

# 1. Affect and social behavior

BERT S. MOORE AND ALICE M. ISEN

The last 20 years has seen a resurgence of interest in the role of affect as a mediator of a variety of kinds of behavior. Although, there has long been an acknowledgment within the field of psychology of the central role played by affect as a governor of behavior, until recently empirical investigation of those relations had not had a great impact because of the thorny methodological and conceptual issues involved in the investigation of affect. In the early 1970s there began a period of intense interest in the mediating role affect plays in behavior. It might be fair to say that if the 1960s marked the advent of a “cognitive revolution” in psychology, the 1970s and 1980s have seen an analogous turning to the critical role of affect in both social behavior and cognition.

That our behavior, our reactions to our world, are colored by our affect requires only a moment’s introspection. We can point to numerous ways that our responses to ourselves and others depend on our feelings. This intuition regarding the role that affect plays in moderating our social reactions and self-reactions has been extensively investigated during the past 20 years, and these investigations have provided a much clearer picture of how affect influences such important social behaviors as altruism, aggression, interpersonal attraction, consumer behavior, and decision making. In addition, during the past 10 years cognitive and social psychologists have turned their attention to how affect influences such phenomena as selective attention, schematic organization, state-dependent memory, and selective retrieval. These parallel movements, an examination of the influence of affect on social behavior and the explication of affect–cognition relations, have enabled increasingly comprehensive statements to be formulated about the interactive role played among affect, cognition, and social behavior. However, while there have been several volumes published on affect and cognition, there has not been a comprehensive work focusing on the area in which the

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preponderance of the affect research has been conducted – social behavior. In this volume we bring together some of the most distinguished contributions in the domain, to provide the reader with an illustration of the richness and variety of the work and to clarify some of the contradictions that have appeared in the rather piecemeal evolution of research in this area.

While the intuitive plausibility of the relation between affect and social behavior may be a sufficient justification for the investigation of these effects, the accumulated research presented in this volume points out the increasing sophistication of our understanding of the processes underlying these relations. There have been several helpful distinctions drawn on the ways that affect may act to influence social behavior, but before we examine these inferred processes, we must clarify somewhat what is meant by “affect” in this volume. The literature in social psychology and personality contains many studies in which terms such as “emotions,” “moods,” and “affect” are used interchangeably. The relationship among these concepts is not well understood, but it may be possible to draw some distinctions among them.

Since at this stage in our knowledge such distinctions must be rather arbitrarily drawn, we would suggest that one important aspect of any definitional scheme selected should be its utility. In particular, it may be useful to focus on the dimensions of pervasiveness and specificity in considering the effects of feelings and emotions. Emotions may be seen as more “interrupting” types of experiences that are typically more focal in terms of both target and behavioral response than are feeling states. Feeling states may be pervasive but nonspecific affective events that are not directed toward any particular behaviors. Because of this pervasiveness and nonspecificity, feeling states may influence a variety of behaviors and judgments and may be able to redirect thinking and behavior. It appears that affect – which, as discussed here, primarily refers to feeling states – influences a wide variety of behaviors but that those influences are not the result of direct imperatives but rather are adventitious.

Feeling states have been found empirically to alter attention, memory, and behavior in a wide range of domains. The behavior affected by feeling states seems often to be determined by the chance encounters with behavioral alternatives offered by the environment after the induction of the feeling state. Thus, although a variety of social behaviors are influenced by affect, one would not expect all behavior to be equally affected. The pattern of influence is apt to be subtle, and the subtlety

may be a partial explanation for the relative lack of attention that these relations have received until recently.

It is our contention that these relations are particularly important in understanding a variety of social behaviors because feeling states occur so frequently and may act to shade and shape people's reactions to themselves and others. We are all aware that our feelings can be potent determiners of how we respond to ourselves. We have all felt the flush of buoyancy and self-approbation that may accompany a "high"; we are also well acquainted with the self-criticism and self-doubt that may accompany our depressions. Of course, our affective states are subtle and multifaceted. Different shades of affect seem to be accompanied by specific forms of cognitive reactions to experience. Melancholy, guilt, nostalgia, exuberance, and joy all seem to produce specific reactions.

It is not critical for our purposes to go into the issues regarding the directionality of these associations – whether affect causes cognitive effects or cognitions cause affective reactions. Undoubtedly this relationship is bidirectional, with affective state engendering certain types of cognitive activity and cognitions leading to distinctive affective experiences. It is also the case, by and large, that these shades of affect, while pervasive and perhaps differing in important ways in their influences on behavior, have not received systematic investigation up to this point (for a comprehensive examination of these perspectives and data relative to them, see Mandler, 1984, and Isen, 1984). What is important for us is to see whether the relationships between cognition and affect suggest any comprehensive statement about how affect regulates behavior.

Later in the chapter we shall outline some of the presumed relations among affect, cognition, and social behavior, but first we shall discuss some of the ways that affective states have been discussed in terms of affective quality (positive, negative) and some of the methods that have been employed in the investigation of affect.

### **1.1. Affective quality**

In a discussion of affect, the very use of the single word might imply a unidimensional phenomenon. There is, however, a continuing question as to the exact nature of the dimensionality of affect. Is it best thought of as a single, unitary dimension or as a series of perhaps interrelated dimensions? Do the common names for affective states (sadness, anger, happiness, fear, etc.) identify distinct affective dimensions? Are affective states unipolar (neutral–happy, neutral–sad, etc.) or are at least some

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of the bipolar (e.g., happy–sad)? These and similar questions are basic to our understanding of affect, and therefore to our choice of research strategies and questions.

It has often seemed that investigators think of affect in terms of a bipolar, unidimensional pleasant–unpleasant continuum. For example, a title such as “Affect and Altruism” (Moore, Underwood, & Rosenhan, 1973), attached to a report of a study of the effects of manipulations of happiness and sadness, may unfortunately imply that *all* affective states can be considered roughly equivalent to one examined in the study. Even more explicitly, a review of the literature on negative effect and altruism that lumps together studies of sadness, guilt, and sympathy without any real distinction among them (Cialdini & Kendrick, 1976) is also likely to promote a rather undifferentiated view of affect.

Similarly, it is sometimes suggested that a dimension of affect involves global “arousal.” Yet the concept of “arousal” is itself a complex one (see Berlyne, 1971; Lacey, 1967; Lacey, Kagan, Lacey, & Moss, 1963; Martindale, 1981). Several authors have suggested that it may be misleading to think of arousal as global or unitary. Moreover, the relationship between arousal and affect is not simple: Some have proposed arousal to be orthogonal to valence as a component of affect; but the nonorthogonal relationship between valence and arousal has been noted for a century in psychology, dating back to the “Wundt Curve” (see Berlyne, 1971; Isen, 1984; Martindale, 1981, for discussion).

Whether we adopt such a view will have a definite impact on any review of the affect literature. Taking a unidimensional approach will increase the claimed generality for any mood effects noted in the literature, and will obviate the need for further studies with previously ignored affective states to complete the picture; a multidimensional approach will have opposite implications. Both to set the stage for the reviews that follow in this volume and to establish some sort of conceptual framework for affect, we shall address this issue in two ways: by brief reference to factor-analytic studies of affective self-reports and by examination of theoretically and conceptually based categorizations of affect.

#### **Factor-analytic studies**

Laboratory research on feelings over the past decade has produced a large number of affect self-report protocols. These have typically been adjective checklists based on Nowlis’s Mood Adjective Checklist (MACL), but with additional descriptive adjectives included. Periodic

factor analyses by one of the present authors have produced a strikingly similar pattern of (unpublished) results across the years: two large factors, one for positive affect and the other for negative affect, along with a few smaller factors that seem to us nonaffective in content (i.e., tired or concentrating; see also Watson, Clark, & Tellegen, 1988). In a similar vein, the conglomerate positive and negative mood scales used by Wispé, Kiecolt, and Long (1977) were chosen on the basis of the results of factor analyses (Wispé, personal communication). Such results would seem to support the notion of two large unipolar affect dimensions, one for "feeling good" and the other for "feeling bad." On the other hand, other investigators have provided numerous reports of factor analyses of mood scales resulting in a variety of specific mood factors, including Nowlis' (1965) report on the original MACL. Reviewing the results of 15 factor-analytic studies, Nowlis suggested "that twelve or more factors should be hypothesized and given further study in mood research" (p. 361). In addition, contrary to his initial expectations, Nowlis found no evidence for bipolar mood dimensions. Similar results have been reported since (e.g., Izard, 1972), although it has been reported that bipolar mood dimensions may be obtained under certain circumstances (Russell, 1980). Although it is not clear why the results of factor analyses should be consistent with a relatively undifferentiated view of affect in some circumstances but reveal a much more differentiated pattern in others (see Watson & Tellegen, 1985 for more extensive discussion), the implications for our view of affect are quite clear. If there are *any* circumstances in which affect appears as a highly differentiated phenomenon, then it may be productive for it to be conceptualized as multidimensional (Shaver, Schwartz, Kirson, & O'Connor, 1987) even if there are some situations in which several of the dimensions cluster together to form a large superordinate dimension. The result of the factor analyses may vary depending both on how affect measures are elicited and the purposes for which they are to be used.

### **Conceptually based categorizations of affect**

The diversity of affective dimensions is perhaps even more striking and ubiquitous within the realm of conceptually based categorizations of affect than it is in empirical studies relying on factor analyses. As an example, one of the reasons for rejection of the James–Lange theory of emotion was the fact that internal visceral reactions in emotional experience were not only too slow to explain the observed feeling states but

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also too uniform to hold any possibility of accounting for the wealth of distinct subjective experiences of affect. A later theory (Woodworth & Schlosberg, 1954) focused on facial expressions rather than visceral sensations as the key to affective distinctiveness and suggested an affect “wheel” on which individual states could be plotted to indicate their relatedness to one another.

This theoretical effort is of special interest in several ways. One point of interest is the early reliance on facial expressions, which have been the focus of continued theoretical interest over the past two decades. A second point of interest concerns the positing of distinct affects that nonetheless bear varying degrees of similarity to each other. This similarity might provide a basis for the occasional clustering of affect descriptions into large-scale superordinate dimensions in factor-analytic studies. A third interesting element of Woodworth and Schlosberg’s (1954) approach is their attempt to explain the distinct-yet-related nature of affective states in terms of two primary dimensions: pleasantness–unpleasantness and acceptance–rejection. These hypothesized underlying dimensions might be another basis for the superordinate factor structure sometimes obtained. Indeed, in data from a number of studies over the past two decades the division into factors has seemed to be based on the pleasantness-unpleasantness distinction.

There have been many other theoretical approaches to affect, virtually all of which have hypothesized numerous distinctive affects. Another that might be mentioned is Plutchik’s (1980a,b) both because of its currency and because of its similarity to the Woodworth and Schlosberg (1954) formulation. Although his approach is an explication of emotions rather than of the feeling states that are our central concern and is based upon conceptual rather than empirical grounds, it does raise some relevant issues. The similarity to Woodworth and Schlosberg is noticeable in the diversity of affects posited, in the use of a geometric figure to illustrate the relationships (a cone in the 1970 version, a circle in the 1980 formulation), and in the suggestion of underlying dimensions to explain relationships among affective states.

It is this attempt to reduce the diversity of affective states to a few explanatory dimensions (common to many theoretical approaches) that represents the only real tendency of conceptual treatments to place severe limits on the number of dimensions of affect. Of course, this sort of limitation is quite different from the suggestion that there are only a few basic affects, since it leaves open the question of when (and to what extent) different affects that happen to share a common position on

some underlying dimension will have different effects. Indeed, some dimensions such as positive–negative may be much more central in their organizing influence on behavior than are other dimensions. In any event, most conceptual approaches to affect are very much in line with the results of most factor-analytic studies in suggesting a variety of distinct affective states. The results of several recent experiments (e.g., Barnett, King, & Howard, 1979; Thompson, Cowan, & Rosenhan, 1980) have even suggested that alterations in the focus of attention may change the quality of certain affective experiences, yielding still greater diversity of affect.

### **Implications of affective diversity**

Because of important and complex differences in the relations between positive and negative affect (Isen, 1984) and behavior, which will be discussed later, the way in which feeling states are conceptualized has important implications for the conduct of research. One implication of the idea of affects as related but numerous and diverse states concerns the validation of experimental manipulations of affect.

### **1.2. Manipulations of affect**

Much of the work in the area of affect over the past two decades has attempted to manipulate affect as an independent variable. Some of the chapters in the present volume describe research in this tradition, while others describe work that assesses but does not directly manipulate feeling states. A brief description of some of the methods employed to manipulate affect will provide a context for understanding some of the conceptual issues to follow.

Children learn very early what we mean when we use an emotional label (see McCoy and Masters in this volume). If you ask children of age 2 to make a happy face and a sad face, they can usually do so. Although the 2-year-olds are less adept at describing what makes them happy or sad, by age 3 children can readily come up with some examples for you. Undoubtedly, this early development of a shared meaning system regarding what is a subtle and complex private experience derives partially from the biological processes that are shared by all people and tied to emotional states. Also, as is discussed elsewhere in this volume, affective states undoubtedly have certain cultural specificities in their expression, and we surmise the experience, with certain emotions

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perhaps being differentially socialized across cultures and therefore having different behavioral concomitants. Therefore, part of children's developmental tasks is to learn the appropriate emotional repertoire suitable to their culture. Because of our different wirings and different experiences, however, we have idiosyncratic emotional experiences. While acknowledging the individual nature of affective experiences, investigators have increasingly tried to bring the study of affect into the laboratory. They have used a variety of methods for manipulating affect, and these will be briefly outlined here.

The design typically used in affect manipulation research is simple. One treatment group of subjects undergoes a short induction experience designed to elicit positive feelings. Another group experiences a negative mood induction, and a third group is given a suitable control experience. A behavioral or cognitive variable is assessed immediately following the induction phase, and analyses are computed to assess group differences on this response attributable to the induction variable.

The use of this design entails the assumption that affect levels can be readily manipulated within the person. Indeed, affect is conceived of as a within-person variable because an individual can be in a happier or sadder state, perhaps relative to a neutral affect balancing point, from moment to moment. Furthermore, it is assumed that shifts in affect level are predictable in relation to the nature of current experiences.

Experimental studies into affect manipulations have generally used one of four recognized procedures: the Velten technique (Velten, 1968), the success or failure experience (e.g., Isen, 1970), the reminiscence interview (Moore et al., 1973), and the serendipitous gift (e.g., Isen & Levin, 1972). Although different techniques are plainly better suited to different subject populations, the assumption is made that the different techniques achieve similar psychological consequences, that is, changes in a neutral to positive or a neutral to negative mood dimension.

The Velten technique involves assigning subjects to either elation, depression, or control treatments. Subjects are asked to read aloud 50 statements, each one having been typed onto a separate small card. The statements used in the elation treatment either connote physical energy or have positive self-referring connotations (e.g., "If my attitude is good then things go better and my attitude is good"). The depression treatment statements either connote tiredness, lethargy, ill health, or a negative self-view (e.g., "There are too many bad things in my life"). Control group statements are designed to have neutral connotations (e.g.,



"Peanuts are grown in Georgia"). Obviously, the Velten procedures are most suited for work with adults.

The success or failure experience involves subjects receiving information as to success, failure, or control experience applied to a task upon which they are unable to judge their own performance level or, alternatively, to a task upon which a predictable outcome is assured. For example, suitable tasks for young children could include matching-familiar-figure problems, the success-failure test, and the widely-used bowling game.

The reminiscence procedure consists of a short interview between a subject and an experimenter. The subject is asked to describe an experience that has happy or sad connotations, or that constitutes a neutral affect content. In a typical study, the experimenter will instruct the positive induction subjects, "I want you to tell me of something that really makes you happy, that makes you feel good." Negative induction subjects are asked to tell of something that makes them feel unhappy or sad. Control group subjects can be asked to verbalize innocuous content such as counting to 10 three times, to describe a scene in a picture, or to list the names of other children in their classroom. In the case of positive and negative induction treatment, the subjects are asked to dwell on the relevant experience for perhaps 20 or 30 seconds. A typical induction is likely to last about a minute.

A serendipitous gift is simply one that a subject receives unexpectedly. The gift need not be one of great value: Several studies have used free samples of items of merchandise or coupons valued at 50 cents or less.

Additionally, some investigators have used stories whose affective tone is varied, movies, audiotapes, music, humor, or even hypnotic inductions to create different feelings within their subjects. Although these manipulations rarely evoke profound emotional experiences, there is evidence that they can reliably alter affect.

It must be said, by the way of caveat, that it has become clear that experimenters are tapping complicated affective complexes when they call upon subjects to generate a specific affective state. It has been demonstrated recently by Polivy (1981) and Underwood, Froming, and Moore (1982) that laboratory inductions designed to influence a single affective state such as sadness, anger, or fear can actually cause significant alterations in all those states simultaneously as well as influencing still other affects, and therefore making difficult the conclusion which

component(s) of the manipulation is (are) the critical one(s). All of this suggests that any procedure designed to validate an affect induction should attempt to measure multiple affective states so as to give a more complex and realistic picture of the effects of emotion. The typical validation has consisted of some form of subject self-report. Even these efforts, however, have often focused only on those affective dimensions presumed to have been influenced by the experimental manipulation.

In addition to the methodological implication of the multidimensionality of affect, there is also an interpretive implication. In any review of the literature, one must be careful to distinguish between the effects of different affective states, and if this has not been addressed directly by the researchers, one must remain aware that the empirical findings may be limited in generality or applicability by such factors.

In recent years, there has been a major effort to obtain behavioral validation of affect inductions. For example, Masters, Barden, and Ford (1979) collected independent ratings of children's facial expressions to validate their induction of mood. Bugental and Moore (1979) used a different approach to assess the validity of an affect manipulation: They recorded the voices of their elementary school subjects, and then subjected the recordings to a pass band filter that removes voice content while maintaining voice quality. Validation of the affect induction was obtained when raters listening to the filtered recording were able to distinguish between the affect and control conditions. A variety of more prosaic manipulation checks (adjective checklists, having children indicate the face most resembling their own feelings) have been used with child and adult subjects – generally finding differences among conditions. All of this is by way of saying that it does not appear that at least transient affective states can be successfully induced in both children and adults.

### 1.3. Overview of empirical relations

We have commented on the intuitive rationales for expecting there to be important relationships between affect and behaviors. There have also been numerous theoretical arguments advanced for such relationships (cf. Izard, 1977). However, most of the empirical work done in the past two decades has not grown out of any specific theoretical position. Indeed, most of the research has been rather piecemeal, with very few attempts to come up with an undergirding conceptual framework. Yet there is, of course, some sort of implicit framework that leads investigators to the topic in the first place.