PART ONE

ATTRIBUTION, AFFECT, AND WELL-BEING IN RELATIONSHIPS

CHAPTER ONE

Affective Influences on Communication and Attribution in Relationships

Joseph P. Forgas

Human beings are intensely social creatures. Our remarkable ability to relate to others has much to do with our evolutionary success as a species, and personal relationships are also responsible for most of the significant affective experiences in our lives (Argyle & Henderson, 1985). Affect, emotions, and mood thus represent a critical feature of human relationships (Forgas, 1979). Indeed, as Zajonc (1980) suggested, feelings may well be *the* primary currency of interpersonal behavior.

Although affect lies at the heart of most relationships, our understanding of how feelings influence our thoughts, judgments, and communication with significant others remained little understood until recently (Bradbury & Fincham, 1987). This chapter reviews some of the most recent evidence for the role of affect in relationship judgments and behaviors. It will suggest that affective influences on relationships are most likely when partners need to engage in open, constructive thinking about a complex, ambiguous, or unusual issue. The role of cognitive information processing strategies in mediating mood effects on relationship judgments and behaviors will be discussed, and a general integrative theory accounting for such effects, the Affect Infusion Model (Forgas, 1995a), will be outlined.

AFFECT, THINKING, AND BEHAVIOR

Traditionally, psychologists assumed that social thinking and behavior were best analyzed in terms of cold, rational cognitive and behavioral

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principles, where affect is either irrelevant or appears only as a source of noise or disruption. This view has been fundamentally challenged by recent psychological and neuropsychological evidence (Bower & Forgas, 2000; Damasio, 1994; LeDoux, 1996). It now appears that cognition, judgment, and social behavior are almost always affectively loaded. Indeed, the evidence suggests that absence of affective reactions significantly impairs social decisions (Damasio, 1994), confirming that affect is an integral and necessary part of our adaptive reactions to the social world (Frijda, 1986).

Emotions and Moods in Relationships

People experience a wide variety of affective states in their relationships, from subtle moods to intense emotions. Moods may be defined as low-intensity, diffuse, and relatively enduring affective states without a salient antecedent cause and therefore with little cognitive content (e.g., feeling good or feeling badly). Emotions, in contrast, are more intense, are short-lived, and usually have a definite cause and clear cognitive content (e.g., anger or fear) (Forgas, 1992a).

One line of research on affect in relationships seeks to explore the rich framework of cognitive knowledge structures within which relationship emotions are embedded. Such emotion scripts have important consequences for the way partners think, feel, and behave toward each other. To the extent that distinct emotions, unlike moods, are rich in cognitive content (Smith & Kirby, 2000), they typically trigger responses that are directed by their specific appraisal qualities. Emotion scripts thus have a predictable and highly visible influence on what partners think, do, and remember (Gottman & Levenson, 1986).

Although research on emotion prototypes is a thriving area, there are also some problems with this approach. It is recognized by several writers that in the absence of complete agreement about the particular kinds of appraisals that generate particular kinds of emotions, some of the predictions are based solely on intuitive analysis (Fletcher & Fincham, 1991). Although emotion schemata can clearly influence how relationship knowledge is structured (Niedenthal & Halberstadt, 2000), there is an obvious need for a complementary research strategy exploring the dynamic, *functional* consequences for relationship judgments and behaviors of less noticeable, milder affective states such as moods. This is one of my objectives here.

Moods, unlike emotions, are typically not in the focus of our consciousness and have little cognitive content and structure. Yet precisely because of their low intensity and limited cognitive structure, moods may often have a longer lasting, subtle, and unconscious influence on thinking, attribution, and communication in relationships than do distinct emotions (Forgas, 1992a, 1993, 2000; Sedikides, 1995). This chapter explores the conditions likely to facilitate or hinder affect infusion—the gradual coloring of thoughts and judgments by a prevailing affective state—in relationships, and it outlines an information processing theory likely to account for the presence or absence of these effects.

Early Evidence for Mood Effects on Relationships

Historically, only a handful of researchers have studied affective influences on relationships. In one of the earliest studies, Feshbach and Singer (1957) demonstrated that fearful subjects are likely to perceive more anxiety in others, a finding that was interpreted by the authors as evidence for the psychodynamic notion of projection. In a series of classic studies, Schachter (1959) showed that induced aversive emotions can influence interpersonal preferences: Anxious people made highly targeted partner choices consistent with a motivated strategy to control and repair their aversive mood. Other experiments in the 1960s and 1970s relied on associationist, conditioning theories when investigating the influence of affect on relationship judgments and behaviors (e.g., Clore & Byrne, 1974; Griffitt, 1970). Results showed that an affective state could become readily associated with how a partner is perceived and evaluated, even if the affect was elicited by a completely irrelevant *prior* cause (such as being in an unpleasant room).

More recent theories rely on cognitive principles to account for affective influences on relationship judgments and behaviors. The emerging social cognition paradigm in the early 1980s provided a promising framework for understanding the subtle links between thinking and feeling in relationships (Bradbury & Fincham, 1992; Fletcher & Fincham, 1991). Recent theories thus rely on information processing principles to explain how and why affect can influence the way people select, learn, process, and remember relationship information (e.g., Bower, 1991; Bower & Forgas, 2000; Clore, Schwarz, & Conway, 1994; Forgas, 1992a, 1995a). The cognitive approach also yielded important new insights about relationship dynamics and dysfunctions (Fletcher, Fitness, & Blampied, 1990; Gottman, 1979; Noller & Ruzzene, 1991).

MOOD EFFECTS ON RELATIONSHIP COGNITION AND BEHAVIORS: THE AFFECT INFUSION MODEL

Interpreting and managing social relationships is an inherently complex and demanding cognitive task (cf. Fletcher & Fincham, 1991; Forgas, 1985a, 1991a). There is now strong evidence suggesting that moods can influence both *what* people think (the content of cognition) and *how* people think (the process of cognition). A recent integrative theory, the Affect Infusion Model (AIM; Forgas, 1995a), seeks to account for both informational and processing mood effects, and it explains both the presence and the absence of mood congruity in terms of the different information processing strategies people use.

Affect infusion occurs when information stored in memory that is associated with a prevailing mood is selectively primed to exert an influence on and become incorporated into ongoing cognitive and behavioral processes, eventually coloring their outcome (Forgas, 1995a, 2000). As this definition suggests, affect infusion is dependent on the nature of the task and the kind of processing strategy used. The AIM predicts that affect infusion should only occur when a person is engaged in genuinely constructive information processing that involves an open information search strategy and the elaboration of the available stimulus details. Thus, as Fiedler (1991) suggested, affect should only influence cognitive processes when the task involves the active generation of new information.

Four distinct information processing strategies are identified by the AIM: direct access, motivated, heuristic, and substantive processing. Each processing strategy is characterized by different affect infusion potentials. For example, when a cognitive task can be solved through the direct access and retrieval of a preexisting, stored response or when a response is generated through a targeted, motivated search driven by a preexisting goal, affect infusion is unlikely, because these strategies require little open and constructive processing. Indeed, in terms of the AIM, motivated processing can be a major vehicle for reducing mood effects and even producing mood-incongruent outcomes, especially when people are motivated to achieve mood repair or mood control (Berkowitz, Jaffee, & Troccoli, 2000; Forgas, 1991a; Sedikides, 1994).

Of course, many responses in relationships require some degree of constructive processing. The AIM distinguishes between (a) heuristic, simplified and (b) substantive, generative processing as the two main alternatives when constructive processing is required. These are high affect infusion strategies, as they involve some degree of open informa-

tion search and constructive thinking (Fiedler, 1991, Forgas, 1992a). The AIM predicts that affect infusion and mood congruence in thinking and judgments should be limited to conditions that recruit either heuristic or substantive processing.

Affect infusion occurs in the course of heuristic processing, because mood itself may be mistakenly used as a source of heuristic information according to the *affect-as-information* principle. For example, people may rely on a "How do I feel about it?" heuristic to infer their response (Clore et al., 1994; Schwarz & Clore, 1988). Given the complex and involved nature of relationships, heuristic processing is probably rarely used when dealing with personally meaningful relationship information (Forgas, 1994). It is more likely that during substantive processing, affect may infuse our thoughts and behaviors owing to its selective priming effects on how relationship information is selected, learned, recalled, and interpreted (Bower, 1991; Bower & Forgas, 2000; Forgas & Bower, 1987). There is strong evidence for the effects of moods on many complex and realistic social and relationship judgments due to such *affect-priming* effects (Forgas, 1991b, 1993, 1995b; Forgas & Bower, 1987; Mayer, Gaschke, Braverman, & Evans, 1992; Salovey, O'Leary, Stretton, Fishkin, & Drake, 1991; Sedikides, 1995).

The AIM regards affect-as-information and affect priming as complementary avenues of affect infusion. Affect-as-information is most likely to be involved during heuristic processing, and affect priming is likely during substantive processing. These mechanisms are empirically distinguishable in terms of processing latency, judgmental latency, memory, and other cognitive measures (Forgas, 1992a, 1995a). Further, choice of processing strategy depends on three kinds of variables: the characteristics of the person (e.g., personality, personal relevance, motivation, cognitive capacity, and affect), the characteristics of the task (familiarity, complexity, typicality, novelty), and the features of the situation (publicity, accountability, scrutiny, etc.). As the AIM has been adequately described previously (Forgas, 1992a, 1995a), it will not be discussed in greater detail here. Rather, I shall now turn to a review of some of the specific evidence showing affect infusion in relationship judgments, attributions, and behaviors.

MOOD EFFECTS ON RELATIONSHIP EVALUATION

Relationship evaluations may show a mood-congruent bias, as people in a good mood may selectively recall mood-congruent, enjoyable, and

pleasant episodes, whereas sad mood facilitates the recall of sad, depressing relationship events. In other words, activation of a mood "also spreads activation throughout the memory structures to which it is connected" (Bower, 1981, p. 135), producing a mood-congruent bias in attention, learning, recall, and associations. Fluctuating affective states may therefore have an important influence on marital satisfaction, as happy partners often produce attributions that "enhance relationship quality, whereas unhappy partners produce attributions that maintain their current levels of distress" (Fletcher, Fitness, & Blampied, 1990, p. 251).

To test these ideas, my colleagues and I performed a series of experiments to assess whether affect infuses the way partners think about their personal relationship under conditions conducive to substantive, elaborate processing strategies. We were also interested in assessing whether these mood effects continue to be important even in long established relationships (Forgas, Levinger, & Moylan, 1994). Intuitively, one would expect mood to have less of an influence on evaluations of well established relationships. However, information processing analyses based on the AIM have contrary implications. As relationship longevity increases and affective involvement becomes deeper, partners also tend to develop a wider range of increasingly complex and heterogenous experiences. The more complex the informational base relevant to a social judgment, the more likely that temporary mood will have a significant influence on what is selectively remembered and used in judgments (Forgas, 1994). As long established relationships provide a richer and more elaborate informational base, the effects of mood on relationship judgments may not decline; they may even increase with relationship longevity.

Our first study was carried out in a realistic field setting. Based on prior work on relationship cognition (Fitness & Strongman, 1991; Noller & Ruzzene, 1991), and the AIM (Forgas, 1992a, 1995a), we predicted that positive mood should enhance and negative mood should decrease relationship evaluation, irrespective of relationship longevity. We used an unobtrusive method. Outside movie theaters, about 190 male and female subjects (mean length of relationships 50.42 months) who had just seen a happy or a sad film (the unobtrusive mood induction) were asked to evaluate the quality of their current, or most recent, romantic relationship on a number of dimensions.

As predicted, those in a temporary good mood judged their relationship significantly more positively than did those in a neutral or a

bad mood irrespective of the sex of the respondent or the length of the relationship. These results establish that a temporary mood, generated by the experience of seeing a happy or a sad film, had a highly significant impact on the way people evaluate their intimate relationships. The counterintuitive finding of undiminished mood effects even in long-term relationships in particular is consistent with the AIM and shows that mood effects persist as long as the information base is sufficiently rich and complex and requires substantive processing.

Our second experiment used a laboratory procedure and more elaborate dependent measures, including evaluations of the relationship, the partner, and judgments about preferred conflict resolution strategies. Following exposure to happy, sad, or neutral video films, in an allegedly unrelated study 84 participants rated their current or most recent intimate relationship, their partner, and their preferred ways of dealing with relationship conflict. Mood significantly influenced all these judgments irrespective of relationship longevity. Results also showed that people in a positive mood evaluated their partners more positively and reported more intimacy than did control, or sad, subjects. As is consistent with the AIM, these results show that mood is more likely to bias judgments that require elaborate, constructive information processing.

The link between more complex information recruiting more substantive processing and greater mood effects was also confirmed in several later experiments. In these studies, happy or sad subjects were asked to form impressions about more or less typical relationships that required more or less substantive processing (Forgas, 1993, 1995b). Results showed a clear pattern of mood congruence, and the extent of mood effects was consistently greater when the relationship judged was more complex, ambiguous, or unusual. In terms of the AIM, such atypical relationships require longer and more constructive processing, allowing greater scope for affect-based associations to infuse the judgment (Forgas, 1995b, Exp. 3).

These studies confirm that affect infusion into relationship judgments crucially depends on the kind of information processing strategy people use. These results also explain the cognitive mechanisms whereby temporary moods may well give rise to an escalating spiral of negativity (or positivity) in relationship judgments, especially when both partners tend to get caught up in each other's moods (Gottman, 1979). A prior history of trust (Holmes, 1991), on the other hand, is likely to help couples to withstand the other's temporary affective

oscillations. Affect may also have an impact on causal attributions for specific relationship conflicts, as our further studies found.

MOOD EFFECTS ON ATTRIBUTIONS FOR COMMUNICATION IN RELATIONSHIPS

Effective functioning in intimate relationships requires the accurate perception and interpretation of the actions of partners. Surprisingly, experimental research indicates that even this most basic attribution task may be subject to mood-based influences. In one experiment, we asked happy or sad participants to view and judge their videotaped interactions with a partner (Forgas, Bower, & Krantz, 1984). There was clear evidence for a mood-congruent bias in these judgments. The very same actions and behaviors that were seen as positive, skilled, and poised in a happy mood were interpreted as awkward, unskilled, and negative when in a bad mood. Later experiments also measured the time it took for such judgments to be produced. We found that mood-induced biases were indeed greater when longer and more constructive, elaborate processing strategies were used by judges (Forgas & Bower, 1987). Such mood effects also influence the way people explain more complex social behaviors, such as successes and failures. It turns out that happy people tend to find more lenient, generous explanations for such outcomes, whereas sad people consistently make more pessimistic, negative interpretations (Forgas, Bower, & Moylan, 1990).

Moods can also influence the likelihood of people committing attributional errors, according to some more recent studies (Forgas, 1998c). It turns out that happy people are more likely to think superficially and commit the fundamental attribution error (incorrectly inferring intentionality), whereas sad people pay more attention to situational constraints on behavior. These results suggest that mood may play a critical role in real-life relationship conflicts and partner communication, as the next section will show.

Mood Effects on Attributions for Relationship Conflict

Dealing with conflict is an inevitable part of relationships, and explaining the causes of conflict is one of the more complex and demanding cognitive tasks partners face in everyday life. In several experiments, we examined one of the major counterintuitive predictions of the AIM: that mood should have a greater influence on attributions about complex

and serious than on those about simple, relationship conflicts, because such events require more elaborate and constructive processing.

In each of these studies, people in happy, sad, or control moods made attributions for more or less serious real-life conflicts they experienced in their close relationships. In the first study, a field experiment (Forgas, 1994), 48 volunteer subjects read three short passages inducing a happy, sad, or neutral mood, before making attributions for happy and unhappy events in their current intimate relationships. People in a negative mood were more likely to blame themselves for conflict episodes, whereas happy subjects identified the causes of conflict in external factors such as their partners and the situation. Attributions for happy events showed a reverse pattern, with more internal attributions by happy rather than sad subjects for rewarding episodes. This pattern is consistent with our prediction of mood congruency in conflict attributions: Even slight variations in temporary mood, brought about by such everyday occurrences as reading a literary passage, can have a marked effect on attributions for real-life events in our relationships.

Experiment 2 (Forgas, 1994) used a different, unobtrusive mood induction. Subjects (N = 162) were approached on the street, immediately after (experimental groups) or before (control group) they saw selected happy or sad films. They were asked to complete a brief questionnaire attributing the causes of six common types of more or less serious conflicts in their intimate relationships. Sad subjects were again more likely to attribute conflict to internal, stable, and global causes, in effect blaming themselves, whereas happy subjects were less likely to blame themselves than were controls. Further, both positive and negative mood effects were greater on attributions for serious rather than simple conflicts. This pattern suggests that affect infusion is enhanced when more substantive processing is required to deal with problematic information.

In the third experiment (Forgas, 1994) mood was induced through happy, sad, or neutral videofilms. Subjects (N = 96) made attributions for real-life serious and simple conflicts recalled from their relationships. The processing latency for performing these judgments was also measured by a computer-administered procedure. Sad subjects were more likely to make internal, stable, and global attributions for conflict. There was also a two-way interaction between mood and conflict severity: Mood had a much greater impact on attributions for serious rather than simple conflicts. Such mood-induced biases in explaining serious conflicts may be a major source of difficulty in