of affective reactivity often called "affect intensity" (Larsen & Diener, 1987) or "emotional intensity" (Gohm, 2003), defined as the magnitude of affective feelings experienced during decision making.

By definition, individuals with higher affective reactivity are likely to experience more intense feelings during decision making. According to the feeling-as-decision-facilitator perspective, intense feelings experienced during decision making may facilitate the cognitive processes involved in decision making by, for example, promoting enhanced attention, working memory allocation, and alternative generation and selection (Damasio, 1994; Ketelaar & Clore, 1997; Kitayama, 1997). In addition, such intense feelings may also have important motivational implications for decision making. Seo, Barrett, and Bartunek (2004) suggested that affective feelings may constantly influence three core dimensions of task motivation within individuals: direction (choice of action), effort (intensity of action), and persistence (duration of action). In particular, they argued that the intensity of feelings (activation), regardless of whether they are pleasant or unpleasant, may generate a sense of energy or urgency for action that leads people to devote a greater amount of effort to a given task and that this effect can occur without their conscious awareness and control. An increase in effort generated by intense feelings in turn may lead to better decision performance to the extent that performance is effort-dependent. Therefore, we hypothesize that affective reactivity may be positively related to decision-making performance:

Hypothesis 2. Individuals higher, rather than lower, in affective reactivity during decision making achieve higher decision-making performance.

Interaction between Affective Influence Regulation and Affective Reactivity

Although affective influence regulation and affective reactivity are mutually distinct individual characteristics, they may not influence decision-making performance in a purely independent fashion if their underlying processes—the bias-generating effect of feeling and the intensity of experienced feeling—are systematically related to each other within individuals. From a conceptual point of view, a systematic association between the two underlying processes is possible because the bias-generating effect of affective feeling implies the presence of affective feeling of at least a certain degree of intensity. Past empirical research consistently suggests a partial association between the intensity of feeling and its bias-generating effect; there is neither complete association nor complete independence between the two. For example, the mere presence of pleasant or unpleasant feeling, regardless of its intensity, is sufficient to color judgments and choices (see Isen [2002] for a review). Similarly, intense feelings often but not always generate biases when people are aware of and thus actively regulate such intense feelings (see Forgas [1995] for a review).

Therefore, at least to the extent that affective intensity is systematically associated with decision-making biases, affective reactivity may influence decision-making performance in interaction with affective influence regulation. More specifically, affective reactivity may more strongly facilitate decision-making performance for those individuals who are higher in affective influence regulation, since they can better regulate any bias-generating effects that arise during decision making. In addition, since the association is still partial, the interaction effect may not completely replace the main effects of affective influence regulation and affective reactivity on decision-making performance. Thus, we hypothesize a moderating effect of affective influence regulation on the relationship between affective reactivity and decision-making performance in addition to the two main effects:

Hypothesis 3. The relationship between affective reactivity and decision-making performance is stronger for those individuals who are higher, rather than lower, in affective influence regulation.

Emotion Differentiation and Affective Influence Regulation

From a practical standpoint, a great deal of uncertainty remains regarding what individuals should do to better regulate the influence of their affective feelings on decision making, even if scientific evidence supports our hypothesis that greater affective influence regulation will lead to higher decision-making performance. Here we propose a way to reduce the uncertainty and, in doing so, we contradict the popular prescriptions and organizational practices that encourage people to ignore or suppress their feelings to better regulate their affective influence (Putnam & Mumby, 1993).

A key dimension on which individuals differ in processing affective information is emotion differentiation. In several studies using an experience-sampling procedure, for example, Barrett and her colleagues (Barrett, 1998, 2004; Feldman, 1995) found that some individuals tend to describe their affective experiences in a discrete, differentiated fashion (high emotion differentiation characterized by smaller correlations among positive affect items and among negative affect items), whereas other individuals represent their affective experience in an undifferentiated fashion, treating a range of like-valence terms as interchangeable (low emotion differentiation characterized by large positive correlations among positive affect items and among negative items).

A number of scholars have suggested that emotion differentiation has an important implication for effective use and regulation of affective experiences, particularly for reducing the possibly bias-inducing effects of momentary feelings (Barrett et al., 2001; Barrett & Gross, 2001; Ciarrochi, Catuti, & Mayer, 2003; Gohm, 2003; Salovey et al., 1995). For example, several researchers have argued that experiences of specific, differentiated emotional states are less subject to misattribution errors (Keltner, Locke, & Audrain, 1993; Schwarz, 1990) because these states are typically associated with a causal object, whereas global affective states are not (Russell & Barrett, 1999). In addition, other scholars (Barrett et al., 2001; Barrett & Gross, 2001; Ciarrochi et al., 2003) have suggested that greater emotion differentiation is associated with more highly activated discrete emotional knowledge, which provides a wealth of information regarding the behavioral repertoire for dealing with an affective experience and coping with the larger situation. Thus, they suggest, individuals with high emotion differentiation should have an advantage in regulating their affective experience and its potentially negative influences on their choices and behaviors.

Accordingly, we hypothesize that emotion differentiation is positively related to affective influence regulation. Specifically, individuals who are more attentive to and better able to identify and distinguish among their current affective states—instead of ignoring them or viewing them globally—are likely to better regulate the possibly bias-generating effects of their affective feelings during decision making. As a result, more emotionally differentiated individuals will achieve higher decision-making performance via their enhanced ability to regulate their affective influence on their decisions. This argument leads us to further hypothesize that affective influence regulation mediates the relationship between emotion differentiation and decision-making performance:

Hypothesis 4. Affective influence regulation mediates the relationship between emotion differentiation and decision-making performance.

METHODS

To examine the dynamics of affective experience and its effects on decision making in a real-life setting, we developed and ran an Internet-based stock investment simulation. We chose this domain of behavior because the task of stock investing involves a series of decision-making activities that have clearly observable variations in key dimensions of decision making, such as risk taking. In addition, stock investing allowed us to isolate individual-level effects of affective experience from potential group-level, organization-level, and institution-level factors that might affect decision-making outcomes.

We combined the investment simulation with an experience-sampling procedure (Barrett, 1998; Barrett & Barrett, 2001; Feldman, 1995) in which investors rated their feelings and thoughts directly on the Internet Web site while simultaneously performing investing activities. Experience-sampling procedures, in which feelings are measured at the time they are being experienced, minimize the cognitive biases that can affect memory-based self-reports (Wheeler & Reis, 1991; Reis & Gable, 2000). This bias reduction is particularly important for studying affective experience, because researchers have detected memory biases when using standard retrospective self-report measures (e.g., Barrett, 1997). Moreover, by measuring momentary affective feelings and all other variables multiple times (here, 17–20 times) for each individual, we could examine the within-individual characteristics in affective information processing (affective reactivity, affective influence regulation, and emotion differentiation) as well as the between-person effects of those within-person characteristics on decision performance.

The first author ran the stock investment simulation for 20 business days (four weeks). The participants were initially given hypothetical cash of $10,000. During the simulation, they were allowed to invest the whole or a part of this hypothetical cash on any of 12 anonymous stocks selected from the national stock market for this simulation. Once a day during the simulation period, participants logged onto the stock investment simulation Web site; viewed current market and stock information, which the author updated daily, using national sources; checked their current investment performance; and finally made their investment decisions about which and how many shares of the 12 stocks to buy or sell for the day. Just before making their investment decisions for the day, they reported their current affect.

Participants

The first author contacted six investment clubs located in the northeastern United States, each with at least 40 members, and advertised the investment simulation via public announcement (e.g., face-to-face presentations during regular meetings and/or electronic advertisement via membership e-mail directories). A total of 118 members volunteered by the deadline date to participate in the stock investment simulation. The first author initially met the participants as groups, gave them the detailed instructions for participating in the stock investment simulation, and told them that the investment simulation was a part of a larger study exploring how people's thoughts and feelings influence investment decisions. Thus, he noted, they would be asked to report their current thoughts and feelings during the simulation. Participants received remuneration of between $100 and $1,000 for participating; the amount depended on their investment performance in the simulation (described further below). Their ages ranged from 18 to 74 ($\bar{x}$ = 24.7, s.d. = 13.2) and, as is typical in most investment clubs, the majority of the participants were male (86 men / 80%). Their investment experience was 4.3 years on average (s.d. = 7.4), ranging from 0 to 50 years (0 years, 16%; 0–1 year, 20%; 2–3 years, 26%; 4–5 years, 15%; 5–10 years, 16%; more than 10 years, 7%).

Measurement

Affective reactivity. Drawing on the recent conceptual and empirical examination of core affective structure by Barrett and Russell (1998), we selected 22 affect-related adjectives that represented the circumplex structure of core affect: two indicated pleasant feelings ("happy" and "satisfied"), five indicated pleasant, "activated" feelings ("excited," "joyful," "enthusiastic," "proud," and "interested"), two indicated activated feelings ("aroused" and "surprised"), five indicated unpleasant, activated feelings ("irritated," "afraid," "angry," "nervous," and "frustrated"), two indicated unpleasant feelings ("sad" and "disappointed"), two indicated unpleasant, "deactivated" feelings ("depressed" and "tired"), two indicated deactivated feelings ("quiet" and "still"), and two indicated pleasant, deactivated feelings ("calm" and "relaxed").

Each day during the simulation period (thus, 20 times), participants used a 5-point scale (0, "not at all," to 4, "extremely so") to indicate the extent to which each adjective described their current feelings. Of the 22 adjectives used, 18 represented affective reactivity: nine pleasantly valenced affect items ("excited," "joyful," "enthusiastic," "proud," "interested," "happy," "satisfied," "calm," and "relaxed") and nine unpleasantly valenced affect items ("irritated," "afraid," "angry," "nervous," "frustrated," "disappointed," "sad," "tired," and "depressed"). We derived an affective reactivity index each day for each participant by taking the average of the pleasantly valenced affect items (α =.90) when pleasant affect was the dominant subjective state and the average of the unpleasantly valenced affect items (α = .86) when unpleasant affect was the dominant state (Barrett et al., 2001; Larsen & Diener, 1987). Out of a total of 1,868 affect reports collected, in 1,072 cases (57%) pleasant feelings were the dominant affective state for a given day, and in 796 cases (43%), unpleasant feelings were predominant. These numbers suggest a relatively good balance in our sampling between predominantly pleasant and predominantly unpleasant affective states. These affective reactivity index scores were further averaged over times (days) for each participant. A higher score in this averaged affective reactivity index indicated greater affective intensity experienced during stock investment decision making.

Affective influence regulation. We computed an index of affective influence regulation for each participant to capture the extent to which the degree of pleasantness and the degree of activation, the two fundamental dimensions of core affect, influenced the level of risk that a person chose in making his or her investment decisions. This computation took several steps.

From each participant's daily report of core affective experience, we first computed the degree of pleasantness (α = .85) by subtracting the mean for the nine unpleasantly valenced affect items (used to construct our affective reactivity measure) from the mean for the nine pleasantly valenced affect items (used to construct the affective reactivity measure). Similarly, we computed each person's degree of activation (α = .61) by subtracting the mean of deactivated affect items ("tired," "depressed," "quiet," "still," "relaxed," and "calm") from the mean of activated affect items ("excited," "interested," "joyful," "enthusiastic," "proud," "aroused," "surprised," "irritated," "afraid," "angry," "nervous," and "frustrated").

Second, from each participant's daily stock investment portfolio, we computed three parameters that indicated the degree of risk chosen by the participant in making his or her stock investment decision on a given day. One was *diversification,* a well-known financial strategy used to avoid risk (Bodie, Kane, & Marcus, 2001), which we measured by computing a Herfindahl index, the sum of the squares of all percentage weights invested in different stocks ($0 < \text{index} < 1$). A higher score indicated greater risk taking. The second risk indicator was the *averaged beta coefficient* of a selected stock portfolio. The beta of each stock, which participants saw every day during the simulation period, is a measure of the volatility of the stock's price in relation to the stock market (Bodie et al., 2001). This is also a well-known parameter of a stock's potential risk. The average of the betas in a participant's stock portfolio indicated the level of risk that the participant chose in constructing the portfolio. A higher average beta indicated greater risk taking. The third risk indicator was *the average one-year return* of a stock portfolio. The one-year return, generally considered a parameter of a stock's potential profitability and associated risk, pointed to the level of profitability and risk that a participant chose in constructing his or her stock portfolio. A higher average one-year return indicated greater risk taking. A factor analysis (with the principal component extraction method) showed that these three parameters constituted one factor that explained 61 percent of the total variance. We used the factor score (calculated by the regression method) as a general index for the risk taking represented in a given stock portfolio, with a higher score indicating greater risk taking.

Finally, we computed two regression coefficients for each participant, one by regressing the risk-taking index on the degree of pleasantness and the other by regressing the same risk-taking index on the degree of activation over time for each individual. The coefficient for the regression of pleasantness on risk taking varied from –3.40 to 1.12, with a mean of −0.03 and a standard deviation of 0.51, and the coefficient for the regression of activation on risk varied from –2.31 to 2.75, with a mean of –0.09 and a standard deviation of 0.65. This pattern of values suggested that affective influence (the bias effect) on risk taking could go in either direction; an increase in pleasantness or activation can make some individuals take greater risks (resulting in positive values for the regression coefficients) but make other individuals avoid risks (negative coefficients). Thus, we took the absolute values for these regression coefficients, to consider only the magnitude, not the direction, of affective influence on risk taking. These two regression coefficients were highly correlated with each other (r = .44), and a factor analysis (principal component extraction method) showed that they constituted one factor explaining 72 percent of the total variance. We used the factor scores (calculated by the regression method) as an index for affective influence regulation. For conceptual consistency, we reversed the index scores in such a way that higher scores indicated higher affective influence regulation (less affective influence on risk taking).

Emotion differentiation. From the 20-day core affective experience ratings of each participant, we computed two emotion differentiation indexes, one for pleasant feelings (positive emotion differentiation) and the other for unpleasant feelings (negative emotion differentiation), following Barrett et al. (2001). For the positive emotion differentiation index, we first calculated the correlations between the three affect items “calm,” “happy,” and “excited” over time for each participant. These affect items were chosen because they represent a range of prototypical pleasant affective states (Barrett, 1998; Barrett et al., 2001). Large correlations reflected large degrees of co-occurrence and thus little differentiation, whereas smaller correlations reflected smaller degrees of co-occurrence and more differentiation (Barrett, 1998). We performed Fisher r-to-Z transformations on all correlations before additional computations and then computed and averaged one set of correlations for each participant. A similar procedure was followed for the three prototypical negative affect items “sad,” “angry,” and “nervous.” For conceptual consistency, we reversed the scores of both the positive emotion differentiation index and the negative emotion differentiation index in such a way that higher scores indicated higher emotion differentiation.

We treated these two indexes separately for both conceptual and empirical reasons. First, individuals often experience more pressure to understand and actively regulate their emotions when they experience negative rather than positive emotions (Oatley & Johnson-Laird, 1996; Pratto & John, 1991). As a result, individuals often better differentiate among negative feelings than positive feelings (Fredrickson, 2001, 2003). This implies not only that positive emotion differentiation and negative emotion differentiation can develop in a mutually independent fashion within individuals, but also that the two may play different adaptive roles in emotion regulation (Barrett et al., 2001). Consistently, these two indexes were virtually uncorrelated with each other in our data ($r = -.02$).

Decision performance. Decision performance was measured as the average daily stock investment return generated by each participant as a result of the daily investment decisions made throughout the simulation. Each participant’s stock investment return was determined daily by the amount that he or she had earned or lost so far as a percentage of $10,000, the initial amount of hypothetical cash provided for each to invest. To discourage opportunistic efforts to simply capitalize on stock market fluctuations, this investment return (expressed as a percentage) was further adjusted by the average performance of the 12 stocks (the local market index also expressed as a percentage).

Control variables. We controlled for two variables in this study that might influence the hypothesized relationships among the key variables. One was participants’ age (in years) and the other was previous stock investment experience (in months). Age is an important factor influencing affective experience and its influence on cognitive processes (e.g., Carstensen, Pasupathi, Mayr, & Nesselroade, 2000), whereas experience may influence both decision makers’ affective experience and their decision-making performance (e.g., Lo, 2002).

Procedures

Each day during the simulation period, participants visited our Internet Web site once, between 6:00 p.m. and 9:00 a.m. the next morning. After logging in using their code names, they saw the daily stock market information, including the daily changes and the past-five-day trends of the three major market indexes (e.g., the Dow Jones, NASDAQ, and S&P 500), as well as the changes and trends of a local market index for the simulation; this was a composite index of the 12 anonymous stocks that we had randomly selected from the national stock market on the basis of varying degrees of risk and profitability and of various industries and company sizes. The local market index was highly correlated with the national market indexes ($r > .8$) and maintained a relatively good balance of ups and downs (14 ups and 6 downs) during the simulation period.

Next, participants saw a Web page that contained the daily updated information (on the basis of daily closing price) on these 12 stocks. Information on each was limited to its *current price* (initially set at $100.00 per share but changed in proportion to the stock’s actual price change thereafter), *daily price change* (expressed as a percentage), *average price change rate for the past five days, beta coefficient* (a stock’s volatility in relation to the market), *one-year stock performance* (percent change in stock price over the trailing 52 weeks), *price-earnings ratio* (a ratio of stock price to its trailing 12-month earnings per share), and *company size* (sales volume). The individual stock names were manipulated (e.g., stock A, B, and C) in such a way that participants could not identify the real names.

On the next page, participants saw a report that summarized their investment performance and expected reward so far. All participants began the simulation with a designated reward of $200, but they earned or lost money each day depending on their investment performance, which was determined by their overall investment return—the amount in percentage that they earned or lost by investing their initial capital (hypothetical cash of $10,000) adjusted by the local market index.

On the next page, participants were asked to rate the various feelings that comprised their current affective state. On the subsequent page, participants made their own investment decisions for the day—which stocks to sell and which to buy. As noted, each participant was initially given $10,000 in hypothetical cash. They were allowed to invest all or a part of the cash on any of the 12 stocks in the local market as long as the cash balance did not go below zero, and they were also allowed to trade those stocks freely, with no transaction costs. The Web page had been designed in such a way that it automatically performed all mathematical calculations required for investment decision making and instantly checked for mistakes (e.g., overinvestment). The current (national and local) market and stock information that participants had seen in the previous pages also became available for reference on a separate Web page.

Before logging out, participants saw their investment summary in a table and were asked to describe the reasons behind their investment decisions for the day in a text box. Finally, they reported whether, when, and how long they had experienced any type of interruptions while performing these tasks for the day. This process was repeated daily during the simulation period (20 times).

Data Analysis

Of the 118 investors recruited for this study, 108 participants completed the stock investment simulation task. They generated 2,059 cases, each of which included all measures generated by one participant going through one investment session per day. We dropped 7 participants because of noncompliance with instructions (they showed a systematic pattern of random responses) and eliminated an additional 63 cases (3%) because the participants reported interruptions during the sessions (57 cases) or data transfer errors (6 cases). As a result, we used 1,870 cases of data completed by 101 participants for data analysis in computing the individual-level indexes for emotion differentiation, affective influence regulation, affective reactivity, and daily decision performance.

We used structural equation modeling (SEM), implemented in EQS (Bentler & Wu, 1998), to test the hypothesized relationships among the variables (including both mediating and moderating effects) precisely by considering all the relationships among the key variables simultaneously in estimating parameters. Using SEM, we fitted several nested models to the data according to our hypotheses, assuming that all the variables in the models were observed (manifest) variables. Following Hatcher (1998), we used several indexes of model fit, including (1) the chi-square goodness-of-fit statistic, (2) the root-mean-square error of approximation (RMSEA), (3) the goodness-of-fit index (GFI), (4) the adjusted goodness-of-fit index (AGFI), (5) the normed fit index (NFI), and (6) the comparative fit index (CFI).

RESULTS

Table 1 presents the means, standard deviations, and ranges of the variables and their correlations.

The Basic Hypothesized Model and Testing the Main Effects

The first model that we tested, the basic hypothesized model, specifies the primary hypothesized relationships among the key variables. This model directly tested the two main effect hypotheses (Hypotheses 1 and 2) and was used as a basis for further testing the interaction (moderation) hypothesis (Hypothesis 3) and the mediation hypothesis

TABLE 1
Means, Standard Deviations, and Correlations[a]

Variable	Mean	s.d.	Maximum	Minimum	1	2	3	4	5	6
1. Age in years	25.05	13.63	74	18						
2. Experience in months	52.96	90.97	600	0	.77**					
3. Decision performance	−0.46	2.50	7.87	−7.42	−.21*	−.07				
4. Affective reactivity	1.41	0.57	3.49	0.33	−.16	−.01	.23*			
5. Affective influence regulation	0.00	1.00	0.85	−6.38	−.19	−.10	.27**	.02		
6. Positive emotion differentiation	0.70	0.20	1.23	0.14	.09	.11	.04	.20*	.12	
7. Negative emotion differentiation	0.69	0.27	1.16	0.02	.01	.04	−.14	−.23*	.23*	.02

[a] $n = 101$.
* $p < .05$
** $p < .01$

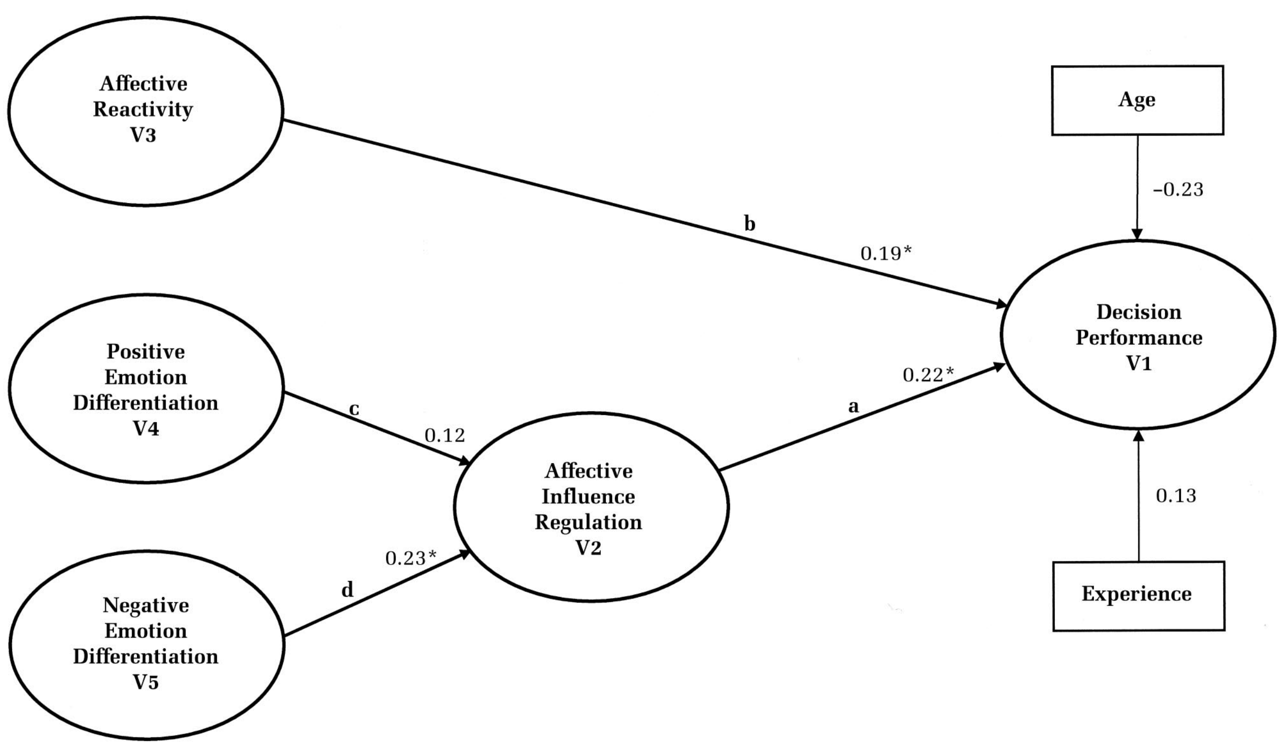
(Hypothesis 4). As presented in Figure 1, our basic hypothesized model contains four main paths to be estimated, paths from affective influence regulation to decision performance (path a in Figure 1; Hypothesis 1), from affective reactivity to decision performance (path b; Hypothesis 2), from positive emotion differentiation to affective influence regulation (path c), and from negative emotion differentiation to affective influence regulation (path d). We added two more paths to be estimated for control purposes, one from age to decision performance and the other from experience to decision performance. In specifying the model parameters, we allowed all pairs of the exogenous variables in the model (affective reactivity, positive emotion differentiation, negative emotion differentiation, age, and experience) to covary (Hatcher, 1998). We present the standardized path coefficients estimated by SEM in Figure 1.

The SEM results suggested that this model fitted the data well, with all fit indexes meeting the criteria ($\chi^2 = 7.43$, $df = 5$, $p < 0.19$; GFI = .98, AGFI = .89, RMSEA = .07, CFI = .98, NFI = .95). The path coefficient from affective influence regulation to decision performance (path a) was positive and significant ($b = 0.56$, $t = 2.40$, $p < 0.05$) and thus supported Hypothesis 1: participants who were less influenced by their current feelings in determining the level of risk in their daily stock portfolios (had higher affective influence regulation) achieved higher daily investment returns on the average throughout the simulation. Hypothesis 2 was also supported; the path coefficient from affective reactivity to decision performance (path b) was positive and significant ($b = 0.85$, $t = 2.01$, $p < 0.05$). Participants who experienced affective feelings with greater intensity during the investment simulation achieved higher investment returns.

Moderation Model

To test Hypothesis 3, stating that affective influence regulation moderates the relationship between affective reactivity and decision performance, we developed a second model, the *moderation model*, following a procedure similar to one suggested by Ping (1995). In this model, we added an interaction term, affective reactivity by affective influence regulation, to the basic hypothesized model and specified a direct path from this interaction term to decision performance. We also allowed this interaction term to be correlated with

FIGURE 1
Basic Hypothesized Path Model with Standardized Path Coefficients[a]



[a] $n = 101$.
* $p < .05$

affective reactivity as well as with the error term of affective influence regulation.

The SEM results suggest that the moderation model fits well to the data, with most fit indexes meeting the criteria (χ^2 = 13.41, df = 9, $p < 0.15$; GFI = .97, AGFI =.87, RMSEA = .07, CFI = .97, NFI = .93). However, the path coefficient of the interaction term was not significant and near zero ($b = -0.01$, $t = -0.05$). Thus, Hypothesis 3 was not supported, suggesting that both affective reactivity and affective influence regulation contributed to decision performance additively, not interactively.

Mediation Model

By default, the basic hypothesized model specifies that affective influence regulation fully mediates the relationships between positive emotion differentiation and decision performance and between negative emotion differentiation and decision performance. Thus, this model provides the basis for testing Hypothesis 4 (stating that affective influence regulation mediates the relationship between emotion differentiation and decision performance). The SEM results show that, although the path coefficient from positive emotion differentiation to affective influence regulation (path c) is positive, it is not significant (b = 0.58, t = 1.22). However, the path coefficient from negative emotion differentiation to affective influence regulation (path d) is both positive and significant (b = 0.85, t = 2.33, $p < 0.05$); participants who reported their negative affective feelings in a more differentiated fashion were less influenced by their affective feelings in determining the level of risk in their daily stock portfolio.

Because both the path from negative emotion differentiation to affective influence regulation (path d) and the path from affective influence regulation to decision performance (path a) are significant, a required condition for mediation is met. To further test the mediation hypothesis, we created two other alternative models, the *partial mediation model* and the *nonmediated model,* and compared them with the basic hypothesized model, as recommended by Kelloway (1998). In the partial mediation model, we specified two direct paths, one from positive emotion differentiation to decision performance and the other from negative emotion differentiation to decision performance, while retaining all other specifications in the basic hypothesized model. In the nonmediated model, we dropped three indirect paths, one from positive emotion differentiation to affective influence regulation (path c), one from negative emotion differentiation to affective influence regulation (path d), and one from affective influence regulation to decision performance (path a), while retaining all other specifications in the partial mediation model.

The SEM results suggest that the partial mediation model fits the data well (χ^2 = 4.55, df = 3, $p <$ 0.21; GFI = .99, AGFI = .88, RMSEA = .07, CFI = .99, NFI = .97). However, the change in the value of chi-square between this model and the hypothesized model is marginal and nonsignificant ($\Delta\chi^2$ = 2.88, df = 2). In addition, neither of the two added direct path coefficients, one from positive emotion differentiation to decision performance ($b = -0.18$, $t = -0.15$) and one from negative emotion differentiation to decision performance ($b = -1.55$, $t = -1.70$), was statistically significant, and a previously significant indirect path from affective reactivity to decision performance (path b) became nonsignificant (b = 0.68, t = 1.55). To check whether these nonsignificant results came from simply entering too many variables (six) into the equation, given the small sample size (n = 101), we further dropped the control variables from the partial mediation model and reran the SEM analysis. However, the two added direct paths remained nonsignificant ($t = -0.34$ and $t = -1.61$, respectively), and the indirect path from affective reactivity to decision performance (path b) became significant (b = 0.87, t = 2.02). The nonmediated model did not fit the data well, with several fit indexes failing to meet the requirements (χ^2 = 7.06, df = 1, $p < 0.01$; GFI = .98, AGFI = .47, RMSEA = .25, CFI = .95, NFI = .95) and with the two direct paths from positive and negative emotion differentiation to decision performance being nonsignificant (t = 0.21 and $t = -1.08$, respectively).

Thus, we retained the basic hypothesized model—the fully mediated model—as having the best fit, as predicted in Hypothesis 4. However, the nonsignificance of the path from positive emotion differentiation to affective influence regulation makes Hypothesis 4 only partially supported; affective influence regulation fully mediates the effect of negative, but not positive, emotion differentiation on decision performance.

DISCUSSION

Going contrary to the popular belief that the "cooler head prevails," the results of this study make it evident that feelings and emotions experienced during decision making can have positive effects on decision-making performance. In this study, people with "hot heads"—those who experienced their feelings with greater intensity during decision making—achieved higher decision-making performance. This result also provides direct counterevidence to Shiv and colleagues' (2005) recent finding that feelings can lead to suboptimal financial decision making in a narrowly defined situation (when the expected gain is greater than the expected loss). Consistently with another popular belief, "Don't let your emotions run your life," however, we found that individuals who better kept their feelings from having direct impacts on their decisions achieved higher decision-making performance. This result confirms the dominant view in the literature on affect and decision making that affective experiences produce various biases in judgments and choices that must be properly regulated to enhance decision-making performance. Yet the popular prescription for successful emotion regulation, "Ignore your emotions," appears, in view of our results, not to be the right answer for effective regulation of feelings and their influence on decision making. Instead, the results suggest exactly the opposite: individuals who better understood what was going on with their feelings during decision making and thus reported them in a more specific and differentiated fashion were more successful in regulating the feelings' influence on decision making and, as a result, achieved higher investment returns.

Theoretical Implications

Our findings extend previous research on affect and decision making in three ways. First, this study extends the decision making literature, which has generally ignored the role of affective feelings or, at best, focused only on their bias-inducing role (see Loewenstein, Weber, Hsee, and Welch [2001] and Slovic et al. [2002] for reviews). This study suggests that both feelings and the ways people handle them during decision making have important consequences for decision-making outcomes. In particular, the results showed a strong support for an alternative view that feelings and emotions can enable and facilitate decision-making processes. This area has been relatively understudied in decision making research.

Second, past studies on affect and decision making have been fragmented in the sense that they have focused on either the functional role of affective experience (e.g., Isen et al., 1987) or its dysfunctional role (e.g., Au, Chan, Wang, & Vertinsky, 2003; Shiv et al., 2005). This study provides integrative evidence that both the functional and dysfunctional effects of affective feelings on decision making operate simultaneously within individuals, as the results showed that affective influence regulation and affective reactivity independently, but not interactively, influenced decision-making performance. Our additional finding that affective influence regulation and affective reactivity were virtually uncorrelated ($r = .02$) further explains the underlying reason: experiencing feelings (a functional process) and doing something with those feelings (a dysfunctional process) may be mutually independent within an individual. These results offer strong empirical support for a broader and integrative perspective on individual difference in affective information processing (Gohm, 2003; Gohm & Clore, 2000) that provides an important theoretical basis for moving beyond simplistic views on whether affective feelings are functional or dysfunctional to decision making. Instead, it helps researchers to explore and examine how various individual-level characteristics (skills, traits, and abilities) create differences in how people experience and handle their affective feelings during decision making, thus ultimately determining their decision-making performance.

Third, this study may also contribute to the literature on emotional intelligence, "one's ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990: 189). This concept has emerged as an area of intense interest, in both the academic (Brackett & Mayer, 2003; Law, Wong, & Song, 2004) and lay (Goleman, 1995) communities. In spite of the excitement regarding the heuristic value of emotional intelligence, however, there have been few rigorous scientific investigations regarding the underlying psychological components and processes that constitute it (Barrett & Salovey, 2002; Law et al., 2004). This study provides empirical evidence that emotion differentiation and affective influence regulation are two essential process components of emotional intelligence (Barrett & Gross, 2001) that positively influence individual performance outcomes.

One additional finding in this study that also has an important theoretical implication is that people achieved the benefit of successful affective influence regulation from understanding and differentiating among their current negative feelings, but not from differentiating among positive feelings. This result was consistent with the finding in Barrett and her colleagues' (2001) study that negative emotion differentiation, not positive emotion differentiation, led to greater self-regulation of emotions. One explanation for these results is that the adaptive pressure to respond to and actively regulate feelings is greater for negative feelings than for positive feelings (Oatley & Johnson-Laird, 1996; Pratto & John, 1991). Thus, when people experience their current negative feelings as qualitatively distinctive, they are more likely to actively regulate such feelings and their possibly negative consequences, whereas they can be less responsive to positive feelings, regardless of whether they experience those positive feelings as fully differentiated or undifferentiated feeling states.

Managerial Implications

There are two ways in which the findings of this study challenge the dominant view in managerial discourse and practice that feelings are potentially dangerous factors hindering effective decision making and thus must be suppressed or constrained in organizations (Ashforth & Humphrey, 1995; Putnam & Mumby, 1993). First, our findings suggest that affective experiences have the potential to both facilitate and hinder decision making within individuals and to do so simultaneously. The problem of the dominant view and related managerial practice is not that they are entirely wrong, but that they are attempts to minimize the potentially negative effects of people's feelings together with all of the potentially positive effects, such as enhanced decision efficiency, engagement, and creativity—thus "throwing the baby out with the bath water." Second, and also contrary to the dominant view, participants who were more ignorant about and thus less able to identify their specific feeling states at the moment of decision making performed worse in this study by being influenced more by the feelings that they ignored. Instead, better performers were more attentive to their current feeling states and better able to describe them clearly during decision making. In particular, the better performers could better distinguish among their negative feeling states, where the press for affective regulation is greatest (Barrett et al., 2001).

Our study informs an alternative approach organizations could take to feelings. This approach would be to foster managers' and employees' experiencing and expressing their moods and emotions to maximize the positive outcomes of those feelings, and simultaneously help them minimize the feelings' potential negative impacts. This approach is similar to "bounded emotionality" (e.g., Martin, Knopoff, & Beckman, 1998) but speaks more directly to productivity issues than to employee well-being. More specifically, to foster experiencing and expressing various feelings and emotions in organizations, managers and leaders may need to carefully reexamine common beliefs, norms, languages, and practices that devalue, discourage, and constrain experiencing and expressing feelings (Ashforth & Humphrey, 1995). They should actively remove such cognitive, normative, and behavioral barriers in their organizations, which might involve a tremendous amount of reeducation and unlearning. We hope the findings of this study can be used as legitimate bases for business leaders' and managers' initiating such reeducation and unlearning. However, a more challenging issue is how to minimize the possibly negative influences of affective feelings, once affective experience and expression became more encouraged and less constrained in workplaces.

This study suggests one particular way in which managers and employees can reduce the possibly bias-generating effects of their current affective states (and thus increase decision-making performance). That is, they might increase the degree to which they attend to and clearly differentiate among their current affective states during decision making. This can be achieved by conducting frequent self-audits (Forgas & Ciarrochi, 2002) of current feelings during decision making—asking oneself, for instance, "How am I feeling right now?" and trying to precisely describe current feelings and understand why they are being experienced. Employees and managers might also attempt to increase their general levels of emotional self-awareness (Ciarrochi et al., 2003; Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990). To do this, they might need to acquire richer categorical knowledge of different emotional states (e.g., describing diverse distinctive feeling states), their underlying meanings (e.g., when those feelings are experienced and what people tend to think and do when they are experiencing those feelings), and the relationships of the states with each other (e.g., how feeling "nervous" is similar to and different from feeling "afraid," "sad," "excited," "calm," and so forth). Mangers and employees could then use such enhanced knowledge in describing their current feelings clearly and in a well-differentiated fashion (e.g., being able to say "I am feeling angry" as opposed to "I am feeling bad"). Our findings place particular emphasis on developing managers' and employees' ability to describe and differentiate negative feelings during decision making. Such differentiation and expression may require a completely different set of abilities or skills from those required to differentiate positive feelings (negative emotion differentiation was uncorrelated with positive emotion differentiation in this study).

Limitations and Future Research Directions

Additional research is needed to address limitations of this study and to advance understanding of the role of affective feelings in decision making. First, this study was based on a correlational research design, which makes it impossible to determine the precise causal directions among the key variables. Supplemental studies with experimental designs in which affective feelings are experimentally induced in participants are needed for this determination of causality.

Second, we measured three individual characteristics of affective information processing in this study—namely, affective reactivity, emotion differentiation, and affective influence regulation—by directly computing scores from participants' daily mood reports and daily stock investment decisions. This is a strength of this study, since the measurements did not rely on participants' perceptions of their affective characteristics, which have been found to be quite different from their actual affective characteristics (Gohm & Clore, 2002). The flip side of the strength is that these measures are too domain-specific to effectively capture participants' general affective characteristics and/or may not be reliably replicated in other studies or research contexts. In addition, calculations were based on certain untested assumptions (e.g., linearity and equal variance), which could have compromised our results. Thus, a better approach future studies could adopt would be to use both the objective measures and some other subjective measures of similar affective characteristics, such as the emotional clarity scales introduced by Gohm and Clore (2000).

Third, although feelings are a booster for short-term memory capacity (Kitayama, 1997), they also constitute salient information that takes up short-term memory capacity (Mackie & Worth, 1989). As a result, extremely intense feelings can substantially absorb and thus directly interfere with an individual's short-term memory capacity or ability to attend, which might hurt decision-making performance (Barrett, Tugade, & Engle, 2004; Mackie & Worth, 1989, 1991; Necka, 1997). Thus, the relationship between affective intensity and decision-making performance may be nonlinear (taking an inverted U-shape), and future research needs to determine the precise relationship.

Fourth, our focus in this study is the effects of affective experience, which is consciously accessible and describable, on decision-making performance. However, affective processes include both conscious and subconscious processes (Bargh & Chartrand, 1999; Winkielman, Zajonc, & Schwarz, 1997), and the latter may have suppressed or amplified our study results. Exploring both the conscious and subconscious processes of affective information processing and its effects on decision-making performance seems a valuable future research direction.

Fifth, although our cash reward ($100–1,000) may have been useful in making the simulation more realistic and inducing a broad spectrum of affective experiences during the simulation, it could have influenced some of the results by affecting participants' affective experience, decision making, and performance simultaneously. Moreover, the remuneration structure for the participants in this study was designed in a way that prevented them from incurring any serious loss. As a result, the expected return for participating in this simulation was highly skewed toward the gain side (up to $1,000 cash remuneration), and the worst performer still got paid $100 ($100 was subtracted from the initial payment of $200). This imbalance in possible gains and losses in the remuneration structure may have led participants to be more sensitive to rewards and to experience more positive feelings than negative feelings. Future studies using different affect-inducing methods and/or a remuneration structure balanced between possible gains and losses are needed to confirm our key findings.

Finally, more research is needed to explore and examine individual-level characteristics that might have further influenced the results of this study. For example, in the experimental studies of Smith and Petty (1996), the bias-generating effect of negative affect (mood congruence recall) was found only among individuals with low self-esteem, not among those with high self-esteem. This result suggests that self-esteem positively moderates the relationship between negative emotion differentiation and affective influence regulation by helping individuals generate counteremotional (positive) thoughts once they have experienced negative feelings and consciously recognized them.

Conclusion

Feelings are an indispensable part of people's individual and organizational lives and, more importantly, powerful entities that can both benefit and harm choices and decisions. Yet the popular approach has predominantly focused on understanding and minimizing the dysfunctional aspects of feelings. This study not only suggests that whether they are actually beneficial or harmful to decisions may largely depend upon how people experience, treat, and use their feelings during decision making, but also points to an alternative approach in which both functional and dysfunctional effects of feelings are equally acknowledged and simultaneously managed to maximize their positive effects and minimize their negative effects. We invite more scholarly investigation of this alternative approach and the ways in which it can be applied to various individual and organizational practices.

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