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Feeling and Speaking:

Affective Influences on Communication Strategies and Language Use

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Introduction

Interpersonal communication is imbued with affect. Every social encounter can influence our affective state, and how we feel in turn plays an important role in determining the way we communicate, and how we use language in particular. Surprisingly, social and cognitive psychologists have remained uninterested in the investigation of the role that affective states play in interpersonal communication until quite recently. The importance of affect in social life was not really re-discovered until the early 1980's (Bower, 1980; Zajonc, 1980), and the past few decades saw a dramatic increase in experimental research on affect by social psychologists. This chapter will review a series of experiments demonstrating that affective states have an important, and often adaptive influence on the way people produce, and respond to social communication. Further, it will be argued that the communicative consequences of affect may be best understood by analysing the cognitive, information processing consequences of affective states.

Affect probably remained the most neglected member of the historical tripartite division of the human mind into cognition, affect and conation, partly as a result of the dominance of first the behaviorist and later the cognitivist paradigms in psychology (Hilgard, 1980). The neglect of research on affect may also be linked to the pervasive idea that affect is a dangerous, invasive force that subverts rational thinking and behavior. This notion has a long history in Western philosophy, going back to the works of Plato who saw emotions as characteristic of a more primitive, subhuman way of functioning. Freud's psychoanalytic theories gave further emphasis to this view of affect as a subconscious, invasive force that needs to be controlled and subjugated. Fortunately, the last few decades saw a radical change in our view of affect. As a result of advances in physiology and neuroanatomy, several lines of evidence now indicate that affect is often an essential and adaptive component of responding to social situations, as several of the present

experiments will also show (Adolphs & Damasio, 2001; Ito & Cacioppo, 2001; Forgas, 1995a, 2002; Zajonc, 2000).

This chapter begins with a brief review of research of the antecedents of contemporary research on affect and social communication, followed by a summary of current theories that inform research in this area. We will then review a number of experiments demonstrating the consequences of affective states for social communication and language use, including the production of, and responding to requests, negotiation, the production of persuasive messages, and self-disclosure strategies. The role of different information processing strategies in mediating these effects will receive special attention.

Background. Zajonc (1980) was among the first to argue that affect often constitutes the primary response to social situations, and twenty years later he claimed that affect indeed functions as the dominant force in social behaviour (Zajonc, 2000). People readily and rapidly acquire an affective response towards social stimuli, and such spontaneous evaluative preferences often influence subsequent responses (Unkelbach, Forgas & Denson, 2008). Affect also plays a major role in how people represent and structure their social experiences (Forgas, 1979, 1982). The key role of affect in mental representations was also confirmed by Niedenthal and Halberstadt (2000), who found that social "stimuli can cohere as a category even when they have nothing in common other than the emotional responses they elicit" (p. 381). Several decades earlier Pervin (1976) pointed out that "what is striking is the extent to which situations are described in terms of affects (e.g. threatening, warm, interesting, dull, tense, calm, rejecting) and organized in terms of similarity of affects aroused by them" (p.471).

Thus, affect plays a critical role in how social situations are mentally represented, interpreted and responded to. The idea that affect may also directly influence social behaviour and communication was also demonstrated in a few early experiments. For example, feeling good might make our responses to other people more positive. In one early study, Feshbach and Singer (1957) used psychoanalytic theories to predict that attempts to suppress affect should paradoxically increase the 'pressure' for affect to infuse unrelated attitudes and judgments. They found that fearful persons were more likely to see "another person as fearful and anxious" (p.286) and this effect was even greater when judges were trying to suppress their fear, as the "suppression of fear facilitates the tendency to project fear onto another social object" (p. 286). In another study using associative theories, some seventy years ago Razran (1940) found that people who were made to feel bad or good (being exposed to highly aversive smells, or receiving a free lunch) spontaneosly reported significantly more negative or positive responses towards socio-political issues communicated to them. A similar conditioning approach to understanding affective influences on attitudes and judgments was subsequently developed by Byrne and Clore (1970) and Clore and Byrne (1974) to account for affect infusion into interpersonal attitudes and behaviors.

Affect, mood and emotion. There is as yet little general agreement in the literature about how best to define terms such as affect, feelings, emotions or mood (Fiedler & Forgas, 1988; Forgas, 1992, 1995, 2002). We have argued elsewhere that <u>affect</u> may be used as a generic label to refer to both <u>moods</u> and <u>emotions</u>. <u>Moods</u> in turn could be described as "low-intensity, diffuse and relatively enduring affective states without a salient antecedent cause and therefore little cognitive content (e.g. feeling good or feeling bad)", whereas <u>emotions</u> "are more intense, short-lived and usually have a definite cause and clear cognitive content" (e.g. anger or fear) (Forgas, 1992, p. 230). This distinction is highly relevant to understanding the functions of affect in social communication. It appears that subtle, non-specific moods may often have a potentially more enduring and insidious motivational influence on social cognition and communication (Fiedler, 1991; Forgas,

1992; Forgas, 1995; 2002; Sedikides, 1992, 1995). Accordingly, our primary concern here is with the effects of low-intensity moods rather than distinct emotions on communication strategies.

Theories of affective influences on communication

Unlike earlier conditioning and psychoanalytic explanations, contemporary cognitive theories offer a finely-grained account of the mechanisms responsible for the infusion of affect into thinking, judgments and communicative behaviors. Two kinds of affective influences on cognition and communication have been identified: (1) *informational effects* (eg. affect congruence), when an affective states directly influence the information people access and use in social situations, and (2) *processing effects*, when affect influences the way information is processed.

Informational effects.

Two recent theories of informational effects will be considered here, *affect priming*, and *affect-as-information* models. *The affect-priming account* proposed by Bower (1981) is based on associative theories of memory, and argues that affect is integrally linked to an associative network of memory representations. An affective state may thus selectively and automatically prime associated representations previously linked to that affect, and these concepts should be more likely to be used in subsequent constructive cognitive tasks. Early studies provided strong support for the concept of *affective priming*. For example, people induced to feel good or bad tend to selectively remember more mood-congruent details from their childhood, and recall more mood-congruent events they had recorded in diaries for the past few weeks (Bower, 1981). Mood congruence was also observed in how people interpret social behaviors (Forgas, Bower & Krantz, 1984) and how they form impressions of other people (Forgas & Bower, 1987). However, later work showed that affect priming is subject to several boundary conditions (see Blaney, 1986;

Bower, 1987), and mood-congruent effects are most reliably obtained when tasks require a high degree of open, constructive processing, as is often the case with inferences, associations, impression formation, and especially interpersonal communication (e.g., Bower & Forgas, 2000; Forgas, 2002).

Alternative, *affect-as-information* (AAI) models advanced by Schwarz and Clore (1983, 1988; Clore & Storbeck, 2006) suggests that "rather than computing a judgment on the basis of recalled features of a target, individuals may ... ask themselves: 'how do I feel about it? [and] in doing so, they may mistake feelings due to a pre-existing state as a reaction to the target" (Schwarz, 1990, p. 529). According to this view, affect congruence in thinking and communication may be caused by an inferential error, as people misattribute a pre-existing affective state to an unrelated social stimulus. The predictions of the AAI model are often indistinguishable from earlier conditioning theories by Clore and Byrne (1974). Whereas the conditioning account emphasized blind temporal and spatial contiguity as responsible for affect congruence, the AAI model, rather less parsimoniously, suggests a misdirected internal inferential process as producing the same effects.

It appears that people rely on affect as such a heuristic cue only when "the task is of little personal relevance, when little other information is available, when problems are too complex to be solved systematically, and when time or attentional resources are limited" (Fiedler, 2001, p. 175). In one relevant study, Forgas and Moylan (1987) asked almost 1000 people to provide responses to an attitude survey on the sidewalk outside a cinema in which subjects had just watched either a happy or a sad film. Happy theater-goers gave much more positive responses than did their sad counterparts, as respondents presumably had little time, interest, motivation, or capacity to engage in elaborate processing, and so relied on their affect as a heuristic shortcut to infer their reactions.

Processing effects.

In addition to influencing the content and valence of cognition and behavior, affect may also influence the *process* of cognition, that is, *how* people think (Clark & Isen, 1982; Fiedler & Forgas, 1988; Forgas, 2002). Early evidence indicated that people in a positive mood seem to reach decisions faster, used less information, avoided demanding, systematic thinking, and showed greater confidence in their decisions, suggesting that positive affect might produces a more superficial, less systematic and less effortful processing style. In contrast, negative affect seemed to trigger a more effortful, systematic, analytic and vigilant processing style (Clark & Isen, 1982).

These effects were initially explained in terms of motivational theories. For example, Clark and Isen (1982) suggested that people in positive mood may try to maintain this pleasant state by refraining from effortful activity. Negative affect in turn should motivate people to engage in vigilant, effortful processing as an adaptive response to improve an aversive state. Schwarz (1990) offered a slightly different account suggesting that positive and negative affect have a signaling/tuning function, automatically informing the person of whether a relaxed, effort minimizing (positive affect) or a vigilant, effortful (negative affect) processing style is appropriate.

However, as positive affect may also have distinct processing advantages (Bless, 2000; Fiedler, 2001), affective influences on processing are thus not simply a matter of increasing or decreasing the effort and vigilance of information processing. Rather, as Bless (2000; Bless & Fiedler, 2006) and Fiedler (2000) showed, the fundamental evolutionary significance of positive and negative affective states is not simply to influence processing effort, but to recruit more internally driven, top-down (positive affect), or externally oriented, bottom up (negative affect) processing styles. Assimilation means to impose internalized structures onto the external world, whereas accommodation means to modify internal structures in accordance with external constraints.

Several lines of evidence now support such an affectively induced assimilative / accommodative processing dichotomy. For example, those in a positive mood use broader, more assimilative cognitive categories, use more abstract representations in their language choices (Beukeboom, 2003), and are more likely to retrieve a generic rather than specific representation of a persuasive message (Bless, Mackie & Schwarz, 1992). Bless and Fiedler (2006) suggest that moods perform an adaptive function essentially preparing us to respond to different environmental challenges. Positive mood indicates that the situation is safe and familiar, and that existing internal knowledge can be relied upon. In contrast, negative mood functions like a mild alarm signal, indicating that the situation is novel and unfamiliar, and that the careful monitoring of new, external information is required. The theory thus implies that both positive and negative mood can produce processing advantages albeit in response to different situations requiring different processing styles. Given the almost exclusive emphasis on the benefits of positive affect in our culture, this is an important message with some intriguing real-life implications. Numerous studies now suggest that negative mood can produce definite processing and communicative advantages in situations when the careful and detailed monitoring of new, external information is required, as we shall see below.

Integrative theories

Thus, affective states can have both an informational, and a processing influence on the way people communicate and use language. A comprehensive explanation of these effects should also specify the circumstances that promote or inhibit affect congruence, and should define the conditions that lead to affect priming, or the affect-as-information mechanisms. The Affect Infusion Model (Forgas, 1995a, 2002) predicts that affect infusion should only occur in circumstances that promote open, constructive processing that involves active elaboration of the available stimulus details and use of memory-based information in this process. The AIM assumes that affect infusion should be dependent on the kind of processing strategy that is used, and identifies four alternative processing strategies: *direct access, motivated, heuristic, and substantive* processing. The first two strategies, direct access and motivated processing, call for highly targeted and predetermined patterns of information search and selection, which limit the scope for incidental affect infusion into communication. In contrast, heuristic and substantive processing are more open and involve some constructive thinking, and may thus produce affect infusion. These four strategies also differ in terms of two basic dimensions: the degree of *effort* exerted in seeking a solution, and the degree of *openness* and constructiveness of the information search strategy. Thus, *substantive processing* involves high effort but closed, pre-determined information search, *heuristic processing* is characterized by low effort but open, constructive thinking, and *direct access processing* represents low processing effort and closed information search.

The model also predicts that the use of these processing strategies is triggered by contextual variables related to the *task*, the *person*, and the *situation* that jointly influence processing choices. An important feature of the AIM is that it recognizes that affect itself can also influence processing choices. As we have seen before (eg. Bless, 2000; Fiedler, 2000), positive affect typically generates a more top-down, schema-driven processing style, and negative affect often triggers piecemeal, bottom-up processing strategies focusing attention on external details. The key contribution of integrative models like the AIM is that they can predict the *absence* of affect infusion when direct access or motivated processing is used, and the *presence* of affect infusion during heuristic and substantive processing. The implications of this model have been supported in a number of experiments considered below.

There are thus good theoretical reasons to expect that affect plays a significant influence on how people represent the social world, the way they plan and use

communication strategies, and in particular, how they generate and respond to verbal messages. The experiments to be described below, typically involve a two-stage procedure. Participants are first induced to experience an affective state, using methods such as hypnotic suggestions, exposure to happy or sad movies, music, autobiographic memories, or positive or negative feedback about performance. After mood induction, their communicative behaviors are assessed in what participants believe is a separate, unrelated experiment. The experimental evidence will be summarized in two sections: (1) affective influences on the content and valence of communication (affect congruent effects), and (2) affective influences on the process of communication (processing effects).

Affect congruence in communication

Homo sapiens is a gregarious species, and coordinating our interpersonal behaviors can be a demanding cognitive task. As social communication typically demands open, constructive thinking, affective states may infuse our thoughts and communicative behaviors. Positive affect may prime positive interpretations and produce more confident, friendly, and cooperative 'approach' behaviors and messages, whereas negative affect may facilitate access to negative memories and produce more avoidant, defensive or unfriendly attitudes and communications (Bower & Forgas, 2001; Eich & Macauley, 2000; Forgas, 1995a).

According to the AIM, affective states should have a mood-congruent influence on producing, and responding to communication, especially when the situation calls for constructive, substantive processing (Forgas, 1995a, 1999a,b). We found, for example (Forgas & Gunawardena, 2001), that female undergraduates who were feeling good after watching a film communicated in a much more positive manner in a subsequent, unrelated interaction. They smiled more, communicated more effectively, disclosed more personal information and generally behaved in a more poised, skilled and rewarding manner according to raters blind to the affect condition. Sad participants were rated as being less friendly, confident, relaxed, comfortable, active, interested and competent than were happy participants. In other words, the mild affective consequences of watching a brief film seemed to have a significant subsequent influence on a wide range of interpersonal behaviors and communications that was readily detectable by observers.

On the most basic level, there may also be affect-congruent distortions on the way people interpret the observed communicative behaviors of others (Forgas, Bower and Krantz, 1984). Happy subjects tend to see more positive skilled behaviours and communicative acts, while sad mood produces a more critical, negative interpretations of the very same messages, even when objective, videotaped evidence is readily available. Several experiments explored mood effects on specific communicative behaviors such as request formulations, negotiation and self-disclosure.

Mood effects on request strategies.

How does affect influence strategic interpersonal communication, such as making a request? Requesting is a complex communicative task characterised by uncertainty and should thus require open, elaborate processing. Requests must be formulated with just the right degree of assertiveness vs. politeness so as to maximize compliance without risking giving offence. Positive mood should prime a more confident, direct requesting style, and negative mood should lead to more cautious, polite requests (Forgas, 1999a). When happy or sad persons were asked to select among more or less polite requests they would use in easy or difficult social situations (Forgas, 1999a, Exp. 1), happy participants preferred more direct, impolite requests, while sad persons preferred more cautious and polite requests. In a follow-up experiment, similar effects were found when participants produced their own open-ended requests, which were subsequently rated for politeness and elaboration by two independent raters. Further, mood effects on requesting were

much stronger when the request situation was difficult and problematic, and thus required more extensive, substantive processing.

Do these mood effects also occur in real-life interactions? In an unobtrusive experiment (Forgas, 1999b, Exp. 2), participants first viewed happy or sad films. Next, in an apparently impromptu development, the experimenter casually asked them to get a file from a neighboring office. Their words in making the request were recorded by a concealed tape recorder, and the requests were subsequently analyzed for politeness and other communicative qualities. Negative mood resulted in significantly more polite, elaborate and hedging requests, whereas those in a positive mood used more direct and less polite strategies (Firgure 1). An analysis of participants' later recall memory for the requests they made (a measure indicating the extent of elaborate processing) showed that more elaborately processed requests were remembered better, and were also more influenced by mood as predicted by models such as the AIM (Forgas, 2002).



<u>Figure 1.</u> Mood effects on naturally produced requests: Positive mood increases, and negative mood decreases the degree of politeness, elaboration and hedging in strategic communications (After Forgas, 1999b).

Mood effects on responding to requests by others.

Spontaneous, impromptu reactions to communications, such as responding to a verbal request, also require constructive processing, and should also be subject to affect infusion. Several of our field experiments were carried out in a university library to confirm this prediction (Forgas, 1998b). Affect was induced by leaving folders containing funny or sad pictures (or text) on some unoccupied library desks. Students occupying the desks were surreptitiously observed as they exposed themselves to the mood induction. A few minutes later, another student (a confederate) made an unexpected polite or impolite verbal request for several sheets of paper to the unsuspecting subjects. Their responses were noted, and soon after a second confederate asked them to complete a brief guestionnaire assessing their perception and memory of the request and the requester. There was a clear mood-congruent pattern in responses to the request. Sad people were less inclined to help, and evaluated the request and the requester more negatively. These mood effects were greater when the request was impolite and unconventional and thus required more elaborate and substantive processing. These results confirm that affect infusion into communication behaviors is a real phenomenon that depends on how much constructive processing is required, in this case, to respond to more or less unusual, unconventional request forms.

Mood effects on communicating in negotiations.

One of the most common and difficult communication situations occurs when people need to engage in verbal negotiation to resolve a conflict. Effective negotiation is a critical communication skill in resolving personal and relationship problems, and is also routinely used in organizations. Can such carefully planned social encounters as verbal negotiation be open to affect infusion (Forgas, 1998a)?. In a series of studies mood was induced before participants engaged in highly realistic interpersonal and inter-group negotiation. We found that happy participants were more confident, formed higher expectations about their success, made more optimistic and cooperative communication plans, and actually used more positive, integrative trusting messages than did control, or negative mood participants (Figure 2). Further, happy participants also achieved better outcomes. Interestingly, individuals who scored high on measures such as machiavellism and need for approval were less influenced by mood. It seems that affect infusion into interpersonal communication behaviors is weaker for individuals who habitually approach interpersonal tasks from a motivated, pre-determined perspective that limits the degree of open, constructive thinking they employ. These findings support the principle that mood effects on social behaviors are highly dependent on processing strategies, often linked to enduring personality traits (Ciarrochi & Forgas, 1999, 2000; Ciarrochi, Forgas & Mayer, 2001; Forgas & Ciarrochi, 2000).



<u>Figure 2.</u> Mood congruent influences on negotiation: happy persons plan, and use more cooperative and less competitive bargaining strategies, and are more likely to make and honor deals than do negotiators experiencing negative affect. (Data based on Forgas, 1998a).

In terms of the AIM, these mood effects on communication in a negotiation can be explained in terms of affect priming mechanisms. Positive mood was found to selectively prime more positive thoughts and associations, leading to the formulation and use of more optimistic, cooperative and integrative bargaining strategies and messages. In contrast, negative mood primed more pessimistic, negative thoughts and associations, leading to less ambitious communication goals and less cooperative, more competitive, and ultimately less successful bargaining strategies.

Mood effects on self disclosure.

Self-disclosure – communicating intimate information about the self - is a critical aspect of skilled interpersonal behavior, and essential for the development of rewarding intimate relationships (Forgas, 1985). Affective influences on self-disclosure strategies were demonstrated in several recent experiments (Forgas, 2010), when happy or sad participants were asked to indicate the order in which they would feel comfortable disclosing increasingly intimate information about themselves to a person they have just met. Happy people preferred significantly more intimate disclosure topics, consistent with a generally more confident and optimistic interpersonal communication style. In subsequent experiments, participants interacted with another person in a neighbouring room through a computer keyboard, as if exchanging emails. Using this 'bogus partner' method, the computer was pre-programmed to respond in ways that indicated either consistently high or low levels of self disclosure. Individuals in a positive mood produced a greater variety of more intimate, more abstract and more positive self-disclosing messages about themselves, and also formed more positive impressions about the 'partner', and these effects were especially marked when the 'partner' was also disclosing (Firgure 3). Positive mood did not increase the intimacy of self-disclosure when the partner was not disclosing.

Why do these effects occur? In uncertain and unpredictable communicative situation, we need to rely on open, constructive thinking in order to formulate our plans to guide their interpersonal behaviors and messages. Affect can prime access to more affect-congruent thoughts, and these ideas should ultimately influence plans and behaviors. Thus, affective influences on communicative behaviors depend on how much open, constructive processing is required to deal with a more or less demanding interpersonal task. Whenever motivated, closed information processing is used, these mood effects tend to be reduced. The same mechanisms of affect infusion seem to influence the way people formulate personal requests, the way they respond to approaches by others, the way they plan and execute negotiations, and the way they produce self-disclosin messages (Forgas, 1998b,c; 1999a,b; 2010). In addition to influencing confidence and the valence of communicative strategies (the content of cognition), affective states also have a marked effect on how people deal with social information, the *process* of cognition and message production. We shall next turn to the processing effects of mood states on social communication.



Figure 3. Mood effects on the intimacy, variety, abstractness and valence of selfdisclosing messages: Communicators in a positive mood reveal more intimate, more abstract, more varied and more positive information about themselves.

The processing consequences of affect on social communication

In addition to producing affect congruence, affect can also influence the way information is processed. Although it is commonly claimed that feeling good promotes better thinking in terms of creativity, flexibility and integrative thinking, (Ciarrochi, Forgas & Mayer, 2006; Forgas, 1994; 2002), this is only part of the story. In this section we present several experiments showing that negative affect may also produce desirable and beneficial cognitive consequences for social communication. In functional terms, negative mood may operate as an adaptive signal recruiting more attentive and accommodative thinking that may help people to cope with the requirements of demanding social situations (Forgas, 2007).

Negative affect improves the accuracy of interpreting messages.

Interpreting the behavior of communication partners is often subject to various biases, such as the *fundamental attribution error* (FAE) when people see intentionality and internal causation in messages despite evidence for the influence of situational forces (Gilbert & Malone, 1995). The FAE occurs because people focus on salient and conspicuous information - the communicator - and fail to process information about situational constraints (Gilbert, 1991). If negative mood promotes the more detailed processing of situational information, the incidence of the FAE and other judgmental biases may be reduced (Forgas, 1998c). In one experiment, happy or sad participants read and made judgments about the verbal messages sent by the writer of an essay advocating a popular or unpopular position (for or against nuclear testing) which they were told was either assigned, or was freely chosen, using the procedure pioneered by Jones

and Harris (1967). Happy mood increased, and sad mood reduced the tendency to infer internal motivation and intentions from messages that were actually coerced and externally caused (the FAE), consistent with the more attentive thinking style recruited by negative affect. Similar effects can also occur in real life.

In a field study, happy or sad participants made attributions about the writers of popular and unpopular essays containing messages arguing for, or against recycling (cf. Forgas & Moylan, 1987). Once again, positive mood increased, and negative mood reduced the incidence of the fundamental attribution error (inferring internal causation from coerced messages). Recall memory data confirmed that these effects were due to the more attentive processing of the actual information contained in the messages when in negative mood (Forgas, 1998c, Exp. 3). These effects are consistent with the suggested evolutionary benefits of negative affect in recruiting more accommodative processing styles.

Affective influences on believing or disbelieving doubtful messages

Believing or not believing a communication partner is another crucial decision people often face in everyday life. How do we know if the messages we receive from others are accurate? Accepting invalid information as true (false positives, excessive gullibility) can be just as dangerous as rejecting information that is valid (false negatives, excessive scepticism). Negative moods might produce more critical and sceptical judgments, while happy people may accept interpersonal messages at 'face value', as genuine and trustworthy due to the information processing consequences of affect we discussed previously.

Several recent experiments found that moods have a significant influence on accepting or rejecting information. Some claims (such as 'urban myths') can potentially be evaluated against objective evidence (e.g., power lines cause leukaemia; the CIA murdered Kennedy), whereas other messages, such as most interpersonal communications, are by their very nature ambiguous and not open to objective validation. Induced mood states can have a significant influence on both kinds of credibility judgements, such as (a) accepting factual claims (*factual scepticism*), and (b) the acceptance of interpersonal representations (*interpersonal scepticism*) (East & Forgas, 2008a,b). We investigated both kinds of effects.

Mood effects on <u>interpreting</u>**disbelieving factual messages**. There are a large number of messages -- urban legends, anecdotes and myths -- that circulate in all societies that propose somewhat plausible, but ultimately unknown and untested claims as facts. What determines if people accept such propositions, and does affect play any role in this process? In one experiment (Forgas & East, 2008a) we asked happy or sad participants to judge the probable truth of a number of verbal messages describing urban legends and rumours. Negative mood increased, and positive mood reduced scepticism, but only for new and unfamiliar claims. A follow-up experiment manipulated the familiarity of a variety of factual claims taken from trivia games (Forgas & East, 2008a). Happy mood significantly increased the tendency to accept messages previously seen and familiar as true. Negative mood in turn produced greater scepticism, consistent with the hypothesis that negative affect triggers a more externally focused and accommodative thinking style and the more critical evaluation of communications.

In another experiment, participants judged the truth of 25 true and 25 false general knowledge verbal messages, and were also told whether each item was actually true (Forgas & East, 2008a). Two weeks later, after a positive or negative mood induction, only sad participants were able to correctly distinguish between true and false statements they had seen previously. Happy participants seemed unable to remember the truth of these messages, and were more likely to rate all previously seen messages as true, even if they were told previously that the information was false. This pattern confirms that happy mood increased and sad mood reduced the tendency to rely on the "what is familiar is true"

heuristic. In all, negative mood conferred an adaptive advantage by promoting a more accommodative, systematic processing style in the recipients of dubious communications (Fiedler & Bless, 2001). This effect seems due to negative mood reducing, and positive mood increasing the tendency to use perceived familiarity as an indication of truthfulness.

<u>Mood effects on interpreting</u>Affective influences on disbelieving interpersonal <u>messages</u>communications. Mood may also influence people's tendency to accept or reject interpersonal communications as genuine or false. In one experiment (Forgas & East, 2008a), happy and sad participants judged the genuineness of positive, neutral and negative facial expressions. Participants in a negative mood were significantly less likely to accept facial expressions as genuine than were those in a positive or neutral mood. In another study, instead of positive and negative facial displays, we used the six basic facial expressions of emotions as the the communication targets (i.e., anger, fear, disgust, happiness, surprise, sadness). Once again, negative mood reduced, and positive mood increased participants' tendency to accept the facial displays as genuine, consistent with the more attentive and accommodative processing style associated with negative moods.

Affective influences on the ability to detecting deceptive communication. Can these mood effects influence the ability to detect deception? We asked happy or sad participants to accept or reject the videotaped statements of people who were interrogated after a staged theft, and were either guilty or not guilty (Forgas & East, 2008b). Those in a positive mood were more likely to accept denials as truthful. Sad participants in contrast were better able to see through attempts to deceive, made significantly more guilty judgements, and were significantly better at correctly detecting communications by deceptive (guilty) targets. Thus, negative affect produced a significant advantage in accurately distinguishing truths from lies. A signal detection analysis confirmed that sad judges were more accurate in detecting deception (identifying guilty targets as guilty) consistent with the predicted mood-induced processing differences (Forgas & East, 2008b; Figure 4). These results confirm that negative affect increases the ability to pay close attention to the communications we received, and as a result of this mood-induced increase in scrutiny, people tend to become more sceptical about both factual and interpersonal messages that they receive. More remarkably, negative mood also significantly improves the ability to detect deception when making judgments about realistic verbal communications. These findings support the prediction that negative affect generally produces a more situationally oriented, accommodative and inductive cognitive style.



Figure 4. Negative mood improves the ability to detect deceptive communication, and assign blame to a communicator attempting to deny a theft (After Forgas & East, 2008b).

Affective influences on the quality and efficacy of persuasive messages.

Producing verbal messages designed to influence others - persuasive communication - is a particularly important communication task everyday life. We rely on verbal messages to influence others, both in our personal lives (romantic partners, children, family members), and in our working lives (colleagues, employees). We know that affect can influence information processing strategies (Bless, 2000; Fiedler, 2000; Forgas, 1998a,b), and it may be that negative affect may also improve the quality of persuasive messages by focusing increased attention on concrete, situational details (Forgas, Ciarrochi & Moylan, 2001). Accommodative processing promoted by negative affect may thus result in more concrete and factual thinking and result, lead to the production of more successful and effective persuasive messages.

We explored this possibility (Forgas, 2007, Exp. 1) by asking happy or sad participants to produce persuasive verbal arguments for or against topical attitude issues, such as an increase in student fees, and Aboriginal land rights. As predicted, negative mood resulted in the production of verbal arguments that were of significantly higher quality, more concrete and more persuasive than those produced by happy participants, as assessed by trained raters blind to the experimental conditions. A mediational analysis established that it was indeed the greater concreteness and detail of the arguments produced in negative mood that improved argument quality and effectiveness.



Figure 5. The effects of positive and negative mood on the quality and concreteness of persuasive arguments produced: Negative mood results in more concrete, higher quality and ultimately more effective persuasive messages than positive mood.

In a further experiment, happy or sad participants were asked to produce persuasive verbal arguments for or against other attitudes issues, such as Australia becoming a republic, and for or against a radical right-wing party. Negative mood again resulted in higher quality and more effective persuasive arguments, consistent with the prediction that negative mood should promote a more careful, systematic, bottom-up processing style and greater attention to concrete details (Bless, 2001; Bless & Fiedler, 2006; Fiedler, 2001; Forgas, 2002; see also Figure 5).

As the effectiveness of the verbal messages produced in these experiments was assessed by trained raters, we also wanted to demonstrate that arguments produced in negative mood were actually more effective in bringing about attitude change by real, naïve paticipants. To further test the actual effectiveness of negative mood arguments, in experiment 3 the verbal arguments produced by happy or sad participants were presented to a naïve audience of undergraduate students, whose original attitudes on these issues were independently assessed at the beginning of term. Arguments written by negative mood participants in Experiments 1 and 2 were actually significantly more successful in producing a real change in attitudes than were arguments produced by happy participants, confirming that negative affect produced a real improvement in the quality of persuasive messages, and the effectiveness of communication.

Finally, in experiment 4 an interactive situation was created, where the persuasive attempts by happy and sad people were directed at a 'partner' through a computer link-up, who were asked to volunteer for a boring experiment using email exchanges (Forgas, 2007). The motivation to be persuasive was also manipulated by offering some communicators a significant reward if they manage to persuade their partner (movie passes). Once again, results showed that people in a negative mood produced higher quality persuasive arguments. However, the offer of a reward reduced mood effects,

confirming a key prediction of the Affect Infusion Model (Forgas, 1995a, 2002), that mood effects on information processing – and subsequent social influence strategies – are reduced by motivated processing. Mediational analyses confirmed that negative mood induced more longer and accommodative thinking, and more concrete and specific arguments.

These experiments confirm that persuasive arguments produced in negative mood are not only of higher quality as judged by raters, but are also significantly more effective in producing genuine attitude change in people. However, when motivation is already high, mood effects tend to diminish, as predicted by the Affect Infusion Model (Forgas, 2002). This finding may have interesting applied implications for managing communication strategies in personal and organisational situations that also involve a great deal of persuasive communication. It is an intriguing possibility that mild negative affect may actual promote a more concrete, accommodative and ultimately, more successful communication style in some social situations.

Summary and Conclusions

Human beings are a moody species. Our fluctuating affective states and moods permeate everything that we think and do. In particular, moods have strong and predictable informational and processing effects on the way people produce and respond to social communication. This chapter reviewed evidence from a number of experimental studies demonstrating affective influences on the way people use requests, engage in negotiation, disclose intimate information about themselves, detect deception, and produce persuasive messages. Many social encounters elicit powerful emotional responses, and there is also growing evidence that affective influences on different information processing strategies play a critical role in explaining the presence or absence of affect infusion into social communication. Integrative theories, like the Affect Infusion Model (Forgas, 1995a; 2002) offer a process-based explanation of when, how and why affect infusion occurs. Several of the experiments here indicate that, surprisingly, more extensive, substantive processing often enhances mood congruity effects on communication (Forgas, 1998, 1999a,b). On the other hand, affect infusion is often absent when a communication task can be performed using a either a direct access or a motivated processing strategy that limit the use of affectively primed information in producing or interpreting a message (Fiedler, 1991; Forgas, 1995a). These effects are not limited to controlled laboratory environments, as unobtrusive field experiments showed that affect infusion occurs in many real-life situations.

Producing and responding to social communication requires complex and elaborate information processing strategies. It is the very richness and elaborateness of communication situations that makes mood effects particularly likely, as even a minor selective priming of positive and negative memory-based information may have large consequences for what is perceived, how it is interpreted, and the kind of responses that are constructed. The messages produced, and responses to messages received tend to be more assertive, confident and optimistic when a person is in a positive mood state, and more likely to be non-assertive, negative or critical when the person is in a dysphoric mood.

We have also seen that affective states may also influence *how* people deal with social information. It turns out that mild negative moods can have a beneficial effect by recruiting more accommodative and attentive processing styles, reducing interpretational errors, improving the quality of persuasive arguments, the ability to detect deception, and also increasing the degree of scrutiny that incoming factual and interpersonal messages receive. The processing effects of negative mood described here seem particularly intriguing, since these studies suggest that mild dysphoria could actually improve <u>communicative strategies and even result in superior outcomes in some situations</u> (Forgas, 2007).

Interestingly, these results also challenge the common assumption in much of applied, organisational, clinical and health psychology that positive affect has universally desirable social and cognitive and communicative consequences. Together with other recent experimental studies, our findings confirm that negative affect often produces adaptive and more socially sensitive outcomes. For example, negative moods can reduce judgmental errors (Forgas, 1998), improve eyewitness accuracy (Forgas, Vargas & Laham, 2005), and improve interpersonal communication strategies (Forgas, 2007), and may also increase fairness and sensitivity to the needs of others. There is much scope in future work to explore mood effects on other kinds of strategic communication behaviours, such as forgiveness.

In conclusion, evidence suggests a closely interactive relationship between affective states and social information processing strategies that determine the way people communicate, and respond to communication in their daily lives. A number of contextual influences mediate and moderate these effects. Considering that most of the research on affect in social psychology is less than a few decades old, a great deal has been achieved. However, we are still far from fully understanding multifaceted influences that affect has on social thinking, judgments and communication in particular. Hopefully, the present chapter in particular will stimulate further interest in this fascinating and rapidly developing area of inquiry.

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