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Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States

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Two experiments investigated whether judgments of happiness and satisfaction with one's life are influenced by mood at the time of judgment. In Experiment 1, moods were induced by asking for vivid descriptions of a recent happy or sad event in respondents' lives; in Experiment 2, moods were induced by interviewing participants on sunny or rainy days. In both experiments, subjects reported more happiness and satisfaction with their life as a whole when in a good mood than when in a bad mood. However, the negative impact of bad moods was eliminated when subjects were induced to attribute their present feelings to transient external sources, irrelevant to the evaluation of their lives. Subjects who were in a good mood, on the other hand, were not affected by misattribution manipulations. The data suggest (a) that people use their momentary affective states as information in making judgments of how happy and satisfied they are with their lives in general and (b) that people in unpleasant affective states are more likely to search for and use information to explain their state than are people in pleasant affective states. Thus the data demonstrate informative and directive functions of affective states.

The role of affect in information processing has recently received some attention, and at least three possible influences of affect have been suggested. Two of these influences, suggested by Wyer and Carlston (1979), are that affective states may serve both informational and directive functions. An example of the informational function is that people may use their momentary affective state as information relevant to making various kinds of judgments, including evaluations of the quality of their lives or their attraction to another person. In addition, moods may serve a directive function in that they direct one's attention to specific classes of information in an attempt to sort out the plausible causes for such feelings. Finally, moods may also increase the availability of mood-congruent thoughts or information (Bower, 1981; Isen, Shalker, Clark, & Karp, 1978).

The present studies investigate the role of mood-related factors in judgments of general well-being, that is, judgments of happiness and satisfaction with one's life. Pilot work suggested that thinking about a single happy or sad event in one's life affects the evaluation of that life as a whole. Why is this the case? Thinking about a happy or sad event not only may change a person's mood but also may increase the availability of this and similarly valenced events in memory (Tversky & Kahneman, 1973). Either of these factors could influence the person's judgments of general well-being.

In Experiment 1, we attempted to separate these processes. To do this, we used a procedure conceptually similar to that developed by Zanna and Cooper (1974) to isolate the role of arousal in cognitive-dissonance phenomena. Specifically, we held constant the activity of thinking about positive and neg-

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ative life events while varying the apparent relevance of any feelings resulting from this activity to judgments about one's life. This was accomplished by offering some subjects the suggestion that their feelings might be due to a situational factor that was irrelevant to the evaluation of their lives. If respondents attribute their feelings to such factors, they should be less likely to use them as an informational basis for evaluating their lives. To the extent that such misattributions of mood or feelings reduce the relationship between thinking about happy or sad events and judgments of general well-being, one can conclude that respondents used these momentary feelings as a basis for judgment. An alternative hypothesis is that writing about a happy or a sad event increases the availability of other similarly valenced life events from memory, leading subjects to overestimate the frequency of such events in their life. If the availability of these mood-congruent memories rather than present feelings is the basis of subjects' happiness and satisfaction judgments, then they should be influenced in all conditions regardless of the attribution manipulation, because the impact of these memories should not depend on the explanation of an individual's present mood.

Additional considerations are raised by recent theorizing about the directive effects of affective states. Wyer and Carlston (1979, p. 198ff.) argue, with reference to a study by Arkin, Gleason, and Johnston (1976), that only unpleasant affective states may motivate persons to seek explanations, whereas persons in pleasant affective states may not be motivated to do so. Different processes may contribute to this effect. On the one hand, as suggested by Wyer and Carlston (1979), persons in unpleasant affective states may try to seek explanations that reduce their unpleasantness. On the other hand, a variety of studies showed that people generally report that they are "happier than most" and "feel pretty good" (Goldings, 1954; Wessman & Ricks, 1966; see Matlin & Stang, 1978, for a review). Kerber and Clore (Note 1) also suggested that when processing social information, the assumption by default (at least among college students) is that people are happy. If this is the case, positive moods simply do not demand explanation either to oneself or others. If this is so, unpleasant states may be perceived as an unexpected deviation from individuals' usual feelings and might generate more attempts at explanation for this reason. Finally, aversive (but not pleasant) states need to be altered by appropriate action, for which, again, reasonable explanations of the state seem to be a prerequisite.

If affective states have a directive effect on reasoning, as suggested by these considerations, the misattribution manipulations in the present studies should affect subjects who described negative life events but not subjects who described positive life events.

Experiment 2 was a field study rather than a laboratory study in which mood was governed by whether subjects were interviewed on sunny or rainy spring days. The same set of hypotheses were tested, but in some respects this study is the reverse of the first. In Experiment 1, we induced subjects to attend to a situational factor that did not actually produce their mood, but in Experiment 2, they were induced to attend to a situational factor that did produce their mood. In both studies, attributions to situational factors were expected to reduce the likelihood that subjects would attribute their moods to more personally relevant aspects of their lives.

Thus the present studies attempted to explore the contributions of salience of life events and of informational and directional effects of subjects' affective states on reports of general well-being. Moreover, we were interested in whether those processes might affect, to different degrees, different measures of well-being. In this regard, Andrews and McKennel (1980) suggested that judgments of happiness might be "affective," whereas judgments of satisfaction might be "cognitive." Using Bradburn's (1969) affect-balance scale, these authors reported that past affective experiences in a respondent's life (e.g., being praised or being criticized) were good predictors of happiness ratings but not of satisfaction ratings. More generally, ratings of satisfaction may reflect the outcome of social-comparison processes, whereas ratings of happiness may reflect the respondent's internal state.

Experiment 1

In the first experiment, we asked subjects to give vivid descriptions of either a happy

or a sad event in their recent past. On the one hand, this task should increase the cognitive availability of positive or negative events, and on the other hand, it should change subjects' mood. To isolate the effect of mood, we ran the experiment in an unusual soundproof room and suggested to some subjects that the room might make them feel good and to others that it might make them feel bad (adapted from Fazio, Zanna, & Cooper, 1977). A third group of subjects was not given any expectations concerning the effects of the room.

We expected that subjects who described negative life events would report being less happy and less satisfied than control subjects, who did not describe any past life events, whereas subjects who described positive life events would report being more happy and more satisfied than control subjects. However, if persons use their affective state as a basis for evaluating the quality of their life, both discounting and augmentation effects (Kelley, 1971) should result from the room manipulation.

Specifically, subjects who described negative life events should discount the bad feelings resulting from thinking about negative life events when the bad feelings can be misattributed to the room, that is, to a transient source, irrelevant to the evaluation of their lives. These subjects should report less unhappiness and dissatisfaction than those with no room expectations. On the other hand, when they expect the room to make them feel elated, they should report more unhappiness and dissatisfaction than the no-expectation group. That is, we expect augmentation effects when subjects realize they feel badly in spite of conditions presumably fostering good feelings.

Similarly, subjects who described positive life events should report lower well-being when they attribute their positive feelings to the room (discounting) and higher well-being when they expect the room to make them feel bad (augmentation) compared to those who have no room expectations.

The occurrence of these discounting and augmentation effects would indicate that subjects use their feelings as relevant information at the time of judgment in assessing the quality of their lives, thus demonstrating the informational value of affective states. If, however, persons are only motivated to explain their affective state if they feel bad—as suggested by the directive functions hypothesis—discounting and augmentation effects should only be obtained when subjects describe negative life events. Subjects who describe positive events should not be influenced by the misattribution manipulations. In contrast, if mood is irrelevant to that type of judgment, or if mood affects it only via the increased availability of mood-congruent cognitions (Bower, 1981; Isen et al., 1978), we should simply find a main effect of the quality of the life events described, because the impact of salient cognitions should not depend on the explanation of a person's mood.

Finally, if judgments of happiness are more "affective" than are judgments of satisfaction, the former should be more influenced by the misattribution manipulations than the latter.

Method

Participants. Sixty-one introductory psychology students who were randomly assigned to experimental conditions received course credit for their participation. They were run in groups of three or four persons each.

Overview. To set up the misattribution possibilities, the experiment was conducted in an odd-looking soundproof room. Participants were first told that the room might make them feel either tense or elated, or they were given no expectation concerning the room's effect. They then heard a series of three-note piano progressions on tape as part of a bogus "sound-memory task" (intended to legitimize the soundproof room). Next they wrote about a life event that had made them feel good or bad. The dependent variables were then assessed using questions about life satisfaction and happiness, present mood, and some causal-attribution scales. The design was therefore a 2 × 3 factorial involving two types of life-event descriptions (positive or negative) and three types of expectations about room effects (tense, elated, or no effect). In addition, a control condition was run in which subjects reported their life satisfaction without having previously described a life event and without having been in the soundproof room.

Expectation. Participants were given one of the three expectations about the soundproof room. Those given a *bad-mood expectation* were told that participants in an earlier study had complained about feeling "tense" and "depressed" in the room. Those given a *good-mood expectation* were told that earlier participants felt "elated" and "kind of high" in the room, perhaps because of its soundproof quality. Subjects in these conditions were then told the Department of Psychology wanted to find out what caused these feelings. They were given a one-page questionnaire on which to rate the room for comfort, lighting, ventilation, and so on. Participants with *no mood expectation* sat in the same room but were not

told about the reactions of earlier participants and were not given a questionnaire.

All subjects received the questionnaire at the beginning of the experiment, but it was desirable to suggest that the room might have its effects later (during the period when life events were described). To accomplish this, the cover page of the questionnaire for the expectation groups contained an instruction to the experimenter from the Department of Psychology to hand the questionnaire to some subjects at the beginning, to some subjects during, and to some subjects at the end of the experiment. It explained that the impact of the room might depend on the amount of time spent in it. In addition, subjects were asked to indicate at which of these times they received the questionnaire. This instruction was intended to convey the impression that subjects' moods might change over the course of the experiment.

Mood. Following the ratings of the experimental room, subjects were exposed to a series of three-note tonal progressions as part of the bogus sound-memory task and were then asked to collaborate on a 25-minute filler task prior to the sound-recognition test. The sound-memory task simply provided an excuse for running the experiment in a soundproof room. The filler task actually constituted the main part of the study. Specifically, subjects were asked to collaborate on the development of a "life-event inventory," purportedly a test instrument to assess events in people's lives. Printed instructions asked them to describe "as vividly and in as much detail as possible" a recent event that made them feel "really good" or one that made them feel "really bad." They were told that these descriptions would provide the basis for the generation of items for the life-event inventory. Subjects were given 20 minutes to complete the task. To ensure that they attended to the emotional aspects of the event, they were asked to indicate how the experience made them feel, what aspects made them feel that way, what the experiences made them think about, and so on. Positive and negative mood conditions were run in each experimental session, and the experimenter was blind to the condition.

Half of the essays from each experimental condition were randomly selected and rated for the pleasantness of the described event. No differences, according to room expectations, emerged either for the positive ($F < 1$) or the negative descriptions, $F(2, 12) = 1.32$, *ns*, which indicated that the descriptions were equally positive or negative across the three expectation conditions.

Measures. Following these descriptions, participants were asked to answer some general questions, purportedly to help in the selection of appropriate response scales for the life-event inventory being developed. The questions, which were answered along either 7- or 11-point rating scales, included two measures of general well-being. One of these pertained to general happiness (How happy do you feel about your life as a whole?) and the other to life satisfaction (How satisfied are you with your life as a whole these days?). Both of these questions had previously been used in other surveys of well-being (cf. Andrews & McKennel, 1980). Following these measures, subjects' present affective states were assessed by the questions "How happy (unhappy) do you feel right now, at this moment?" and "How good (bad) do you feel at this moment?"

Finally, to assess causal attributions for their momentary moods, participants were asked two questions, one about how much their present feelings were due to what they thought about (an internal attribution) and one about how much their feelings were due to the room (an external attribution).

Participants in a nonfactorial control group, run concurrently with the experimental conditions, responded to the same dependent measures without first describing events from their lives.

Results

Temporary mood. The task of describing pleasant and unpleasant life events influenced mood, as expected. Compared to participants who described positive life events, those who described negative life events reported feeling significantly less happy at this moment (Ms = 3.7 vs. 5.5 on a 7-point scale) and less good (Ms = 5.8 vs. 8.4 on an 11-point scale), Fs(2, 54) = 22.7 and 20.7, respectively, ps < .001. Moreover, compared to control group subjects (Ms = 5.1 and 7.9), subjects who described negative events felt only less happy and less good at this moment, ts(54) = 2.97 and 3.06, ps < .004, whereas subjects who described positive events felt only somewhat happier and better, ts(54) = 1.32 and 1.30, respectively, ps < .20. That is, compared to the control group, the instruction to think about negative events had a more pronounced effect on subjects' mood than did the instruction to think about positive events. This finding, however, seems to be due primarily to the preexisting positive mood of the control group.

As expected, the manipulation of subjects' expectations for how the room would make them feel did not affect their reported mood (Fs ≤ 1). In other words, opportunities to explain the source of the mood did not change the level of the mood itself.

General well-being. Table 1 shows the effects of event descriptions and room expectancies on ratings of both general happiness and life satisfaction. The pattern of results was similar in each case and consistent with the hypotheses. That is, subjects who had described positive life events reported being happy and satisfied with their lives regardless of their expectations about the effects of the room they were in. However, when subjects had described negative experiences, their ratings depended on the extent to which the room could potentially account for their negative feelings. That is, they reported less happiness and less life satisfaction when the room

Table 1
General Happiness and Life-Satisfaction Ratings: Experiment 1

Description of event	Expectation about room: Tense	No mood	Elated	Total	Control
		General happiness (7-point scale)			
Positive	$6.5_{a,b}$	$6.4_{a,b}$	6.7_{a}	6.5	5.5_{b}
Negative	$6.1_{a,b}$	4.1_{c}	3.6_{c}	4.5	
		Life satisfaction (11-point scale)			
Positive	9.6_{a}	8.6_{a}	9.7_{a}	9.3	8.9_{a}
Negative	8.6_{a}	5.7_{b}	4.4_{b}	6.2	

Note. Means that do not share a common subscript differ at $p < .05$ (Newman–Keuls test).

was described as likely to make them elated and reported more happiness and satisfaction when it was described as likely to make them sad than when no expectations about the room's effects were given. These conclusions are confirmed statistically for both happiness and life satisfaction by main effects for the type of event described, $Fs(2, 54) = 59.2$ and 32.8, respectively, $ps < .001$, and by an Event Description × Room Expectations interaction, $Fs(2, 54) = 10.6$ and 5.6, respectively, $ps < .01$.

Thus the data are consistent with both informative and directive effects hypotheses. That is, subjects who were in a bad mood tried to explain their feelings in terms of transitory situational factors and therefore discounted them as reasonable sources of information about their life situation when they could attribute their feelings to the room they were in. Indeed, the discounting was sufficiently complete that the bad-mood-expectation condition no longer differed from the good-mood condition. On the other hand, participants who felt bad but who expected the room to make them feel "elated" or "kind of high" reported nonsignificantly less happiness than did those who expected no side effects and much less happiness than did participants with the same expectations who were in the good-mood condition.

In contrast, subjects who were in a good mood were not influenced by possible situational explanations of their mood. This fact may indicate that subjects were not motivated to search for factors that could account for positive affective states.

Attributions. In general, we expected attributions for mood states to be consistent with the information provided. For example, compared to subjects without expectations about the room, those expecting the room to make them feel tense should attribute bad moods externally to the room and good moods internally to their thoughts. Data relevant to this hypothesis are summarized in Table 2. Because within-cell variability in responses to these attribution scales was high, the expected effects were not significant. However, three of the four comparisons between means for subjects expecting elation versus tension were in the predicted direction (although the mean for the no-expectation group was often misplaced). The pattern of the data supports the misattribution reason-

Table 2
Causal Attributions of Subjects' Present Affective State

Description of event	Expectation about room: Tense	Neutral	Elated	Control
		Attribution to thoughts		
Positive	9.8_{b}	$7.9_{a,b}$	7.3_{a}	5.4_{a}
Negative	$8.9_{a,b}$	9.3_{b}	$8.0_{a,b}$	
		Attribution to the room		
Positive	$2.8_{a,b}$	1.5_{a}	$3.5_{a,b}$	$2.4_{a,b}$
Negative	5.6_{b}	$2.4_{a,b}$	$3.5_{a,b}$	

Note. Scales range from 1 to 11. Within each variable, means that do not share a common subscript differ at $p < .05$ (Newman–Keuls test).

ing, the only deviation being that participants in the bad-mood condition who expected the room to make them feel "elated" still attributed their bad mood more to the room and less to their thoughts than did the no-expectation group. This pattern of attribution may account for the weakness of the augmentation effect found in this condition.

Correlational analyses. Additional support for the hypothesis that subjects based their assessment of general well-being on their affective state at the time of judgment is provided by correlational analyses. Specifically, subjects' reports of momentary mood were generally correlated significantly with their reports of both general happiness and satisfaction with their lives; this was true for control subjects (rs = .74 and .79, respectively, $p < .002$). It was also true for subjects in the no-misattribution conditions after describing positive events ($r = .57$, $p < .07$ and $r = .67$, $p < .04$) and after describing negative events ($r = .81$, $p < .01$ and $r = .58$, $p < .07$). None of the correlations in the misattribution conditions, on the other hand, reached significance at the .10 level. Contrary to expectations, the correlation of mood with happiness was not significantly higher in any of the conditions than was its correlation with satisfaction.

Discussion

Writing vivid and detailed descriptions of pleasant and unpleasant life experiences appears to influence not only subjects' momentary mood states but also their judgments of how happy and satisfying their lives are in general. Considered in isolation, this could occur for two reasons. First, writing about a happy or a sad life event may increase the availability of similarly valenced events in memory. This, in turn, could lead subjects to overestimate the prevalence of such events in their lives (Tversky & Kahneman, 1973) and bias their judgments. Second, people may use their mood at the time of judgment as information in evaluating the quality of their lives. The results favor the second interpretation. That is, when subjects were given a chance to attribute their *bad* mood to a transient source, irrelevant to the quality of their lives, the description task no longer influenced their judgment of general well-being. In the terminology of attribution research, this is referred to as a "discounting effect" (Kelley, 1971), because subjects discounted aspects of their own lives as a cause of their bad moods when another external cause (the soundproof room) was made salient. Thus, these data demonstrate informational functions of affective states.

Discounting occurs when alternative plausible causes for an effect are made salient. Augmentation effects have also been reported (e.g., Schwarz, Servay, & Kumpf, 1981) when aspects of a situation are made salient that could reasonably produce a state opposite to that of the subject. Augmentation effects were anticipated primarily in the condition in which subjects were in a bad mood but had expected to be made giddy and elated. The results showed only a trend toward augmentation effects. Judging from the pattern of attribution results, subjects may have found it less credible that the soundproof room could produce elation than that it would produce tension, making augmentation effects in the bad-mood condition unlikely.

On the other hand, subjects who thought about positive events and reported being in a good mood were not influenced by the misattribution manipulations and reported high well-being regardless of experimental condition. This result is in line with the hypothesis that affect has a directive influence and that persons are more likely to seek explanations for negative than for positive feelings. It should be noted, however, that the momentary mood of subjects who described positive events was only insignificantly better than was the mood of control subjects, whereas the mood of subjects who described negative life events was significantly worse. That is, the mood of subjects who described negative events deviated more from what might be considered "normal" than did the mood of subjects who described positive events, a finding that seems to reflect the well-known tendency of people to report positive resting moods (see Matlin & Stang, 1978, for a review).

Experiment 2

The results of Experiment 1 support the hypothesis that people use their momentary

mood state as information in evaluating the quality of their lives. The evidence came, however, from a relatively complex laboratory experiment involving some extraordinary stage managing. We decided, therefore, to test the hypothesis again in a more naturalistic way.

In this second study, well-being was assessed as part of a telephone interview conducted either on warm and sunny days or on rainy spring days. Cunningham (1979) had previously shown that weather had a reliable effect on mood. If people use their affective states as information to evaluate their lives, they should report greater well-being and life satisfaction on sunny days than on rainy days. This effect should be attenuated, however, when respondents are led to attribute their mood to the weather, that is, to a transitory source irrelevant to the evaluation of their lives. In this case, their mood should be discredited as reliable information concerning their general well-being. In addition, if only negative affective states lead respondents to seek explanations, then this attenuation of the effect of weather on well-being should occur only when the weather is bad and not when the weather is good.

Method

In a 2 × 3 factorial design, subjects were called either on sunny or on rainy spring days and were asked to answer questions on life satisfaction as part of a telephone survey. The salience of the weather as a plausible explanation for mood was varied. Weather either was not mentioned at all, was mentioned in passing as small talk, or was mentioned as a primary focus of the experiment.

Respondents. Ninety-three telephone numbers randomly selected from the student directory of the University of Illinois at Urbana-Champaign were called, and the persons answering the phone served as respondents. They were called by a female interviewer on either sunny or rainy weekdays during April and May. Nine respondents refused to participate in the interview, five on rainy days and four on sunny days, which left 84 subjects in the analysis.

Procedure. The interviewer always opened the conversation with "Hello, I'm ——, we're doing research for the psychology department at Circle Campus in Chicago." This university was selected as the interviewer's alleged affiliation under the pretense that the interviewer was calling from out of town.

In *indirect-priming conditions* the interviewer continued with an irrelevant aside: "By the way, how's the weather down there?" After the subject's response the interviewer continued, "Well, let's get back to our research. What we are interested in is people's moods. We randomly dial numbers to get a representative sample. Could you just answer four brief questions?"

In *direct-priming conditions* the interviewer continued after saying hello and indicating that she was calling from Chicago Circle with the words, "We are interested in how the weather affects person's mood. We randomly dial numbers. . . ."

In *no-priming conditions* the interview continued after the standard opening as in the indirect-priming condition without the aside about the weather.

Following one of these introductions, the interview continued with the assessment of the respondent's perceived quality of life and present feeling state:

1. First, on a scale of 1 to 10, with 10 being the happiest, how happy do you feel about your life as a whole?
2. Thinking of how your life is going now, how much would you like to change your life from what it is now? This is also on a scale of 1 to 10. Ten means "change a very great deal" and one "means not at all."
3. All things considered, how satisfied or dissatisfied are you with your life as a whole these days? (with number 10 being the most satisfied).
4. And, how happy do you feel at this moment? Again, 10 is the happiest. That's all the questions I have. Thank you for your time and cooperation.

On any given rainy or sunny day the same number of calls were made in each priming condition. Thus a confounding of weather and priming was avoided. Finally, it should be noted that the interviewer was blind to the experimental hypothesis and did not expect an interaction effect of weather and priming but did expect a main effect of weather.

Results

Mood. An analysis of "momentary happiness" ratings showed that subjects called on sunny days felt happier (M = 7.5) than did subjects called on rainy days (M = 5.4), $F(1, 78) = 39.90$, $p < .001$, and that this mood measure was not affected by the priming manipulation, $F(2, 78) = 1.58$, *ns*.

Well-being. The effects of weather and priming manipulations on each dependent variable are shown in Table 3. In each case, the pattern of results is similar and consistent with predictions. That is, respondents on sunny days reported themselves to be generally happy and satisfied with their lives, and they had little desire to change. This tendency was similar under all conditions and planned comparisons of the no-priming condition with both priming conditions revealed no significant differences, $ts(78) = .20, .75$, and .80, respectively. In contrast, respondents on rainy days reported themselves to be generally less happy, $t(78) = 3.68$, $p < .001$, and

Table 3
Mean Ratings of General Happiness, Desire to Change, and Life Satisfaction: Experiment 2

Dependent variable	Priming		
	None	Indirect	Direct
General happiness			
Sunny	7.43_a	7.29_a	7.79_a
Rainy	5.00_b	7.00_a	6.93_a
Desire to change			
Sunny	3.93_a	3.43_a	3.57_a
Rainy	5.79_b	$4.57_{a,b}$	$4.93_{a,b}$
Life satisfaction			
Sunny	6.57_a	6.79_a	7.21_a
Rainy	4.86_b	6.71_a	7.07_a

Note. $n = 14$ per cell. Means that do not share a common subscript differ at $p < .05$ (Newman–Keuls test).

less satisfied, $t(78) = 3.56$, $p < .001$, and desiring more change, $t(78) = 1.96$, $p < .06$, in the no-priming condition than in either the direct- or the indirect-priming condition. In other words, the influence of the weather on these life judgments was appreciable only under no-priming conditions. Moreover, as shown in Table 3, respondents' appraisals of their lives on rainy days under no-priming conditions generally differed from their responses in the other five conditions, which did not differ from each other. However, the results for the "desire to change" measure were not as strong as for the happiness and the satisfaction measures.

In summary, the data of this study replicated both the informational and the directive effects of subjects' affective states found in Experiment 1.

Correlational analyses. As in Experiment 1, there was a tendency for the correlation of subjects' reported present affective state with their reported happiness to be higher under no-priming conditions ($r = .79$) than under both priming conditions ($r = .63$, $z = 1.36$, *ns*). The correlation with satisfaction, on the other hand, was the same in the no-priming ($r = .49$) and the priming conditions ($r = .48$) and was lower than the correlation with happiness in both the no-priming ($z = 1.89$, $p < .06$) and the priming conditions ($z = 1.11$, *ns*).

General Discussion

Informative Functions of Affective States

The two experiments reported here, one in the laboratory and one involving telephone interviews, both provide evidence that respondents use their momentary moods to make judgments about their general happiness and life satisfaction. Both thinking about good versus bad experiences and being in sunny versus rainy weather influenced subjects' reports of general well-being. However, this influence was not direct. Instead, it appeared to occur only insofar as these factors affected subjects' moods, and these moods were considered to provide reliable information about well-being. Subjects appear to seek personally irrelevant explanations for an unpleasant mood state when such explanations are available. As a consequence, they then do not use their mood as information about their well-being. When in a good mood, however, subjects do use their mood as a basis for judging the quality of their life regardless of the availability of alternative explanations for the mood.

The impact of (mis)attribution manipulations on subjects' judgments, under bad-mood conditions make the results difficult to interpret in terms of the effect of mood on the availability of mood-consistent ideas (Bower, 1981; Isen et al., 1978). According to this reasoning, mood-congruent events should be more available in memory, leading subjects to overestimate the prevalence of positive or negative events in their lives. To the extent that subjects base their evaluations on this recalled evidence, they should report higher well-being under positive than under negative mood. Note, however, that the implications of the recalled events should not be altered by the attribution manipulations. That is, the mood-congruent-availability notion should predict a main effect of mood but not an interaction of mood and attribution. On the other hand, the attribution manipulation should affect the diagnostic value of subjects' present affective state, resulting in the interaction effect found in both studies. Therefore, the data provide evidence that moods themselves have an informational function.

Directive Effects of Affective States

Although opportunities for attribution and misattribution had strong effects on the reported well-being of participants in negative moods, those in positive moods reported high well-being regardless of experimental conditions, as predicted by the directive-effects hypothesis. This evidence is consistent with the results reported by Williams, Ryckman, Gold, and Lenny (1982), who used misattribution procedures to study the role of affect in the attitude-similarity-attraction paradigm. As in the present study, they found that subjects took the opportunity to attribute away negative but not positive affect. Also, Arkin et al. (1976) reported that subjects who received positive feedback about their performance (presumably putting them in a good mood) were insensitive to situational factors that could account for this feedback.

In this regard, we have favored the hypothesis that people are more motivated to seek explanations for negative than for positive moods, and we suggested that this might be primarily due to the fact that most people experience negative moods as deviating from their usually positive feelings. By the same logic, depressed persons for whom bad moods are usual, and persons in social situations in which bad moods are expected (e.g., funerals), should show attempts to explain any good feelings they might experience. Similarly, persons in unusually positive mood states might attempt to find out the causes of their feelings. Unfortunately, the present studies do not allow an evaluation of these issues because the positive mood induced through thinking about positive life events was not significantly better than was the mood of control group subjects. Also, rainy and sunny weather, used as a mood manipulation in the second study, does not lend itself easily to the creation of a "neutral" control group. Thus it seems reasonable to assume that extreme positive moods might produce effects similar to the ones we found for negative moods. We would like to suggest, however, that for most people most of the time unpleasant states are more likely to trigger explanations than pleasant states are.

Motivational Bias

By itself, the tendency to attribute bad moods but not good moods to external sources may indicate the operation of a motivational self-serving bias. Two pieces of data from Experiment 1, however, lead us to suggest that some factors, in addition to motivational bias, are at work. Both pieces of data are instances in which subjects did not take opportunities to increase the perceived quality of their lives. They suggest a two-stage branching system in which subjects must first seek explanations before available explanations are adopted. At the first stage, bad moods but not good moods are problematic and tend to activate explanation-searching activity. This stage, in which subjects do or do not seek explanations, could be motivated by a desire to maintain or reinstate feelings of well-being. Results at the next stage, however, are not always consistent with such a motivation. Thus, for example, subjects who felt good subsequent to describing positive life-events but who expected the room to make them feel bad could have augmented their feelings of well-being, but like other good-mood subjects, did not take the explanation-seeking branch. As a result, the opportunity to augment their good mood through attributional enhancement was foreclosed. There was no evidence of such augmentation effects in the good-mood condition. Conversely, bad-mood subjects, who generally did take the explanation-search branch, sometimes opened themselves to explanations that worsened their already negative level of well-being. Thus, for example, subjects who felt bad as a result of describing negative life events but who expected the room to make them feel elated, further decreased their sense of well-being. Though this effect was not significant, the pattern of means was nevertheless inconsistent with an unembellished motivational interpretation. Thus, although the present data are certainly not strong enough to allow a straightforward rejection of a self-serving bias explanation, they nevertheless seem to favor an informational interpretation: It appears that once subjects are in an explanation-search mode, processing of the information available is not

motivationally biased even if the original decision to search might have involved such factors.

Preparatory Information

In the first experiment, one might argue that the reason mood did not influence life appraisals for subjects expecting to be in a bad mood was that the expectation manipulation had forewarned them, leading to more efficient coping with their mood changes. This argument has been advanced by Calvert-Boyanowsky and Leventhal (1975) as a general critique of studies of the misattribution of arousal. They point out that subjects under misattribution conditions usually receive a list of arousal symptoms that subjects under control conditions do not get and that research on the effect of preparatory information (e.g., Staub & Kellett, 1972) suggests that this alone might account for differences in emotional response. Note, however, that this reasoning implies that subjects expecting a bad mood should be less affected by the negative mood induction. As indicated by the mood data, however, this was not the case. Only the description task and not the mood-expectation manipulation influenced subjects' present affective state. Also, of course, there was no advance warning in Experiment 2 when weather was used to induce mood, so the explanation would not fit those results. Thus, we may conclude that our results are not due to a differential induction of mood, as suggested by Calvert-Boyanowsky and Leventhal (1975). Rather, they seem to be due to differential implications of one's present affective state for the judgment to be made under different experimental conditions.

Happiness Versus Satisfaction

Although the effect of subjects' mood on judgments of happiness was somewhat more pronounced than its effect on judgment of satisfaction (as was indicated by a repeated-measures analyses of variance not reported here), both measures were influenced by subjects' affective state in much the same way. That is, we found little evidence that happiness might be "affective," whereas satisfaction might be "cognitive" (cf. Andrews & McKennel, 1980). Thus, although the data reported by Andrews and McKennel (1980) suggest that happiness is more a function of past affective experiences than is satisfaction, our data suggest that persons use their affective state at the time of judgment to make both judgments in a similar way. Note, however, that in both studies judgments of happiness were obtained prior to judgments of satisfaction, which might account for some of the consistency between these measures. Thus, additional research will be needed to clarify potential differences in the impact of affect on different measures of well-being.

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