

Metacognitive and Nonmetacognitive Reliance on Affect as Information in Judgment

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We propose that the reliance on feelings as information in judgment may involve two separate mechanisms: one involves a metacognitive assessment of whether one's feelings should be trusted in the judgment; the other is more mindless reliance on feelings without much consideration for their perceived diagnosticity. Consistent with this proposition, results from four experiments indicate that, when cognitive resources are available, the influence of integral (target-induced) and incidental (mood-induced) affect on judgment depends on the momentary trust that people have in their feelings, suggesting that feelings are metacognitively assessed in terms of perceived diagnosticity. In contrast, when cognitive resources are limited, the influence of integral and incidental affect on judgment does not depend on the perceived diagnosticity of the feelings, suggesting usage of feelings without metacognitive assessment.

We often make evaluations by inspecting how we feel toward the target (see Schwarz and Clore 1996 and Pham 2004 for reviews). This process has been called the “how-do-I-feel-about-it?” heuristic (Schwarz and Clore 1988) and lies at the heart of the affect-as-information framework (Schwarz and Clore 1996; Schwarz and Clore 1983). According to this framework, we tend to rely on our feelings because we believe that they convey valuable information about the object being evaluated. If we feel good while evaluating a target, we infer that the target is desirable; if we feel bad, we infer that the target is not desirable.

The “how-do-I-feel-about-it?” heuristic is often regarded as a low-effort, “peripheral” strategy (e.g., Forgas 1995; Petty et al. 1993), invoked primarily as a means of simplifying judgment (Clore et al. 1994). Some research indicates, however, that people can be quite discriminating in their reliance on feelings. Under certain conditions, people’s reliance on feelings appears to be very sensitive to the perceived diagnosticity of these feelings (e.g., Keltner et al. 1993; Pham 1998; Raghunathan and Pham 1999; Schwarz et al. 1987). This sensitivity suggests that the “how-do-I-feel-about-it?” heuristic could also be used more reflectively. Under certain conditions, the reliance on feelings may in fact be regulated by a metacognitive assessment of whether one’s feelings *should* be used in a given judgment rather than by a sole concern for judgmental efficiency.

We propose that the “how-do-I-feel-about-it?” heuristic can be invoked in two different ways. The first is in a relatively mindless fashion, without much metacognitive consideration of the diagnosticity of the feelings. This mode of reliance on the heuristic is compatible with the view that the use of feelings is primarily a means of simplifying judgment. The second mode of reliance on the “how-do-I-feel-about-it?” heuristic is more reflective and sensitive to a metacognitive assessment of the diagnosticity of the feelings for the task at hand. Under this

latter mode of reliance on feelings, people take into account various considerations that determine at a metacognitive level whether the feelings should be trusted in the judgment. If, at the time of judgment, people believe (for whatever reason) that they should trust their feelings, they will use them as a basis of evaluation. If, on the other hand, they believe that they should not trust their feelings, they will refrain from using them as a basis of evaluation. We additionally propose that the engagement of this metacognitive assessment depends on the availability of processing resources. If sufficient resources are available, feelings will tend to be used in a reflective, metacognitively-appraised manner, that is, in a way that factors in their perceived diagnosticity for the judgment at hand. If resources are more limited, feelings will tend to be used more mindlessly, without much metacognitive assessment of their diagnosticity.

This research makes the following three contributions to the literature on the role of affect in consumer judgment. First and foremost, it demonstrates that, contrary to previous conceptualizations, the heuristic reliance on feelings in judgment does not reflect a single mechanism but two distinct mechanisms. One involves a metacognitive assessment of whether the feelings should be trusted in the judgment; the other involves a more mindless reliance on the feelings without much consideration for their perceived diagnosticity. Second, we propose a new concept, the momentary trust that people have in their feelings, as a general explanation for various documented contingencies in people's reliance on feelings in judgment. Third, this research introduces an innovative method for experimentally manipulating the momentary trust that people have in their feelings.

META- AND NONMETACOGNITION IN AFFECT-AS-INFORMATION

Feelings as Low-Effort Heuristics

This research focuses on valenced feelings associated with affective and emotional experiences. These feelings can come from an integral affective response to the object being evaluated (e.g., a felt attraction toward a new car model) or arise incidentally from a source that is independent of the object being evaluated (e.g., a contextual mood state). The former types of feelings are called integral affect; the latter are called incidental affect (Bodenhausen 1993).

Compared to more descriptive bases of judgment such as attribute information, feelings tend to be easy to monitor and assess (e.g., Isbell and Wyer 1999; Pham et al. 2001; Strack 1992). The ease of processing feelings stems from their ready accessibility (e.g., Verplanken et al. 1998) and their transparent evaluative implications (Schwarz and Clore 1988). As Zajonc (1980) once argued, feelings are to some extent inescapable. It is, therefore, not entirely surprising that conditions that reduce people's motivation, ability, or opportunity to process information are generally found to increase people's reliance on their feelings in evaluation (see Clore et al. 1994, for a review). It has been found, for instance, that the reliance on feelings in evaluation increases with time pressure (Pham et al. 2001; Siemer and Reisenzein 1998), with distraction (Albarracín and Wyer 2001), with a low motivation to process information (Isbell and Wyer 1999; Petty et al. 1993), or with a lack of expertise in the target domain (Ottati and Isbell 1996). This kind of evidence has been interpreted as suggesting that the reliance on feelings is primarily a way of simplifying judgment (Clore et al. 1994), and that the "how-do-I-feel-about-it?" heuristic operates mainly under low-effort or "peripheral" modes of judgment (Forgas 1995; Petty et al. 1993). However, other findings seem to suggest that feelings can also be used more

selectively than would be predicted under a strict effort-minimizing, peripheral-judgment strategy.

Feelings as a Selective Heuristics

The very idea of feelings-as-information implies that people should be selective in their reliance on feelings. If people rely on their feelings because they attribute information value to these feelings, they should logically refrain from using these feelings whenever they perceive these feelings to be uninformative (Schwarz 1990; Schwarz and Clore 1988). The classic demonstration of this contingency comes from Schwarz and Clore's (1983) original mood-as-information studies. In these studies, respondents were found to report more favorable judgments of life satisfaction if they were in a positive mood than if they were in a negative mood. However, when it was made salient to them that the actual source of their feelings was unrelated to the object of their evaluation, the effect disappeared. This basic result has been replicated in numerous studies (Gorn et al. 1993; Keltner et al. 1993; Raghunathan et al. 2006). It shows that people rely on their feelings to the extent that they perceive these feelings to be representative of the target being evaluated (Pham 1998; Strack 1992).¹

Other considerations, in addition to representativeness, seem to influence the perceived information value or diagnosticity of feelings and therefore moderate whether the feelings are relied upon. For example, Pham (1998) observed that consumers are more influenced by their mood when making decisions guided by experiential motives (e.g., assessing a movie for an

¹ People appear to assume by default that their feelings are representative of the target, even if the actual source of the feelings is incidental (Schwarz, 1990). It is only when an alternative explanation for their feelings is made salient that people question the representativeness of their feelings (Gorn et al. 1993; Schwarz and Clore 1983), or when they have very high motivation and ability to process information (Albarracin and Kumkale 2003).

evening out) than when making decisions guided by instrumental motives (e.g., assessing the same movie as material for a school project). Presumably, this is because feelings are perceived to be more relevant for assessing the potential fulfillment of experiential goals (e.g., “Would I have fun at this movie?”) than for assessing the potential fulfillment of instrumental goals (e.g., “Would seeing this movie help me with the project?”). Similarly, Schwarz et al. (1987) found that mood states have greater influence on judgments of well-being than on reported satisfaction with one’s work or current housing. Again, this is presumably because people’s momentary feelings are more diagnostic of their overall well-being than of their satisfaction with more specific issues. Raghunathan and Pham (1999) additionally found that anxiety and sadness have more influence on individuals making decisions for themselves than on individuals making decisions for someone else. Again, this is presumably because feelings are more diagnostic of one’s own preferences than of someone else’s. Finally, Pham and Avnet (2004) recently found that affective responses to advertisements have more influence on brand evaluations under a promotion mode of self-regulation than under a prevention mode, and that this effect occurs because feelings are perceived to be more diagnostic under promotion than under prevention (see also Avnet and Higgins 2006).

Therefore, a variety of findings suggest that feelings can also be used more selectively than would be predicted by a simple effort-minimizing, peripheral judgment strategy. Whenever feelings are used selectively, it appears to be out of concern for the diagnosticity of the feelings for the judgment at hand (see Pham 2004). Determinants of this perceived diagnosticity include (a) the perceived representativeness of the feelings (Schwarz and Clore 1983; see also Gorn et al. 1993), (b) the perceived relevance of the feelings given decision goals (Pham 1998; see also Yeung and Wyer 2004), (c) the appropriateness of the feelings given the object to be judged

(Schwarz et al. 1987), (d) the perceived validity of the feelings in assessing one's own versus someone else's preferences (Raghunathan and Pham 1999), and (e) the person's regulatory focus, promotion versus prevention (Avnet and Higgins 2006; Pham and Avnet 2004).

A METACOGNITIVE EXPLANATION OF SELECTIVE VERSUS NONSELECTIVE RELIANCE ON FEELINGS

We propose that both sets of findings—those that suggest that feelings are used as a low-effort heuristic and those that suggest that feelings are used more selectively—can be explained within a single metacognition-based account of how feelings enter judgments. A growing body of evidence suggests that the effects of beliefs and thoughts on judgment depend not only on the evaluative content of these beliefs and thoughts, but also on various metacognitive considerations such as one's confidence in these beliefs and thoughts (Petty et al. 2002; Wilson and Brekke 1994; Yzerbyt et al. 1994). For instance, Petty, et al. (2002) found that thoughts in response to a message had more influence on persuasion if these thoughts were held with high confidence than if they were held with low confidence. This finding suggests that, when forming an attitude, people take into account not only the valence of their thoughts toward the target, but also their metacognitive confidence in these thoughts.

We hypothesize that the reason why people sometimes use their feelings selectively is because they invoke similar metacognitive considerations with respect to their feelings. That is, when relying on feelings, people consider not only the evaluative implication of these feelings, but also the degree to which they trust these feelings for the judgment at hand.² We propose that

² We prefer to use the term “trust” rather than “confidence” for the following reason. A person's confidence in his or her beliefs or thoughts denotes the degree to which this person is convinced about their validity or truth value.

previously-documented determinants of selective reliance on feelings in judgments—such as representativeness, relevance to the decision goal, appropriateness, etc.—are specific cases of a broader metacognitive assessment of the diagnosticity of one’s feelings. For example, the finding that consumers are more likely to rely on their feelings in decisions guided by experiential motives than in decisions guided by instrumental motives (Pham 1998; Yeung and Wyer 2004) can be interpreted in metacognitive terms. This finding suggests that, before relying on their feelings, consumers metacognitively assess the relevance of these feelings for the decision at hand. Similarly, the finding that feelings of anxiety and sadness have more influence on decisions done for oneself than on decisions done for someone else (Raghunathan and Pham 1999) can also be interpreted as showing that the use of feelings is moderated by some metacognitive appreciation of the validity of using one’s feelings in decisions for oneself versus someone else.

Because metacognitive assessments have been found to require processing resources (Nelson, Kruglanski, & Jost, 1998), we additionally hypothesize that a key moderator of whether feelings are used in a selective, metacognitively-appraised manner or in a nonselective, more thoughtless manner is the availability of processing resources. When resources are available, factors that determine the perceived diagnosticity of feelings at a metacognitive level should have greater influence than when resources are more limited. This would explain the finding that feelings that are nondiagnostic such as incidental mood states are generally more influential under conditions known to restrict processing resources than under conditions of unrestricted processing resources (Albarracin and Wyer 2001; Isbell and Wyer 1999; Siemer and Reisenzein 1998).

Feelings cannot be assessed for their truth value (Strack, Werth, and Deutsch 2006); rather, they can be assessed for their diagnosticity with respect to a specific task (e.g., judgment or decision).

In summary, we hypothesize that the reliance on feelings in judgment operates in two different ways: (a) a reflective way that involves a metacognitive assessment of whether to trust the feelings in the judgment at hand; and (b) a non-reflective way that is insensitive to the diagnosticity of the feelings. The former is more likely to arise when sufficient processing resources are available; the latter is more likely to arise when such resources are unavailable. This general hypothesis is consistent both with findings that people sometimes appear to be quite discriminating in their reliance on feelings and with findings that people sometimes appear to rely on feelings in a less discriminating fashion.

To test this general metacognitive account, we introduce a new way of manipulating the perceived diagnosticity of feelings that is independent of the perceived representativeness of feelings and their perceived relevance. In our studies, the perceived diagnosticity of feelings is manipulated by varying the momentary trust that people have in using their feelings in judgment. Compared to standard manipulations based on representativeness (Gorn et al. 1993; Schwarz and Clore 1983), the manipulation used in our studies presents two advantages. First, manipulations based on representativeness capitalize on the fact that incidental moods are by definition nonrepresentative of the target (hence nondiagnostic). Therefore, calling people's attention to the actual source of their moods undermines the perceived diagnosticity of these moods. Although these manipulations provide some insight into how nondiagnostic feelings are assessed metacognitively, they do not provide an examination of how diagnostic feelings are assessed metacognitively. Second, because people tend to assume by default that their feelings are representative (Schwarz 1990), focusing on representativeness as an operationalization of the perceived diagnosticity of feelings may not fully capture the degree to which feelings are assessed at a metacognitive level. Compared to manipulations based on the perceived relevance

of feelings (Pham 1998; Yeung and Wyer 2004), the manipulation used in our studies also presents the advantage of holding the person's evaluation goals constant. To the extent that the manipulation used in our studies is independent of both the representativeness of the feelings and their perceived relevance to the evaluation goal, this manipulation also allows a generalization of the idea that feelings can be assessed based on a variety of metacognitive considerations. Finally, as shall be seen, the manipulation used in our studies presents the advantage of being counterintuitive and therefore less amenable to demand interpretations.

OVERVIEW OF THE STUDIES

The proposed general hypothesis was tested in four experiments. In these experiments, feelings toward the target were manipulated either integrally or incidentally for greater generalizability. Participants' momentary trust in their feelings was manipulated by varying the ease of retrieval of previous instances of successful reliance on feelings in judgments or decisions. Perceptions of representativeness of the feelings and relevance to the goal were held constant. The purpose of the first two experiments was to demonstrate that the selective reliance on feelings in judgment can be driven by a metacognitive assessment of how much people trust their feelings. In the first experiment, the pleasantness of participants' feelings toward the target was manipulated integrally by varying affect-eliciting properties of the target stimulus. Participants' momentary trust in their feelings was manipulated independently. It was predicted that attitudes toward the target would be more influenced by the pleasantness of feelings toward the target among participants who were induced to have high trust in their feelings than among participants induced to have low trust in their feelings. The second experiment was similar to the

first experiment, except that feelings toward the target were manipulated incidentally by varying participants' mood. Consistent with experiment 1, it was predicted that evaluations of the target would be more influenced by participants' mood if participants were induced to trust their feelings than if participants were induced not to trust their feelings. The purpose of Experiments 3 and 4 was to test the proposition that the metacognitive assessment of feelings requires significant processing resources. As a result, the reliance on feelings in judgment will be moderated by the metacognitive assessment of how much trust people have in their feelings when processing resources are available, but it will not be moderated by this metacognitive assessment when processing resources are restricted. Therefore, feelings can be relied upon as information in two distinct ways: one that involves a metacognitive assessment of their diagnosticity and one that does not. In these experiments, as in the first two, feelings toward the target were manipulated either integrally (experiment 3) or incidentally (experiment 4), and participants' momentary trust in their feelings was manipulated as well. In addition, the availability of processing resources was manipulated orthogonally by varying participants' cognitive loads during judgment. It was predicted that, when processing resources were available, a metacognitive assessment of the feelings would take place; therefore, attitudes and evaluations would be more influenced by feelings toward the target among participants with high momentary trust in their feelings than among participants with low momentary trust in their feelings (consistent with Experiments 1 and 2). When processing resources were limited, it was predicted that no metacognitive assessment would take place; as a result, feelings toward the target would influence attitudes and evaluations even if participants were induced not to trust their feelings.

PRETEST:

MANIPULATING PEOPLE'S TRUST IN THEIR FEELINGS

In our experiments we manipulated respondents' trust in their feelings using a procedure adapted from Schwarz et al. (1991). In Schwarz et al. (1991) participants were instructed to describe either six or 12 examples of situations in which they behaved assertively and were asked to rate their own assertiveness. As the authors predicted, participants who were asked to list fewer examples of situations in which they had acted assertively rated themselves as more assertive than participants who were asked to list more examples. Additional studies and subsequent research support the following explanation (Schwarz 2004). When people are asked to generate or retrieve information, they monitor not only the content of the information generated or retrieved but also the ease with which this information is generated or retrieved. When people experience difficulty in generating or retrieving some content, they tend to draw inferences that are opposite to this content because they interpret the difficulty of generating or retrieving this content as meaning that the content is uncommon or atypical. Participants asked to perform the difficult task of identifying 12 examples of their assertiveness interpreted their experienced difficulty as meaning that they did not act assertively very frequently and thus concluded that they were not very assertive. In contrast, participants asked to perform the easier task of identifying six examples of their assertiveness interpreted their experienced ease as meaning that there were many examples of situations in which they acted assertively and concluded that they were assertive.

We used the same rationale to manipulate participants' momentary trust in their feelings in our experiments. The procedure was as follows. After a brief explanation of the distinction

between using feelings versus facts and logical reasons to make decisions, participants were asked to describe either two (high-trust condition) or 10 (low-trust condition) “situations in which you trusted your feelings to make a judgment or a decision and it was the right thing to do.” Only situations that really happened were to be listed. These situations were to be described in two or 10 separate boxes appearing on a page titled “2 (or 10) situations in which I was right in trusting my feelings.” All participants were given seven minutes to complete the task. It was expected that participants in the high-trust condition would find it easy to identify two situations in which they were correct in trusting their feelings. From this ease of retrieval, they would infer that situations in which they were correct in trusting their feelings are common. As a result their momentary confidence in their feelings would be high. In contrast, participants in the low-trust condition were expected to find it difficult to identify 10 similar situations. From this perceived difficulty, they would infer that situations in which they were correct in trusting their feelings are not common. As a result their momentary confidence in their feelings would be low.

An initial pretest confirmed that participants indeed found it more difficult to list 10 situations in which they were correct in trusting their feelings ($M = 5.87$) than to list two such situations ($M = 4.25$; $F(1, 38) = 5.21$; $p < .03$). A more formal pretest confirmed that this ease or difficulty produced the predicted differences in trust of one’s feelings. Fifty-eight participants (29 women, 29 men) were randomly assigned to one of the two conditions described above (high trust vs. low trust). Once participants had completed this task, they were asked to evaluate a book as part of a supposedly unrelated study. After reporting their evaluation, participants were asked to provide, in an open-ended format, up to eight reasons for their evaluation. Participants were then asked to code each provided reason as reflecting either “how [they] felt toward the book” (a feeling-based reason) or “what [they] thought about the book” (a thought-based reason). As

predicted, compared to participants in the low-trust condition ($M = 2.51$), participants in the high-trust condition invoked a higher number of feelings-based reasons to justify their evaluations ($M = 3.10$; $F(1,57) = 3.88$; $p < 0.05$). There was no difference between conditions in terms of number of thought-based reasons listed ($F(1,57) = 1.76$; $p = 0.19$).

As part of a supposedly unrelated study, participants were next presented with 12 questions assessing how much they trust various types of information in different decision situations. Six of the 12 questions pertained to how much participants trusted their feelings (e.g., “When buying a new car, to what extent do you trust what your feelings tell you about this car?”). The other six questions pertained to how much participants trusted other types of information (e.g., “When buying clothes, to what extent do you believe and trust what your friends say about them?”). Answers were collected on seven-point scales (1 = Not trust at all; 7 = Trust very much); and feeling- and non-feeling-related questions were presented in mixed order. The trust ratings for the six feeling questions were averaged into a single index of general trust in feelings. As expected, participants in the high-trust condition reported higher trust of feelings ($M = 5.15$) than did participants in the low-trust condition ($M = 4.72$; $F(1,57) = 4.28$; $p < 0.04$). There was no difference in participants’ trust ratings of the non-feeling information ($F < 1$). The pretest results thus indicate that the manipulation indeed varied participants’ momentary trust in their feelings and does so without affecting their trust in other inputs.

EXPERIMENT 1:

METACOGNITIVE ASSESSMENT IN RELIANCE ON INTEGRAL FEELINGS

If the reliance on feelings in judgment involves some metacognitive assessment of whether these feelings should be trusted, feelings experienced during evaluation of the target should have stronger influence on this evaluation when momentary trust in one's feelings is high than when it is low. In this experiment, participants were shown a TV commercial and asked to evaluate the issue advocated in the commercial. Participants' integral feelings toward the commercial were manipulated by varying the commercial's musical soundtrack. Participants' momentary trust in their feelings was manipulated independently through the procedure described in the pretest. Processing resources were not constrained and therefore presumed to be available. It was predicted that evaluations of participants who had been induced to have high trust in their feelings would be more influenced by the pleasantness of the soundtrack than evaluations of participants who had been induced to have low trust in their feelings.

Method

Participants, Design, and Procedure. Fifty-two undergraduates who received \$12 for participating were randomly assigned to one of four conditions of a 2 (high vs. low trust of feelings) \times 2 (pleasant vs. unpleasant feelings) between-subjects design. Participants were seated at separate computer stations and were told that they would be taking part in three allegedly unrelated studies. The first study manipulated participants' momentary trust in their feelings as explained in the pretest. They were given seven minutes to list either two or 10 situations in which they were correct in trusting their feelings to make a judgment or decision.

Once the seven minutes were over, participants were asked to continue to the second study, which was a filler task meant to separate the trust-in-feelings manipulation from the main

evaluation task. The main task was administered in the third study. Participants were asked to watch a previously unseen TV commercial on their monitors and be prepared to answer a series of questions after the viewing. To manipulate their integral feelings toward the commercial, two versions of the commercial were created. In the pleasant-feeling condition, an enjoyable musical soundtrack was woven into the commercial. In the unpleasant-feeling condition, a less enjoyable soundtrack was used. After participants watched the commercials, the dependent measures were administered. Participants were then debriefed, thanked, and paid for their participation.

Stimulus Materials and Manipulation of Integral Feelings. Participants' feelings toward the target were manipulated integrally. All participants were shown a professionally edited version of a 60-second British TV commercial (not seen in the US) praising the virtues of books. Unlike most other commercials, this commercial's main message was not conveyed through a voiceover or dramatized dialogues, but through a series of still text frames appearing between the commercial's various silent scenes. By varying the commercial's musical soundtrack we were therefore able to manipulate how participants felt toward the commercial without changing the substance of the message. In the pleasant-feelings condition, the commercial's visual signal was paired with the audio signal of an instrumental piece of music that a pretest had shown to be appealing and pleasing. In the unpleasant-feelings condition the commercial's visual signal was paired with a different instrumental piece that the same pretest had shown to be less appealing and pleasing.³ Another pretest showed that participants exposed to the pleasant-soundtrack version of the commercial reported more positive feelings toward the commercial ($M = 5.47$) than did participants exposed to the unpleasant soundtrack version ($M = 4.06$; $F(1, 23) = 7.50$; p

³ The two versions of the commercial are available from the authors upon request

< .01), while the perceived quality of the commercial was equivalent across the two versions ($M_{pleasant} = 4.77$; $M_{unpleasant} = 5.02$; $F < 1$).

Measures. As a further check of the trust-of-feelings manipulation, the perceived difficulty of generating the requested number of situations was measured by three seven-point items (e.g., “How difficult was it to come up with the situations where you were right in trusting your feelings?”; $\alpha = .86$). The main dependent variable, attitude toward reading, was measured by five seven-point items (e.g., “I have a favorable/unfavorable opinion about reading,” “I believe reading is/is not very important”; $\alpha = .87$). As a confounding check, task involvement was assessed on three items (e.g., “I watched the ad very carefully”; “I took extra care in rating my attitude toward books/reading”; $\alpha = .59$). Finally, as a check for experimental demand, participants were asked to guess the purpose of the experiment.

Results

Preliminary Analyses. As expected and consistent with the pretest, participants found it more difficult to identify 10 situations in which they were correct in trusting their feelings ($M = 5.02$) than to identify two such situations ($M = 3.62$; $F(1,48) = 10.35$; $p < .002$). When probed, none of the participants correctly guessed the true purpose of the study. There were also no significant effects of the manipulations on task involvement (all p 's = .13 or higher).

Attitude Toward Reading. Results from the pretest indicated that momentary trust in feelings would be greater among participants who were asked to recall two examples of successful reliance on feelings than among participants asked to recall 10 such examples. If the

reliance on feelings in judgment involves a metacognitive assessment of their trustworthiness, attitudes toward reading should be more influenced by feelings elicited by the commercial among participants with high trust in their feelings than among participants with low trust in their feelings.

[Insert Figure 1 about here]

As depicted in Figure 1, on average, attitudes toward reading were more favorable in the pleasant-soundtrack condition ($M = 5.83$) than in the unpleasant-soundtrack condition ($M = 5.00$; $F(1,48) = 5.90$; $p < .02$). More importantly, this effect was qualified by an interaction with the trust manipulation ($F(1,48) = 5.68$; $p < .02$). The soundtrack had a stronger positive influence on the attitudes of participants asked to identify two examples ($M_{\text{pleasant}} = 5.97$ vs. $M_{\text{unpleasant}} = 4.33$; $F(1,48) = 11.73$, $p < .001$) than on the attitudes of participants asked to identify 10 examples ($M_{\text{pleasant}} = 5.69$ vs. $M_{\text{unpleasant}} = 5.67$; $F < 1$). Therefore, as predicted, the pleasant or unpleasant feelings elicited by the soundtrack had a greater influence on how the commercial was evaluated among participants whose momentary trust in their feelings was high than among participants whose momentary trust in their feelings was low.

Discussion

In this experiment, the pleasantness of a commercial's musical soundtrack was found to have a stronger influence on evaluations of the message among participants asked to provide two examples of successful reliance on feelings than among participants asked to provide 10 examples. This result is consistent with the idea that the reliance on feelings in evaluative judgments can involve a metacognitive assessment of how much trust one has in one's feelings. As indicated in the pretest, the ease of retrieving two examples of successful reliance on feelings

produced a momentary increase of the trust that participants had in their feelings. As a result, they relied more heavily on their feelings toward the commercial in their evaluations. In contrast, the difficulty of retrieving 10 such examples produced a momentary decrease in the trust that participants had in their feelings. As a result, they relied less on their feelings toward the commercial in their evaluations. This selective reliance on feelings as a function of the momentary trust that participants had in their feelings is consistent with the proposition that a metacognitive assessment of the feelings took place prior to the judgment.

It is unlikely that the findings were driven by experimental demand. When asked about the purpose of the experiment, participants exhibited little intuition about the experiment's rationale and hypotheses. In addition, the manipulation of trust in feelings used in this research was deliberately counterintuitive. Even if participants were to connect the alleged first study (where the manipulation was introduced) to the alleged third study (where the main evaluation task took place), it is implausible that participants asked to identify two examples of successful reliance on feelings could have guessed that they were expected to rely more on their feelings than participants asked to identify 10 examples. Rather, the results suggest that the reliance on feelings in judgment involves not only a monitoring of the feelings' evaluative implications but also a metacognitive assessment of one's trust in these feelings.

EXPERIMENT 2:

METACOGNITIVE ASSESSMENT IN RELIANCE ON INCIDENTAL FEELINGS

The purpose of this second experiment was (1) to replicate the first experiment's finding that consumers' metacognitive trust in their feelings moderates their reliance on these feelings,

and (2) to generalize this finding to the reliance on incidental feelings from preexisting mood states. Participants' whose momentary trust in their feelings was manipulated as in experiment 1 were put into either a positive mood or a negative mood through exposure to affectively-charged video clips. Participants were then asked to evaluate a book from a synopsis. It was predicted that participants who were induced to trust their feelings would be more influenced by their mood states in their evaluations than participants induced not to trust their feelings. Such a result would suggest that the metacognitive assessment of feelings applies to feelings in general, including to incidental feelings arising from mood states.

Method

Fifty undergraduates who received \$12 for participating were randomly assigned to one of four conditions of a 2 (high vs. low trust of feelings) x 2 (pleasant vs. unpleasant mood) between-subjects design. They were seated at separate computer stations and told that they would be taking part in four allegedly unrelated studies. The purpose of the alleged first study was to manipulate participants' momentary trust in their feelings. As in experiment 1, participants were given seven minutes to list either two or 10 situations in which they had correctly trusted their feelings to make a judgment or decision. The alleged second study was designed to manipulate participants' mood. Under the guise of studying people's ability to grasp the essence of TV programs from short excerpts, participants were shown two video clips and instructed to try to understand the gist of the programs from which the clips were taken. The first clip was affectively neutral and constant across conditions. Its purpose was to reinforce the cover story and make the manipulation of mood (introduced in the second clip) less blatant. After

viewing the first clip, participants completed a series of comprehension-related questions. The second clip differed across mood conditions. In the positive-mood condition, it was a seven-minute excerpt from a stand-up comedy performance. In the negative-mood condition, it consisted of seven minutes of edited scenes from a movie about a child stricken by a terrible disease. After viewing the second clip, participants completed another set of comprehension-related questions to further reinforce the cover story. A pretest had shown participants' mood was more positive after exposure to the positive-mood version of the stimuli ($M = 5.24$) than after exposure to the negative-mood version of the stimuli ($M = 4.16$; $F(1, 28) = 4.59$; $p < .04$). After going through the mood-induction procedure, participants completed a filler task presented as a third study. As a confounding check, filler task involvement was assessed on three items (e.g., "I took extra care to form an accurate opinion on the issue."; "I read the article very carefully"; $\alpha = .78$). There was a main effect of mood on task involvement ($M_{\text{positive mood}} = 2.40$ vs. $M_{\text{negative mood}} = 3.36$; $F(1, 49) = 4.77$; $p < .03$). However, more importantly, there was no effect of trust on task involvement ($F < 1$), suggesting that it is very unlikely that task involvement accounted for the results.

The evaluation task was administered in the fourth study. Participants were shown a one-page synopsis of a non-fiction book and asked to evaluate the book as if they were considering buying it for themselves. Their evaluations were collected on five seven-point items (anchored at "good/bad," "favorable/unfavorable," "like/dislike," "interesting/not interesting," and "worth buying/not worth buying"; $\alpha = 0.94$). Participants were then asked to guess the purpose of the experiment. (No participant showed evidence of having guessed the hypotheses of the study.) Finally, before debriefing, participants underwent a procedure designed to remove any negative mood.

Results

Consistent with numerous previous findings (e.g., Forgas 1995; Goldberg and Gorn 1987; Schwarz and Clore 1983), evaluations of the book were more favorable in the positive-mood condition ($M = 4.87$) than in the negative-mood condition ($M = 3.77$; $F(1, 49) = 10.64$; $p < .002$). More importantly, as depicted in Figure 2, this main effect of affect was qualified by an interaction with the trust-of-feelings manipulation ($F(1, 49) = 9.80$; $p < .003$), as in experiment 1. As predicted, participants' mood had a stronger influence on their evaluations in the two-situations (high trust) condition ($M_{\text{positive mood}} = 5.13$ vs. $M_{\text{negative mood}} = 2.88$; $F(1, 49) = 19.65$; $p < .0001$) than in the 10-situations (low trust) condition ($M_{\text{positive mood}} = 4.64$ vs. $M_{\text{negative mood}} = 4.58$; $F < 1$).

[Insert Figure 2 about here]

Discussion

The results reproduce the classic mood-congruency effect that evaluations rendered while in a positive mood are more favorable than evaluations rendered while in a negative mood. More importantly, the results replicate those of experiment 1 in suggesting that the influence of affect on judgment may be contingent on the degree of momentary trust that people have in their feelings. As predicted, participants' reliance on their mood-induced feelings in their evaluations was selective and dependent on whether they were asked to identify two or 10 situations in which they were correct in trusting their feelings. When momentary trust in feelings was high (as

a result of identifying two situations of successful reliance on feelings), participants evaluated the book significantly more favorably if in a good mood than if in a bad mood. In contrast, when momentary trust in feelings was low (as a result of identifying 10 situations), participants reported comparable evaluations across mood conditions. This contingency is again consistent with the idea that a metacognitive assessment of the feelings took place prior to the judgment.

The parallelism between the results of this experiment (in which nonrepresentative incidental mood states were the source of the feelings) and those of experiment 1 (in which more representative integral feelings were involved) suggests that the metacognitive assessment of feelings as information extends beyond considerations of representativeness. This parallelism also mitigates the possibility that in experiment 1 the findings were not driven by integral feelings generated by the commercial's soundtrack but by some unobserved correlates of the commercial manipulation.

An alternative explanation for the results of experiment 2 is that the manipulation of trust in feelings may have influenced how participants responded to the mood manipulation rather than how they used their feelings in the judgment stage. Participants asked to identify 10 situations may have had their incidental feelings less affected by the mood manipulation than participants asked to identify two situations. This explanation seems improbable on two grounds. First, the mood manipulation—seven minutes of exposure to an emotionally rich video clip—was relatively strong. It seems unlikely that a mere request to identify 10 examples of successful reliance on feelings could attenuate dramatically the effects of this manipulation on feelings. More importantly, it shall be seen in experiment 4 that, under certain conditions, the same mood manipulation does have an influence on evaluations even among participants exposed to the same induction of low trust in feelings.

EXPERIMENT 3:
METACOGNITIVE AND NONMETACOGNITIVE RELIANCE ON INTEGRAL
FEELINGS

The next two experiments test the propositions that (a) the metacognitive assessment of feelings requires significant processing resources, and (b) depending on the availability of cognitive resources, feelings can be relied upon in two different ways: one in which feelings are metacognitively assessed in terms of diagnosticity and the other in which they are not. In this experiment, participants were shown the same commercial as in experiment 1 and asked to report their attitudes. Three factors were manipulated. As in experiment 1, the first two factors manipulated the pleasantness of feelings elicited by the commercial and the momentary trust that participants had in their feelings. Unlike in Experiment 1, a third factor varied the availability of processing resources (low or high).

It was predicted that, when processing resources were more available, the results would replicate those of experiment 1. Participants induced to have high trust in their feelings would be more influenced by the pleasantness of the soundtrack than participants who were induced to have low trust in their feelings, presumably because the availability of processing resources would allow a metacognitive assessment of the feelings. However, when processing resources were less available, the pattern of results would be different. In this condition it was expected that participants would be influenced by the pleasantness of the soundtrack regardless of whether they were induced to have high or low trust in their feelings. This is because the limited availability of processing resources would presumably prevent a metacognitive assessment of the

feelings from taking place. Therefore, it was predicted that feelings toward the commercial would influence attitudes in two different ways: a metacognitively-appraised way that would be moderated by participants' momentary trust in their feelings and a nonmetacognitively-appraised way that would be insensitive to participants' trust in their feelings.

Method

As in experiment 1, participants were shown a TV commercial about the virtue of reading and asked to report their attitude toward reading. Ninety-five undergraduates who received \$12 for participating were randomly assigned to the conditions of a 2 (pleasantness of feeling) x 2 (trust in feelings) x 2 (resource availability) between-subjects design. Participants were told that they would be taking part in four supposedly unrelated studies. The first study manipulated their trust in their feelings using the same procedure as in the previous experiments. The second study consisted of the same filler task as in the previous experiments. The third study manipulated the availability of processing resources. Under the guise of a study on memory, participants were asked to memorize either a two-digit number (high resource availability) or a seven-digit number (low resource availability) that appeared on their computer screen for 10 seconds, and then continue to the next study. In the final study participants were shown the same TV commercial as in experiment 1 with one of two different soundtracks manipulating their feelings toward the commercial. Participants reported their attitudes toward reading on the same items as in experiment 1. As a confounding check, task involvement was assessed on 2 items (e.g., "The message in the ad was important to me."; $\alpha = .81$). As a check for the cognitive load manipulation, participants were then asked to report the number that they were instructed to

memorize. They also rated (a) how “busy” they were trying to remember the number while answering the evaluation questions and (b) how difficult it was on two seven-point items ($\alpha = 0.61$). After being asked to guess the purpose of the experiment, participants were debriefed.

Results

Preliminary Analyses. All participants were able to report correctly the number they were asked to remember. As expected, self-reports of cognitive busyness were higher in the low-resource-availability condition ($M = 3.59$) than in the high-resource-availability condition ($M = 1.91$; $F(1, 86) = 34.22$; $p < .0001$). There were no significant effects of the manipulations on task involvement (all p 's = 0.09 or higher). Also, none of the participants guessed the experimental hypotheses.

Attitudes Toward Reading. The results are summarized in Figure 3. A 3-way ANOVA of participants' attitudes uncovered a main effect of pleasantness of feelings ($F(1, 87) = 37.66$; $p < .0001$) showing that attitudes toward reading were more favorable in the pleasant ad condition ($M = 5.77$) than in the unpleasant ad condition ($M = 4.39$), as in experiment 1. The analysis also uncovered a pleasantness-of-feelings-by-trust interaction ($F(1, 87) = 3.99$; $p < .05$) showing that the simple main effect of pleasantness of the ad was more pronounced in the high-trust condition ($M_{\text{pleasant}} = 5.75$ vs. $M_{\text{unpleasant}} = 3.85$; $F(1, 87) = 31.37$; $p < .0001$) than in the low-trust condition ($M_{\text{pleasant}} = 5.79$ vs. $M_{\text{unpleasant}} = 4.85$; $F(1, 87) = 9.06$; $p < .01$). More importantly, the feeling-by-trust interaction was qualified by a marginally significant 3-way interaction with resource availability ($F(1, 87) = 3.43$; $p < .07$). As predicted, when resources were more available, a

simple 2-way interaction between pleasantness of feelings and trust ($F(1, 87) = 7.83; p < .01$) indicated that feelings induced by the commercial were more influential in the high trust condition ($M_{\text{pleasant}} = 5.88$ vs. $M_{\text{unpleasant}} = 3.90; F(1, 87) = 18.32, p < 0.0001$) than in the low trust condition ($M_{\text{pleasant}} = 5.95$ vs. $M_{\text{unpleasant}} = 5.77; F < 1$). This simple interaction is consistent with the idea that, when processing resources are available, feelings are submitted to a metacognitive assessment. In contrast, when resources were less available, the simple 2-way interaction between pleasantness of feelings and trust was not significant ($F < 1$)--only a simple main effect of pleasantness emerged ($F(1, 87) = 27.63, p < .0001$). When resources were limited, attitudes toward reading were uniformly more favorable when the commercial was pleasant ($M = 5.62$) than when it was unpleasant ($M = 3.84$), regardless of whether participants had high or low trust in their feelings. This simple main effect of pleasantness of feelings, combined with the finding that this effect was not moderated by an interaction with trust, suggests that when processing resources are limited, feelings are relied upon less selectively.

[Insert figure 3 here]

Discussion

The results of this experiment support the general proposition that the degree to which the metacognitive trust in one's feelings moderates the reliance on these feelings depends on the availability of processing resources. When processing resources were presumably available (in the two-digit condition), the influence of feelings elicited by the commercial on attitudes depended on the momentary trust that participants had in their feelings, consistent with the findings of experiment 1. This contingency suggests that some metacognitive assessment of the trustworthiness of the feelings took place. In contrast, when processing resources were less available (in the seven-digit condition), the influence of feelings elicited by the commercial on

attitudes did not depend on the momentary trust that participants had in their feelings, suggesting that no metacognitive assessment of the trustworthiness of the feelings took place. This overall pattern of results is consistent with the general hypothesis that feelings can be relied upon in two different ways in judgment: one that involves a metacognitive appraisal of their diagnosticity and one that does not.

EXPERIMENT 4:

METACOGNITIVE AND NONMETACOGNITIVE RELIANCE ON INCIDENTAL FEELINGS

The purpose of this final experiment was to test the robustness and generality of the results of experiment 3 using an incidental mood manipulation of respondents' feelings toward the target. Participants were asked to evaluate the same book as in experiment 2. Three factors were manipulated. As in experiment 2, the first two factors manipulated participants' preexisting mood and the momentary trust that they had in their feelings. As in experiment 3, the third factor varied the availability of processing resources.

It was predicted that, when processing resources were more available, the results would replicate those of experiment 2. Participants induced to have high trust in their feelings would be more influenced by their mood than participants induced to have low trust in their feelings. This is presumably because the availability of processing resources would allow a metacognitive assessment of the feelings. However, when processing resources were less available, the pattern of results would be different. It was expected that participants would be influenced by their mood regardless of whether they were induced to have high or low trust in their feelings. This is

because the limited availability of processing resources would presumably prevent a metacognitive assessment of the feelings. Therefore, consistent with experiment 3, it was predicted that participants' mood would influence their evaluations in two different ways: a metacognitively-appraised way that would be moderated by participants' momentary trust in their feelings and a nonmetacognitively-appraised way that would be insensitive to participants' trust in their feelings.

Method

A total of 139 undergraduates who received \$12 for participating were randomly assigned to the conditions of a 2 (pleasant vs. unpleasant mood) x 2 (trust in feelings) x 2 (resource availability) between-subjects design. They were told that they would be taking part in five supposedly unrelated studies. The first study manipulated participants' trust in their feelings using the same procedure as in the previous experiments. The alleged second study manipulated participants' mood using the same procedure as in experiment 2. The third study consisted of the same filler task as in the previous experiments. As a confounding check, filler task involvement was assessed on three items (e.g., "I took extra care to form an accurate opinion on the issue."; "I read the article very carefully"; $\alpha = .87$). There were no significant effects of the manipulations on filler task involvement (all p 's = 0.66 or higher).

The fourth study manipulated participants' resource availability using the same cognitive load manipulation as the one used in experiment 3. In the final study, participants were shown a one-page description of a non-fiction book and asked to evaluate it as if they were considering buying it for themselves. These evaluations were collected on the same five items as in

experiment 2 ($\alpha = .90$). The checks for the cognitive load manipulation were the same as in experiment 3. After being probed for demand characteristics, participants completed a procedure designed to remove any negative mood and were debriefed. None of the participants guessed the experimental hypotheses.

Results

Preliminary Analyses. All participants were able to report correctly the number they were asked to remember. As expected, self-reports of cognitive busyness were higher in the limited-resource-availability condition ($M = 3.76$) than in the high-resource-availability condition ($M = 1.77$; $F(1, 129) = 81.51$; $p < .0001$). When probed, no participant showed evidence of having guessed the hypotheses of the study.

Book Evaluations. A 3-way ANOVA of participants' evaluations of the book uncovered a main effect of mood showing that evaluations were more favorable in the positive mood condition ($M = 4.88$) than in the negative mood condition ($M = 4.27$; $F(1, 131) = 7.30$; $p < .01$), consistent with previous findings. A main effect of cognitive resources indicated that evaluations were slightly less favorable in the high resource availability condition ($M = 4.35$) than in the low resource availability condition ($M = 4.84$; $F(1, 131) = 4.55$; $p < .04$). More importantly, there was a significant 3-way interaction among mood, trust in feelings, and resource availability ($F(1, 131) = 3.99$; $p < .05$), as illustrated in Figure 4. As predicted, when resources were more available, a simple 2-way interaction between mood and trust ($F(1, 131) = 6.57$; $p < .01$) indicated that participants' moods were more influential in the high trust condition ($M_{\text{positive}} = 5.00$ vs. $M_{\text{negative}} = 3.73$; $F(1, 131) = 8.19$; $p < 0.005$) than in the low trust condition ($M_{\text{positive}} =$

4.18 vs. $M_{\text{negative}} = 4.52$; $F < 1$). This simple 2-way interaction is again consistent with the idea that, when processing resources are available, feelings are submitted to a metacognitive assessment of their diagnosticity. In contrast, when resources were less available, the simple 2-way interaction between mood and trust was not significant ($F < 1$). Instead, there was only a simple main effect of mood showing that evaluations were more favorable in the positive mood condition ($M = 5.22$) than in the negative mood condition ($M = 4.45$; $F(1, 131) = 5.39$; $p < .03$), regardless of the level of trust in the feelings. This latter finding is consistent with the idea that feelings are relied upon less selectively when processing resources are limited. Therefore, the overall pattern of results of this experiment was very similar to that of experiment 3.

[insert figure 4 here]

Discussion

The results of this experiment closely replicate those of experiment 3 and lend further support to the general hypothesis that, depending on the availability of processing resources, feelings—here incidental feelings—can influence judgments in two different ways: one that is selective and involves a metacognitive assessment of the feelings and one that is less selective and does not seem to factor in the diagnosticity of the feelings. When resource availability was higher, the influence that participants' mood had on their evaluations of the book was found to be moderated by their momentary trust in their feelings. Participants who had high trust in their feelings were more influenced by their moods than participants who had low trust in their feelings. Under high resource availability, the results were thus very similar to those of experiment 2, where resources were not constrained and affect was also manipulated incidentally. In contrast, when resource availability was limited, participants' mood was found to

influence their evaluations regardless of the level of trust that participants had in their feelings. As in experiment 3, this contingency supports two related propositions: (a) the metacognitive assessment of feelings requires significant processing resources, and (b) depending on the availability of cognitive resources, feelings can be relied upon in two different ways: one in which feelings are metacognitively assessed in terms of diagnosticity, and the other in which they are not.

Similar to the convergence between the results of experiment 1 and those of experiment 2, the convergence between the results of this experiment and those of experiment 3 suggests that the processes involved in the metacognitive assessment of feelings operate at a rather general level. Specifically, this assessment seems to function in the same manner whether feelings are elicited integrally by the target (experiments 1 and 3) or incidentally from a preexisting mood state (experiments 2 and 4). In addition, the finding that, when resources were limited, mood did influence the evaluations of participants who were induced not to trust their feelings helps rule out an alternative explanation for the results of experiment 2. One could argue that in experiment 2 the induction of low trust in feelings may have attenuated participants' affective responses to the mood induction (rather than reduced their reliance on feelings in the judgment stage). However, the finding that mood did influence the evaluations of participants induced not to trust their feelings when resources were limited suggests that the low trust manipulation did not attenuate participants' mood experience.

GENERAL DISCUSSION

Although the reliance on feelings as information in judgment is generally viewed as a single, unitary mechanism called the “How-do-I-feel-about-it?” heuristic, the results of four experiments suggest that this reliance may in fact involve two qualitatively different mechanisms: one that is reflective and involves a metacognitive assessment of the perceived diagnosticity of the feelings and another that is more spontaneous and less sensitive to this perceived diagnosticity. Consistent with the first type of mechanism, it was found in experiments 1 and 2 that, where processing resources were not constrained, experimentally-manipulated feelings had stronger influence on evaluations among participants induced to have high momentary trust in their feelings than among participants induced to have low momentary trust in their feelings. Parallel findings were observed in experiments 3 and 4 when constraints on participants’ processing resources were light.

These findings suggest that when people rely on their feelings as information, they not only monitor the content of these feelings (“How do I feel about it?”), but may also monitor metacognitive properties of these feelings with respect to the judgment at hand (e.g., “How much should I trust my feelings?”). Importantly, these findings were observed both with feelings manipulated integrally through affect-eliciting properties of the target stimulus and with feelings manipulated incidentally through participants’ moods. That participants’ momentary trust in their feelings played a very similar role in moderating the effects of integrally and incidentally-induced feelings suggests that the metacognitive assessment of feelings is a general process that has broad applicability across types of feelings.

Consistent with the second type of mechanism, it was found in experiments 3 and 4 that, under conditions such as limited processing resources, participants’ feelings can influence their evaluations regardless of the momentary trust that they have in these feelings. Under such

conditions, only the content of the feelings seems to be incorporated in the judgment; metacognitive considerations such as one's momentary trust in the feelings seem to be ignored. Again, these findings were observed both with feelings manipulated integrally and with feelings manipulated incidentally, suggesting that a more mindless form of reliance on feelings is also a generalizable finding.

We propose that these two mechanisms of reliance on feelings as information can be accommodated within a single metacognitive account. This account starts with the experience of emotional feelings. Depending on a variety of factors, these feelings may or may not be submitted to a metacognitive assessment of their diagnosticity for the judgment or decision at hand. As evidenced in experiments 3 and 4, and consistent with findings in the metacognition literature (Nelson 1996; Nelson et al. 1998), one of the factors that seem to determine whether this metacognitive assessment takes place is the availability of processing resources. Although not tested in this research, another factor may be the consumer's motivation for accuracy. Consumers who are more motivated to make an accurate judgment or decision are theoretically more likely to reflect on the diagnosticity of their feelings. We also speculate that a metacognitive assessment of the feelings is more likely when there is greater awareness of the experienced feelings than when there is lower awareness.

If a metacognitive assessment of the feelings does take place, the feelings will be assessed along various considerations that will determine their perceived diagnosticity for the judgment at hand. As shown in Schwarz and Clore's (1983) seminal study, one of these considerations could be the degree to which the feelings are perceived to be representative of the target (see also Raghunathan et al. 2006, for further evidence of a representativeness account). Other factors may include: the perceived relevance of the feelings given decision goals (Pham

1998; Yeung and Wyer 2004), the appropriateness of the feelings given the object to be judged (Schwarz et al. 1987), the perceived validity of the feelings in assessing one's own versus someone else's preferences (Raghunathan and Pham 1999), and the person's regulatory focus, promotion versus prevention (Avnet and Higgins 2006; Pham and Avnet 2004). Our findings suggest that these various considerations might be subsumed under an umbrella notion of momentary trust that people have in their feelings.

When conditions prevent a metacognitive assessment of the feelings, the feelings still enter the judgment, but do so in a less selective manner. This is consistent with a large body of findings showing that incidental (i.e., nondiagnostic) mood states typically exert greater influence on judgment under conditions of limited processing resources than under conditions of greater resources availability (e.g., Albarracin and Wyer 2001; Isbell and Wyer 1999; Ottati and Isbell 1996). Experiment 3's findings additionally suggest that this nonselective reliance on feelings under limited processing resources is not limited to incidental moods: it also applies to integrally experienced feelings.

The proposed distinction between a metacognitive and a nonmetacognitive reliance on feelings as information is different from the notion that mood states can influence evaluative judgments via two different "routes." It has been suggested and observed that mood states can have mood-congruent effects on evaluations via either a direct, "heuristic" route consistent with a "how-do-I-feel-about-it?" process or via an indirect, "systematic" route in which the mood state primes mood-congruent thoughts in memory that then enter the judgment (e.g., Batra and Stayman 1990; Fedorikhin and Cole 2004; Petty et al. 1993; see also Forgas 1995). Our conceptualization differs from the dual-route conceptualization of mood effects in two important respects. First, our conceptualization is silent about the possibility that feelings may also

influence judgments indirectly by priming feeling-related thoughts. Instead, our conceptualization focuses on distinguishing between two mechanisms of direct reliance on feelings in judgment. Second, our conceptualization is not restricted to the effects of incidental moods on judgment; it also applies to the effects of integral feelings on judgment.

It should be clear that our framework is totally consistent with the affect-as-information hypothesis (Schwarz, 1990; Schwarz & Clore, 1983, 1996). Although Schwarz and Clore did not originally formulate this hypothesis in metacognitive terms, the very idea that affect is regarded as a source of information is inherently metacognitive. The finding that feelings can be subjected to a metacognitive assessment thus reinforces the general proposition that feelings are indeed treated like any other sources of information (Pham 2004). Our research extends previous affect-as-information research in several respects. First and foremost, our research suggests that the reliance on feelings as information in judgment can involve two distinct mechanisms: one that is metacognitively-mediated, one that is not. Second, whereas previous studies on affect-as-information have generally used incidental mood states to manipulate the content of people's feelings, our studies enabled a demonstration of the strong parallelism in the way people rely on incidental versus integral feelings. This parallelism is important in the following respect. Because of their reliance on manipulations of incidental moods (i.e. nondiagnostic feelings), previous studies on affect-as-information have mostly documented instances of nonreliance on (or discounting of) nondiagnostic feelings when a metacognitive assessment of the feelings presumably took place. Our research suggests that a metacognitive assessment of feelings can also reinforce the reliance on these feelings, provided that they are perceived to be diagnostic, as is more likely to be the case with integral as opposed to incidental feelings (holding other diagnosticity considerations constant). Third, our research also reinforces the idea that

representativeness—the primary focus of previous affect-as-information studies—is only one of several considerations that enter into people’s assessment of the perceived diagnosticity of feelings from a metacognitive standpoint. The idea that multiple considerations may enter into people’s metacognitive assessment of the perceived diagnosticity of their feelings does not mean that these considerations are weighted equally. For example, people may assume by default that their feelings are representative of the target (Schwarz 1990), but be much more discerning with respect to the relevance of their feelings to their decision goals (Pham 1998).

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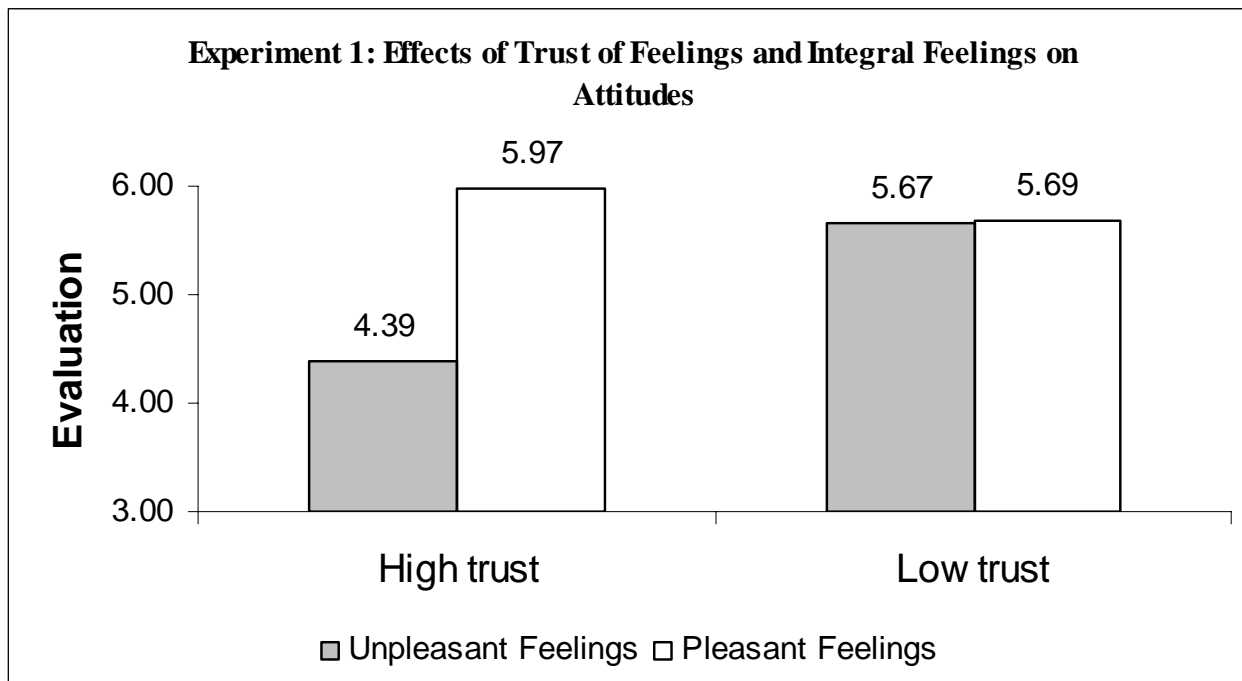


Figure 1

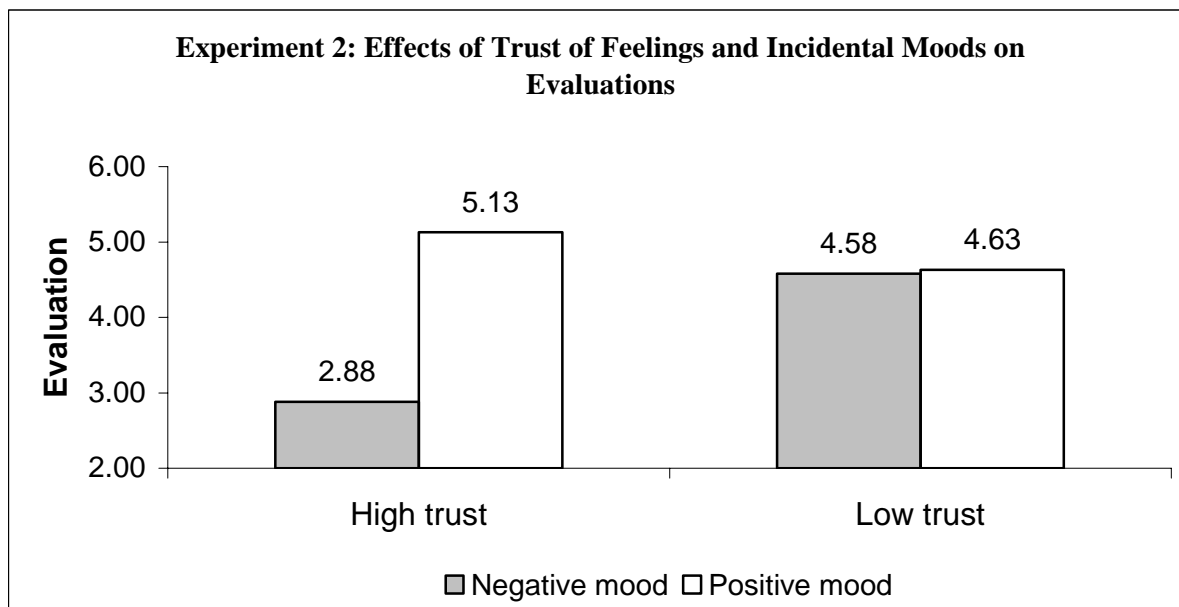


Figure 2

Experiment 3: Effects of Trust of Feelings, Integral Feelings, and Processing Resources on Attitudes

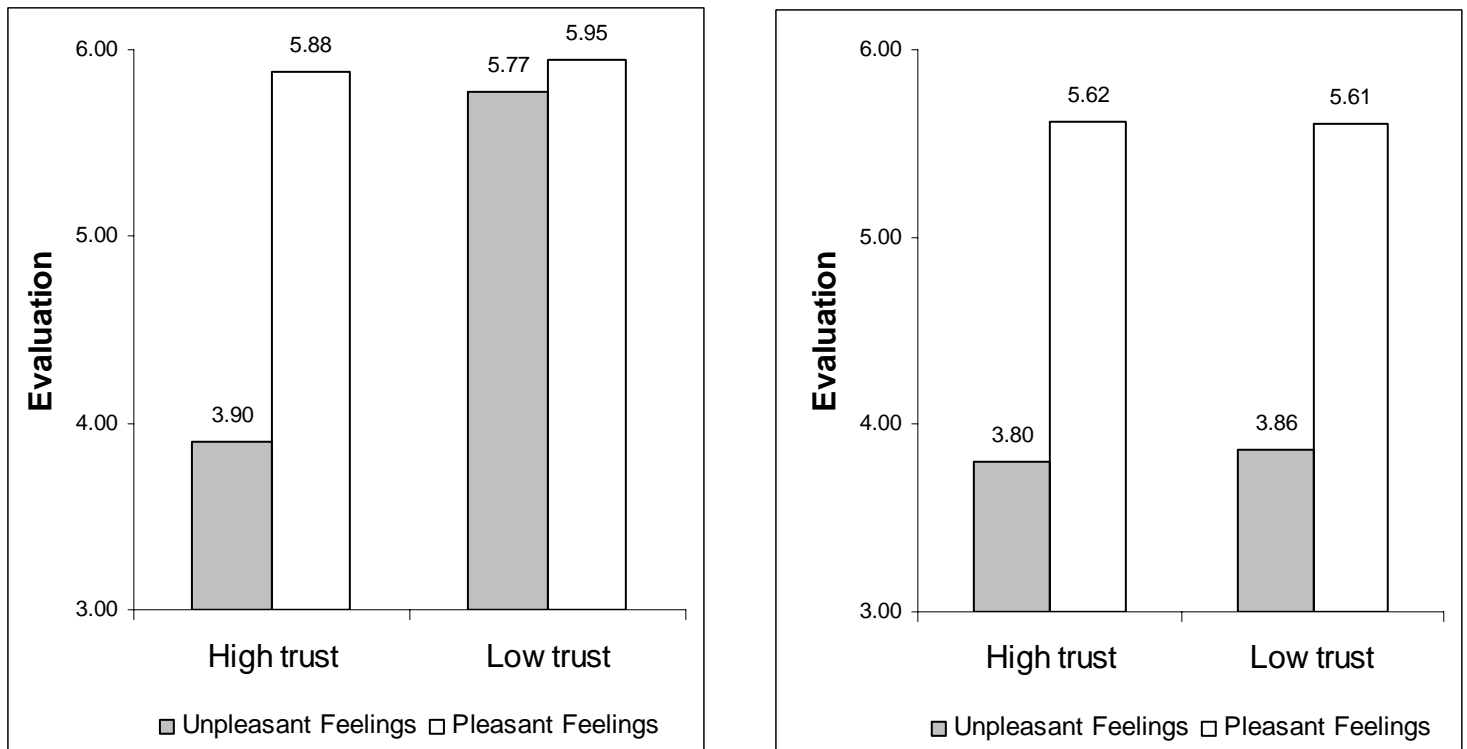


Figure 3

Experiment 4: Effects of Trust of Feelings, Incidental Moods, and Processing Resources on Evaluations

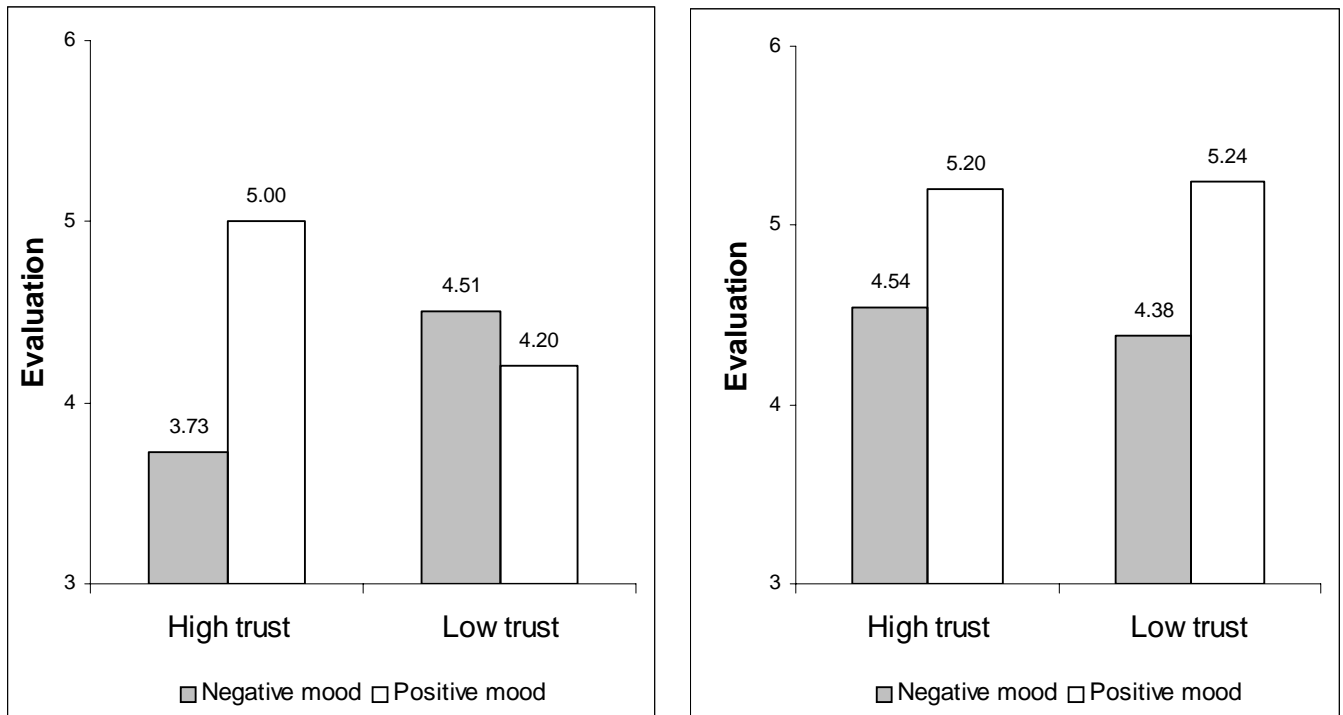


Figure 4