Employee Positive Emotion and Favorable Outcomes at the Workplace

Barry M. Staw • Robert I. Sutton • Lisa H. Pelled

Haas School of Business, University of California at Berkeley,
Berkeley, CA 94720
Department of Industrial Engineering and Engineering Management,
Stanford University, Stanford, CA 94305
Department of Industrial Engineering and Engineering Management,
Stanford University, Stanford, CA 94305

This paper contributes to the small but important literature on emotions in the workplace. Moving beyond rational and economic views of employees, the authors integrate diverse literatures and use archival data to show that positive affect has favorable outcomes at work in terms of supervisor evaluation and coworker support. The impact of positive and negative emotions is a rich area of research about organizations.

Richard L. Daft

Abstract

This paper draws on writings in psychology, sociology and organizational behavior to develop a conceptual framework that specifies how positive emotion helps employees obtain favorable outcomes at work. We propose that feeling and expressing positive emotions on the job have favorable consequences on: (1) employees independent of their relationships with others (e.g., greater persistence), (2) reactions of others to employees (e.g., "halo," or overgeneralization to other desirable traits), and (3) reactions of employees to others (e.g., helping others). These three sets of intervening processes are proposed, in turn, to lead to work achievement, job enrichment and a higher quality social context. A partial test of this framework is made in an 18-month study of 272 employees. Results indicate that positive emotion on the job at time 1 is associated with evidence of work achievement (more favorable supervisor evaluations and higher pay) and a supportive social context (more support from supervisors and coworkers) at time 2. But positive emotion at time 1 is not significantly associated with job enrichment at time 2.
(*Positive Emotion*; *Employee Success*)

Many basic elements of research on job attitudes have changed in recent years. Instead of simply assessing employee responses to various aspects of the work role, attention has begun to shift toward how social contexts shape attitudes and needs (Salancik and Pfeffer 1978), dispositional determinants of affect (e.g., Staw et al. 1986), and expressed emotions in organizations (Rafaeli and Sutton 1989). This broader formulation of job attitudes has opened organizational research to a wider array of concepts such as positive and negative affect, optimism, depression, liking and happiness. This reformulation of job attitude research has also stimulated a new search for the consequences of emotion in the workplace. In lieu of the usual process of correlating job satisfaction with absenteeism, turnover, and performance, it is now more evident that research can profitably examine how emotion influences a wider set of personal and organizational outcomes.

The present study is among the first attempts to empirically examine the broader consequences of attitudes in the workplace. Our general hypothesis is quite simple. We propose that employees who feel and display positive emotion on the job will experience positive outcomes in their work roles. This overarching theme is used to weave together diverse literature in psychology, sociology and organizational behavior pertinent to emotion at the workplace. We focus on explaining outcomes provided by the workplace that are favorable from the employee's perspective, not the organization's perspective.

Several specific relationships are posited to underlie the general hypothesis that positive emotion yields favorable work outcomes; these are outlined in Figure

Figure 1   The Link Between Employee Positive Emotion and Favorable Outcomes at the Workplace
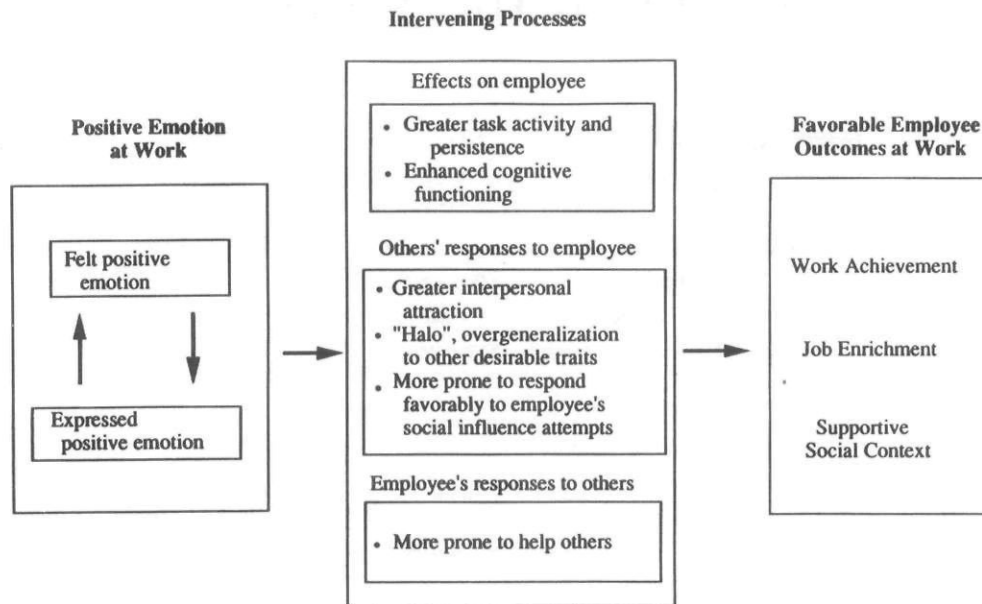
1. The model suggests that positive emotion brings about favorable outcomes on the job through three sets of intervening processes. First, positive emotion has desirable effects independent of a person's relationships with others, including greater task activity, persistence, and enhanced cognitive functioning. Second, people with positive rather than negative emotion benefit from more favorable responses by others. People with positive emotion are more successful at influencing others. They are also more likable, and a halo effect may occur when warm or satisfied employees are rated favorably on other desirable attributes. Third, people with positive feelings react more favorably to others, which is reflected in greater altruism and cooperation with others. We hypothesize that the combination of these intervening processes leads to favorable outcomes in the workplace, including achievement (e.g., favorable supervisor evaluations and greater pay), job enrichment (e.g., variety, autonomy, feedback and meaning), and a more supportive social context (e.g., support from coworkers and supervisors).[1]

Before explicating this framework, however, it is important to emphasize that we do not contend that traveling through organizational life in a good mood is a panacea. We take care throughout this paper to point out conditions under which pleasant emotions may lead to undesirable consequences for employees. Often, however, findings that positive emotion has undesirable consequences from the organization's per-

spective also imply desirable consequences from the employee's perspective. Research by industrial psychologists, for example, indicates that positive affect by job candidates (Arvey and Campion 1982, Eder and Ferris 1989) threatens the validity of selection interviews, and that the extent to which an employee is likable (Cardy and Dobbins 1986) or satisfied (Smither et al. 1989) threatens the validity of performance evaluations. From an employee's perspective, these findings suggest that positive affect will help him or her to get a job and to receive favorable performance evaluations.

The Intertwining of Felt and Expressed Positive Emotion

Figure 1 does not distinguish between the consequences of felt and expressed positive emotion. We do not make this distinction, in part, because it is so difficult to measure inner feelings (e.g., researchers typically infer internal emotions from expressed emotions gleaned from questionnaries, interviews and observations). We also do not make this distinction because theory and research suggest that felt and expressed emotion are closely intertwined. Research on social desirability (Crowne and Marlow 1964), self-monitoring (Snyder 1974), and emotional labor (Hochschild 1983) do suggest that expressed and felt emotions are conceptually distinct. But a substantial

body of literature indicates that there are strong reciprocal effects between felt an expressed emotions. When investigators have used manipulations presumed to induce positive and negative feelings, they have found that such feelings are highly correlated with both self-reports and facial expressions (see Ekman 1982, p. 75). There is also evidence showing that, when organizations try to require members to express an emotion they do not feel, employees often come to internalize such required emotions (Hochschild 1983, Sutton 1991). And even when employees try to feign required emotions that they do not feel, their inner feelings may nonetheless shape expressed emotions. For example, service employees tend to smile less as external stress increases (Sutton and Rafaeli 1988). Likewise, Ekman's (1985) research on lying indicates that when people try to display false emotions, their inner feelings often leak out in unintended ways.

Felt and expressed emotions may be intertwined for both cognitive and physiological reasons. In terms of cognition, the expression of a given emotion may lead individuals to solidify their self-perception that they are feeling in a particular way; in a sense, becoming behaviorally committed (Kiesler 1971, Salancik 1977) to a particular emotion. This process may explain why research indicates that expressed hostility often increases rather than decreases anger toward another party (e.g., Ebbeson et al. 1975, Berkowitz 1978), and why positive interpersonal interaction can increase for liking for others (Cialdini 1984). And some research suggests that expressed emotions can trigger physiological processes that determine felt emotions. For example, Zajonc et al. (1989) found that utterances causing subjects to form facial expressions similar to a smile (e.g., repeating the letter "e") were associated with the most pleasant mood, and utterances that caused subjects to form facial expressions similar to a frown (e.g., repeating the letter "u") were associated with the least pleasant mood. Zajonc and his colleagues present physiological evidence indicating these effects occur because unpleasant facial expressions cause insufficiently cooled blood to enter the brain, which people experience as unpleasant, while pleasant facial expressions facilitate the cooling of blood flowing to the brain. By extension, these findings suggest that displaying unpleasant emotions may cause employees to have unpleasant feelings because they—literally—become more hot-headed. Taken together, the literature suggests that, although felt positive emotion and expressed positive emotion can be distinguished in theory, the presence of one often implies the presence of the other.

Direct Influence of Positive Emotion on Employees

Figure 1 proposes that positive emotion influences two sets of performance processes: (1) task activity and persistence and (2) cognitive functioning. These forces may lead to beneficial outcomes for the employee when actual work performance is increased. These forces may also lead to favorable outcomes when others, especially powerful people who control incentives, notice that an employee has work-related skills. Powerful people can reward persistence and enhanced cognitive functioning with incentives such as pay, favorable performance ratings, interesting work, and a more supportive social context.

Task Activity and Persistence. There is evidence that most people tend to be optimistic in anticipating success (Weinstein 1980) and also have, "illusions of control," believing that they can influence outcomes that are randomly determined (Langer 1975). Experiencing positive emotion seems to exacerbate these beliefs. People who are positive in disposition or mood are more likely to overestimate their control over the world and the outcomes they will receive than those with negative emotion (e.g., Alloy and Abramson 1979, Alloy et al. 1981, Taylor and Brown 1988). Similarly, people with positive moods or dispositions are more subject to self-serving biases, (tending to attribute positive consequences to personal rather than external causes) than people with negative emotion (see Taylor and Brown, 1988 and Fiske and Taylor, 1991 for reviews).

One recent study (Dunning and Story 1991) has shown that positive people actually do experience more positive outcomes, disputing the notion that positive beliefs are necessarily illusory. Yet, no matter whether peoples' beliefs about the future are accurate or not, one conclusion is relatively certain. Anticipation of success and thoughts that one can bring it about are likely to facilitate task activity and persistence. When people believe that their actions will lead to positive results, they are more likely to initiate difficult and uncertain tasks. And, when people believe they have some degree of control over task success (e.g., self-efficacy), they are more likely to persist under difficult or failing conditions (Bandura 1982, 1991). Thus, because positive emotion increases tendencies toward optimism and perceived control, we would expect greater task activity and perseverance. Indeed, as Taylor and Brown (1988) point out, the link between happiness and activity has been suggested by observers of human behavior going back to Aristotle.

A study by Seligman and Schulman (1986) is illustrative of the predicted effects of optimism on task persis-

tence. These researchers divided a sample of 103 new life insurance agents on measures of dispositional optimism, using measures of how people typically attribute the causes of success versus failure rather than simple assessments of expected outcomes. Seligman and his colleagues (e.g., Abramson et al. 1987) have argued that people with pessimistic coping styles will construe bad events in their lives as resulting from internal ("it is my fault"), enduring ("it will go on forever"), and global causes ("it will ruin everything that I do"). In contrast, people with optimistic coping styles believe that bad events are due to external, temporary, and local causes. Results from the life insurance study showed that optimists remained on their jobs at twice the rate of pessimists and sold more insurance than pessimists. These results are particularly interesting because insurance agents repeatedly encounter failure, rejection and indifference from clients—that is they must work on a task in which persistence is necessary for success. Other research on optimism has yielded similar results. For example, college freshmen with optimistic coping styles were shown to have higher grade point averages than those with pessimistic styles (Peterson and Bennett 1987). Also, controlling for prior levels of achievement, school children with optimistic styles subsequently performed better on standardized achievement tests than students who had pessimistic styles (Nolen-Hoeksema et al. 1986).

Enhanced Cognitive Functioning. Although people who are happy may be more active and persistent on tasks, they may be less accurate in their cognitive functioning. Research has shown, for example, that the more depressed an individual is, the less susceptible he or she is to cognitive biases such as overconfidence, self-serving attributions, and illusions of control (e.g., Sweeney et al. 1982, Kuiper 1978, Alloy and Abramson 1979). Such "sadder but wiser" effects have also been supported by attitude change experiments. Using various mood manipulations, persuasion studies have found that those in positive moods tend to be less sensitive to the quality of arguments than those in negative affective states. That is, when a person is happy a strong argument is not much more persuasive than a weak argument; but when a person is in a negative mood, he or she is much more likely to be persuaded by a strong than a weak set of arguments (see Mackie and Worth, 1991, Schwartz et al. 1991 for reviews).

In opposition to these "sadder but wiser" findings is an extensive stream of research linking positive emotion and *enhanced* cognitive functioning. These "happier and smarter" studies indicate that subjects induced to be in good moods are more likely, compared to those in a bad mood or subjects in a control group, to use efficient and rapid problem-solving strategies (Isen and Means 1983). Other experiments suggest that subjects in good moods take greater risks in hypothetical situations or when the chances of winning are high (Isen et al. 1982, Isen and Patrick 1983, Isen et al. 1990). In contrast, in situations where the possibility for loss is large or salient, positive affect appears to lead to cautious behavior (Isen and Geva 1987, Isen et al. 1988). Thus, positive emotion may foster decision-making designed to maintain one's positive state —taking risks when success appears likely, yet being cautious when the odds appear slim.

There has also been research on the connection between mood and creative problem-solving. Positive affect appears to promote more connection and integration of stimuli. Subjects induced to be in good moods generate a broader range of associations with common words, recall longer lists of words that are related to one another, and are more likely to solve problems that require seeing a broader set of potential relationships among the elements composing an issue (Isen and Daubman 1984, Isen et al. 1985, Isen et al. 1987). Furthermore, research on negotiation by Carnevale and Isen (1986) indicates that people in good moods are more likely to reach integrative rather than compromise solutions. Because integrative solutions require more creativity, Carnevale and Isen assert that this finding shows that positive affect promotes creativity during negotiations.

It may be possible to reconcile the "sadder but wiser" and "happier and smarter" literatures by noting that the consequences of positive and negative affect can depend on the task involved. For example, if the task requires cognitive processing that is rapid, based on heuristics and broad integrative categories, then individuals with positive affect may have an advantage. In contrast, when a task requires tighter information processing, with more careful attention paid to detailed arguments and data, then people with negative affect may have an advantage (Schwartz and Bless 1991). Although such a contingency approach to affect makes conceptual sense, it has not yet been upheld in any direct tests. Staw and Barsade (1992) used a three-hour managerial decision exercise to see whether affective disposition would predict performance in a detailed decision-making task. They gathered data on whether MBA students with negative emotion were more careful in their decisions, used more information, and recognized the interrelationships of various decision elements. None of the "sadder but wiser" hypotheses were upheld. Those who were positive in emotion

made better decisions and displayed more evidence of accurate information processing in the managerial simulations. Given these results, one might logically expect that positive emotion will, on balance, enhance cognitive functioning in organizational settings.

Responses of Others to Employees

Figure 1 proposes that positive emotion has three sets of effects on employees' relationships with others. First, employees with positive emotion will be viewed as more interpersonally attractive. Second, employees who have positive affect will tend to be rated by others as having a wide range of desirable traits, even when others lack information about such traits. Third, more likable people have more success at wielding social influence over others. Taken together, these patterns suggest that people with positive affect will be viewed by others as more deserving of incentives and support on the job.

Interpersonal Attraction. The most direct evidence that people with positive rather than negative emotion are more interpersonally attractive is found in research on depression. Coyne (1976) conducted an experiment in which 45 undergraduate students were each randomly paired with a stranger and engaged in a 20-minute unstructured telephone conversation with the stranger. The set of strangers comprised 15 depressed psychiatric outpatients, 15 nondepressed psychiatric outpatients and 15 controls. Compared to subjects in the other two groups, those who talked to depressed outpatients were less willing to engage in future interactions with the strangers. Subjects in the experimental group also reported that, after the interaction, they were more depressed, anxious, and hostile than subjects who talked to nondepressed patients and controls.

The literature on social support also provides some indirect evidence that positive emotion leads to interpersonal attraction. Cross-sectional field studies consistently have found positive relationships between social support and indicators of pleasant emotion such as life satisfaction, self-esteem, lack of depression, and lack of anxiety (e.g., Caplan et al. 1980, House 1981, Ganster et al. 1986). These findings usually are portrayed as evidence that people who receive aid, affirmation and emotional support from others use these resources to enhance their mental well-being. But these data may also reflect the opposite causal relationship: positive emotion may lead others to provide social support. Those who are emotionally positive may be viewed as more interpersonally attractive. Providing emotional and tangible assistance to a happy person provokes good feelings in the helper, who will then seek the

experience again. In contrast, providing support to an unhappy person may provoke unpleasant feelings in the helper, who may then shun the unhappy person. Evidence for this effect is provided by a recent longitudinal field study of 486 men by Vinokur et al. (1987). They reported that people who had a generalized negative outlook on life (e.g., lacked self-esteem and resented others) at time 1 later reported receiving less social support from significant others, and that their significant others (wives and close friends) reported giving them less subsequent support as well.

Halo. The notion that people with positive emotion (and who are more likable) have an advantage when observers evaluate their other traits is an old and persistent theme in the social sciences. Asch's (1946) classic research on impression formation suggested that the warm-cold dimension was a central trait that colored the perceptions of numerous other traits, despite a complete absence of information about those traits. Two groups of subjects were each presented a list of a person's traits; the lists differed only in that the word "warm" appeared in one list and the word "cold" appeared in the other list. Pronounced differences between the "warm" and "cold" groups included subjects ratings of the hypothetical person as "generous" (91% versus 8%), "wise" (65% versus 25%), and "good-natured" (94% versus 17%). Asch's findings are often interpreted as an example of halo error (e.g., Cooper 1981), a widely observed effect that occurs when one salient feature of a person being evaluated colors judgments made about that person across a wide range of dimensions.

The notion that employees' positive emotion causes halo error when others evaluate their performance is reflected in a wide range of research. A correlational study by Alexander and Wilkins (1982) found that the extent to which supervisors liked subordinates was a stronger predictor of supervisors' performance appraisals than objective indicators of subordinate performance. Similarly, several experimental studies found that indicators of ratee positive affect including satisfaction (Smither et al. 1989), lack of nastiness and coldness (Krzystofiak et al. 1988), as well as liking (Cardy and Dobbins 1986), led others to make inflated evaluations of ratee performance.

The halo effect also is implied by literature on selection interviews. Typically, several videotapes of simulated job interviews are presented to subjects, each with varying levels of displayed positive emotion such as smiling, hand gesturing and eye contact. These experiments consistently reveal that interviewees who display greater positive emotion through nonverbal be-

havior are more likely to be rated as desirable employees (e.g., Imada and Hakel 1977, McGovern and Tinsley 1978, Rasmussen 1984). Forbes and Jackson (1980) report a similar finding in their field study of applicants for engineering apprenticeships.

The halo effect often demonstrated in both the performance evaluation and selection literatures does not mean that positive emotion can always substitute for objective qualifications or performance. No doubt, the display of positive emotion combined with very poor credentials can be interpreted as a sign of ingratiation by applicants. Likewise, positive emotion combined with performance that is viewed as deficient, could make the employee appear even weaker to the evaluator. These caveats notwithstanding, positive emotion is usually a beneficial contributor to performance and employment evaluation. Logically, one would expect halo effects to be most prevalent in cases where there are not many objective differences in performance among candidates and where performance indicators are inherently ambiguous: two prevalent conditions in work organizations. Although the applied psychology literature treats positive emotion as a source of distortion in performance evaluations, the focus here is on the consequences of positive emotion for the individual. From the employees' vantage point, any increase in evaluated performance due to positive emotion constitutes a favorable or successful outcome at the workplace.

Social Influence. As we noted, the literature on interpersonal attraction indicates that people who have positive affect are more likable than those with negative affect. Writings on social influence suggest, in turn, that people who are more well-liked are more successful at persuading others to comply with their requests (e.g., Drachman et al. 1978). In summarizing this research, Cialdini (1984) argues that the use of liking to produce assent from others is so widely known that some sales jobs are designed so that occupants will only sell products to people who already know and like them (e.g., at Tupperware parties). Similarly, when they must sell products such as cars or encyclopedias to strangers, Cialdini contends that the salespersons' "strategy is quite direct: They first get us to like *them*" (p. 165). As an extreme example, Cialdini describes Joe Girard, listed in the *Guinness Book of World Records* as the world's greatest car salesman, who regularly sent out 13,000 greeting cards each month to customers and potential customers. The greeting on the front varied with the season, but the message inside was always simply: "I like you."

Likeability may not be the only way that people with positive emotion wield social influence. As we have learned from research on social information processing (Salancik and Pfeffer 1978, Zalesny and Ford 1990), positive and negative emotions are infectious, spreading from one person to another. And when a person is in a positive emotional state, he or she may be highly susceptible to social influence. As noted above, experiments have shown that, when a person is in a good mood, he or she may not pay close attention to the quality of arguments in a message, with the result being that weak arguments can be just as persuasive as strong arguments for those in positive as opposed to negative emotional states (see Schwartz et al. 1991).

Thus, people may comply with more requests from people with positive (rather than negative) emotion for several reasons. First, people who display positive emotion may put others in a good mood, making them susceptible to weak as well as strong arguments in persuasion attempts. Second, as Fiske and Taylor (1991) note, people who are in good moods take steps to maintain their pleasurable state. Coworkers and superiors may therefore say "yes" to positive employees in order to encourage further pleasant interactions with such employees. Finally, the norm of reciprocity (Gouldner 1960) provides a third explanation for this social influence. Positive emotion may, in itself, be viewed as something of value that an organizational member gives to others. As a result, others may feel obligated by the rules of exchange to reciprocate by saying "yes" to their requests. Regardless of the theoretical mechanism, we can infer from the literature on social influence that—all other things being equal—employees who have more positive emotion may be more successful when they make requests for higher pay, more interesting work, and other desirable outcomes available at the workplace.

Employees' Reactions to Others

Helping Behavior. Experimental research on altruism has consistently shown that people who are induced to be in positive moods are more likely to be helpful to others. Subjects who experience success at tasks are more likely to help others (e.g., Berkowitz and Conner 1966, Isen 1970, Isen et al. 1973), as are subjects who find a dime in a telephone booth (Isen and Levin 1972), or are given free stationery (Isen et al. 1976). In summarizing this research, Isen (1984) concludes that positive affect consistently brings about greater sociability and benevolence.

There is not yet firm agreement about the explanation for this "feel good, do good" phenomenon. One explanation is that being in a good mood is reinforcing,

and helping others is a form of self-reward that enables a person to maintain this pleasurable state (Fiske and Taylor 1991). Another explanation is that people who are in good moods are generally more attracted to others (e.g., Gouaux 1971, Mehrabian and Russell 1975, Bell 1978). As the literature on social influence suggests, people are more willing to help people they like compared to those they dislike. The implication is that, compared to employees who are usually grouchy, employees in good moods are more helpful to others because they find themselves liking a larger proportion of people encountered at the workplace.[2]

The hypothesis that positive emotion leads to more altruism also is suggested by the emerging body of theory and research on organizational citizenship developed by Organ and his colleagues (see Organ 1988). Organizational citizenship reflects contributions made by employees at the workplace that go beyond formal role expectations. Organ summarizes a series of cross-sectional studies indicating that job satisfaction is among the most robust predictors of organizational citizenship behaviors, even when self-reports of job satisfaction are correlated with independent reports of citizenship. George and Brief (1993) make a similar argument that a positive mood at work is likely to contribute to organizational spontaneity. They note that positive emotion can be linked with helping co-workers, protecting the organization and spreading goodwill. Such contributions by the employee may be reciprocated by others in the organization through the allocation of more favorable performance evaluations, higher pay, desirable tasks and both supervisor and peer support.

Hypotheses

Our review of the literature, summarized in Figure 1, shows that one can expect positive emotion to have a range of favorable results. As we noted, much of the existing literature shows that positive affect has beneficial consequences in terms of cognition, interpersonal attraction, and helping behavior. Yet this prior literature has been relatively silent on consequences at the workplace from the individual's point of view. We know relatively little about whether positive emotion translates into greater achievement, better job assignments, and a richer social environment for individuals working in organizational settings. Such questions will be the main focus of the present research effort.

One might expect that cognitive improvements (such as greater persistence and creativity) will be reflected in greater achievement by employees. For example, if positive emotion improves cognitive functioning, one might also expect parallel improvements in performance, if the job entails cognitive requirements. Of course, performance in the organizational context can depend as much on interpersonal as cognitive functioning (e.g., the ability to get along with others may be as important as doing good individual work). In such cases, positive emotion might contribute to achievement via interpersonal functioning. Finally, regardless of actual performance, one can expect that the display of emotion will influence the assessment of achievement and allocation of rewards by others. Prior research, for example, has shown that positive affect is a systematic source of halo in performance evaluations (Cardy and Dobbins 1986, Smither et al. 1989). There is also experimental evidence that subordinates who engage in ingratiation by acting friendly and offering compliments are more likely to receive pay raises from supervisors than subordinates who do not engage in ingratiation (Kipnis and Vanderveer 1971). Although such effects are often considered a source of bias or error, especially in the literature on performance evaluations, we consider these improvements in ratings and rewards as achievements in their own right, at least from the individual's point of view. Thus, due to the subjective as well as objective influences of positive emotion, we propose:

HYPOTHESIS 1.   *Employees with greater positive emotion will receive more favorable evaluations of their performance and higher pay.*

In addition to rated performance and pay, another valued outcome is the work itself. Job design research has shown that most people desire an enriched job with characteristics such as variety, significance, identity, feedback and autonomy (Hackman and Oldham 1980). In addition, Oldham and his colleagues have shown (Oldham et al. 1982, Oldham et al. 1986) that job characteristics can operate like other more tangible rewards in creating satisfaction or dissatisfaction among employees. Workers apparently compare themselves with others on job dimensions and can experience deprivation when others have more enriched jobs. Like money and other readily recognized resources (Foa 1971), an enriched job may have both personal and social meaning. It may be a symbol that one's position in the organization valued by others (Salancik and Pfeffer 1978).

Positive emotion can be expected to influence job enrichment through three principal routes. First, if positive emotion leads to an actual improvement in

work performance, then a more difficult or complex job assignment might logically follow. Second, the same logic applies to any positive halo or bias resulting from an employee's positive emotionality, because it is the perception (not the reality) of an employee's ability that determines a supervisor's view of whether the person can handle a job assignment. Third, the literature leads us to expect that positive employees are more successful in persuading supervisors and others in the organization to give them more interesting work. Because they are well liked, supervisors may offer positive individuals better assignments and yield more readily to their requests for more enriched jobs. Thus, we propose:

HYPOTHESIS 2. *Employees with greater positive emotion will receive more enriched jobs.*

Our third hypothesis concerns the social context of work. Employees with positive emotion may be more likely to receive social support, since their supervisors and coworkers use psychological and technical assistance as rewards for good performance. For example, if those with positive emotion are likely to be better performers in terms of persistence or decision making, then both superiors and coworkers may offer more support to such people. Likewise, if those with positive emotion are more helpful in work situations, then coworkers and supervisors may "repay" such citizenship with supportive actions. Finally, positive employees may receive more social support simply because interaction with them is more reinforcing than with negative employees. Thus, we contend that others are supportive of positive individuals because of the rewarding qualities of positive emotion itself, and because support serves as compensation for valued actions contributed by those in a positive state.

We treat social support as a favorable outcome for the employee for several reasons. People who receive more tangible and emotional assistance from their supervisors are, by definition, engaging in more frequent interaction with higher ranking members of the organization, suggesting that they are valued by those in power. Social support from coworkers is also a valued work outcome since employees can use it to protect themselves from occupational stress and health problems (Cobb & Kasl, 1977; House, 1981). Finally, because most people value social interaction on the job (Locke, 1976), social support is by itself a positive consequence of working, a reward that may often rank alongside money and the task as important personal outcomes from employment. Thus, we propose:

HYPOTHESIS 3. *Employees with greater positive emotion will receive more social support from supervisors and coworkers.*

An Exploratory Test
As we have noted, positive emotion may have a number of direct and indirect consequences. Most of the prior literature has outlined relationships between emotion and what we have labeled intervening variables in Figure 1. These proximal or intermediate relationships (perhaps with the exception of some aspects of cognitive functioning) have been validated by enough prior research as to be relatively uncontroversial. In contrast, there has been little research linking affect to the more distal outcomes of employees. Thus, the present study will address the three major hypotheses concerning the relationship between positive emotion and employee outcomes.

Much theory and research suggests that job performance may cause job satisfaction (Petty et al. 1984). Similarly, laboratory researchers have found that success can be used to induce positive mood among subjects (Isen and Shalker 1982, Weiner and Graham 1984). As a result, this test of the framework presented here uses a longitudinal design in which positive emotions were measured well before indications of favorable outcomes suggesting success at the workplace.

In testing the three hypotheses outlined above, an ideal research design might not only examine prior and subsequent levels of the consequences of emotion, but also the intervening variables underlying the relationships between emotion and employee outcomes. The study that follows is more limited and exploratory. We use a data set that contains good measures of both work outcomes and emotionality, but unfortunately does not allow a test of the intervening processes. The analyses that follow should thus be viewed as testing the plausibility of the model in Figure 1 rather than its accuracy. If relationships between positive emotion and employee outcomes can be established, then the processes underlying such relationships become plausible, if not proven. The contribution of this preliminary test is that it underscores the value of subsequent research. If overall relationships are discovered between emotion and employee outcomes, it then becomes important to study the relative contribution of each of the processes underlying these effects.

Methods
Sample
The present study uses data collected by The University of Michigan's Survey Research Center for a study

of "Effectiveness in Work Roles: Employee Responses to Work Environments" (Quinn 1977). Data were collected at two times, separated by 18 to 20 months. Time 1 data were gathered in Winter 1972. Time 2 data were gathered in Fall 1974. The panel sample for both periods included 272 employees of three midwestern organizations: a hospital and two manufacturers of automobile accessories. The sample was composed of 152 men and 120 women. The mean age was 37.58. For further details about the sample, see writings by Glick et al. (1986), Gupta and Beehr (1982), Jenkins et al. (1975), and Quinn (1977).

Data Sources

A primary aim of the Effectiveness in Work Roles study was to use multiple methods to measure attributes of and responses to work. The present study uses data gathered with four different methods. First, we used data collected through face-to-face interviews with employees. Professional interviewers from the Survey Research Center staff administered these interviews, typically at respondents' homes. The interview questions and format were based on the interviews used in three national studies of the quality of employment (see Quinn and Staines 1979). The interview included a variety of methods to gather self-report data from respondents including closed-ended and open-ended questions that required oral responses, and several brief questionnaires. The interview also included card sorts, a method in which cards with questions or statements are sorted into piles representing different response anchors. Second, at the end of each interview, the interviewer recorded his or her observations of several characteristics of the employee, including gender and apparent intelligence.

Third, structured field observations were made by observers while each employee performed his or her job. These observers had two days of intensive training. At time 1, each employee was watched at work by at least two different observers on two different occasions. At time 2, only 147 of the 272 employees who participated were watched because no time 2 observations were made at one of the automotive plants. Of these 147 employees, 100 were watched by a single observer; the remaining 47 were watched by three observers, once by a single observer and once by a pair of different observers who watched simultaneously. Employees were watched by different observers at time 1 and time 2. Each observation period lasted between 60 and 90 minutes. The observer recorded information about participating employees and their jobs in a structured observation booklet. In all, more than 1,500 hours of

structured observations were made during the study. Jenkins et al. (1975) report that these observations have satisfactory inter-rater reliability. Further descriptions of this methodology can be found in Jenkins et al. (1975), Glick et al. (1986), and Quinn (1977).

Fourth, and finally, a supervisor rating form was developed for use in the Effectiveness in Work Roles study. Employees were evaluated on eight aspects of their work behavior at both time 1 and time 2. This one page instrument was completed by the employee's immediate supervisor and then mailed directly to the Survey Research Center.

Measures

The predictor, dependent and control variables used in this study are described below. The Appendix presents a complete list of the items that compose each scale, along with information about the number of response anchors, data source, and scoring (positive or negative) for each item.

Predictor Variable. Our conceptual approach to measuring emotion follows the assertion of Zajonc et al. (1989) that "Despite disagreement about the taxonomic boundaries of emotion labels, there is virtually full agreement about one important fact—emotions can be discriminated from each other quite reliably according to their positive-negative hedonic polarity. Many theorists consider this polarity to be a fundamental feature of all emotions." (p. 401). Zajonc et al. note further that "A focus on the one dimension about which there is general consensus—hedonic polarity—might well be most fruitful for research at this time" (p. 412, 1989). In this vein, rather than focusing on subtle differences in taxonomic boundaries, we emphasize similarities among the lessons researchers have reported under a wide range of labels for pleasant and unpleasant emotions. This emphasis on integration rather than differentiation is most useful for developing and testing general theory about the consequences of positive emotion at work. Such integration frees us from taking constant digressions to explain largely minor differences between concepts such as optimism, satisfaction, pleasantness, happiness, absence of work-related depression, high positive emotion and low negative emotion. Thus, although some recent literature has drawn finer distinctions between aspects of positive emotion, especially between positive and negative affect (Watson and Tellegen 1985), we treat positive emotion as a single dimension to predict employee outcomes.

Our major predictor variable, positive emotion at work, was operationalized by a composite scale mea-

suring the extent to which employees felt and expressed positive emotion on the job at time 1. To construct this scale we first used a modified and reverse-scored version of Quinn and Shepard's (1974) 10 item work-related depression scale. The ten items in Quinn and Shepard's depression scale were drawn from the 20 item Zung Self Rating Depression Scale (Zung 1965). Quinn and Shepard reported that this 10 item subscale correlates 0.95 with the original scale. We then added two other self-report items to this scale. The first asked the extent to which the employee felt happy or sad at work. The second asked employees to report their level of pep and energy on a seven-step ladder. We included this item because feeling energetic and alert rather than sluggish indicates absence of depression. In addition to the 12 self-report items, we included three items from the trained observers indicating how often the employee smiled, laughed or said something funny. These observational data were added because they provided an independent assessment of the employee's positive emotion. Combined together, these 15 items formed a reasonably reliable scale (Cronbach's alpha equaled 0.74), designed to assess positive emotion in the work role. The scale assessed the tendency to feel and display positive rather than negative emotion on the job at time 1.

Dependent Variables. The dependent variables in this study included two measures of work achievement (supervisor evaluations at time 2 and pay at time 2), one measure of job enrichment (job characteristics at time 2), and two measures of the employee's social environment (supervisor social support at time 2 and coworker social support at time 2).

The same instrument was used to measure *supervisor evaluation* at both time 1 and time 2. Supervisor evaluation at time 1 was used as a control variable in the longitudinal analysis to help partial out the effects of the supervisor's opinion at time 1 on his or her opinion at time 2. Because of employee turnover and changes in supervisors, complete evaluation forms at both time 1 and time 2 were available for only 60 employees. Supervisors were asked to rate their subordinates on eight dimensions: work quality, work quantity, creativity, lateness, dependability, affinity for working, desire for responsibility, and getting along with others. The eight items on this rating form were combined into a single index. Cronbach's alpha at both time 1 and time 2 was 0.92.

Pay from the job (rather than income from all sources) was measured on the interview with the following question: "How much does your income from your job figure out to be a *year*, *before* taxes and other

deductions are made?" The same measure of pay was used on the interview at time 2. Pay at time 1 was used as a control variable in the analysis. Archival information at time 2 was not available for use in this study. However, using the archival data available at time 1, Gupta and Beehr (1982) conducted a study of the correspondence between archival and self-report pay data. They reported that the correlation between the two indicators of income was 0.71.

The measure of *job enrichment* used data gathered by the trained observers. This measure was based on scales developed by Jenkins et al. (1975) and Glick et al. (1986) in prior studies using the Effectiveness in Work Roles data set. This measure operationalizes four dimensions identified by Hackman and Oldham (1980) as features of motivating jobs: task feedback, variety, autonomy and meaning. Task identity, the fifth of Hackman and Oldham's (1980) proposed list of job characteristics, was not included because the observational data did not include measures of task identity at both time 1 and time 2. Items measuring these four job characteristics were combined to form a measure of the overall motivating potential of each employee's job. Cronbach's alpha was 0.96 at time 1 and 0.90 at time 2.

Supervisor support is the extent to which an employee receives emotional and tangible assistance from his or her immediate supervisor. The same scale was used to measure supervisor social support at both time 1 and time 2. Supervisor social support at time 1 was used as a control variable in the analysis. This scale included three items from the supervisor support scale developed by Beehr (1976). The fourth item asked how true it was that the employees' supervisor went out of his/her way to praise good work. Cronbach's alpha was 0.84 at time 1 and 0.79 at time 2.

Coworker support is the extent to which an employee receives emotional and tangible assistance from the members of his or her work group. The same scale was used to measure coworker support at both time 1 and time 2. Coworker support at time 1 was used as a control variable in the analysis. This five-item scale was composed of three items adapted (and modified) from Seashore (1954) and two items developed for the Effectiveness in Work Roles study. Cronbach's alpha was 0.76 at time 1 and 0.68 at time 2.

Control Variables
In addition to measures of the five dependent variables at time 1, the other control variables used in this study were education, age, gender and rated intelligence. These variables were all measured at time 1. Age was measured during the interview. We controlled for age

because it is related to job satisfaction (Janson and Martin 1982), and thus may be related to general affective responses on the job. Moreover, a meta-analysis by Waldman and Avolio (1986) suggests that supervisors tend to give lower performance ratings to older employees. Education was measured through self-report data from the interview. We controlled for this variable because more educated employees may be viewed more favorably by their supervisors and co-workers, and be paid more, regardless of the employees' felt and expressed emotion. Gender was measured through the observations recorded at the end of the face-to-face interview. We controlled for gender because research suggests that women convey more warmth than men (Deaux 1985).

We used a one-item measure of rated intelligence developed by Quinn and Shepard (1974). This five-point scale was completed by the professional interviewer from the Survey Research Center after the 90 minute interview with the employee. Quinn and Shepard (1974) reported that this one item scale correlated 0.72 with intelligence as measured by the Ammons Quick Test (Ammons and Ammons 1962, Traub and Spruill 1982). We controlled for rated intelligence because employees who appear to be intelligent may also be more likely to receive higher ratings and pay from their supervisors.

Results

Table 1 reports means, standard deviations, and inter-correlations for all measures used in this study.

The three hypotheses reflected our general assumption that positive emotion leads to favorable outcomes for employees. Our longitudinal design enabled us to conduct analyses consistent with this causal assumption. We examined the relationship between positive emotion on the job at time 1 and five favorable outcomes on the job at time 2: 18 to 20 months later. Yet, even using this longitudinal design, an alternative explanation is that a relationship between positive emotion and a favorable outcome occurs because of the enduring effects of that favorable outcome on positive emotion at time 1. In order to help control for the prior and concurrent effects of favorable outcomes on positive emotion at time 1, we used a multiple regression procedure similar to that employed by Nolen-Hoeksema and her colleagues (1986) in their longitudinal study of the effects of depression and explanatory style on achievement in school children. For each of the five equations predicting a favorable outcome variable at time 2, we introduced a measure of that outcome at

time 1 as a control. If positive emotion at time 1 was a statistically significant predictor of a favorable outcome at time 2 over and above the effects of that dependent variable at time 1 (and of the other four control variables), then support for our underlying causal assumptions would be found (Pedhauzer 1982).

It could be argued that the 18 to 20 month time interval of this study was not theoretically ideal for testing the effects of positive emotion upon work outcomes. Logically, a 6 to 12 month interval would have allowed enough time for pay, task design or social support to have been influenced by positive affect. The longer interval of this study probably increased the number of exogenous and random influences on the dependent variables, making it harder to find any significant effects of emotion. Thus, one should view the results that follow as a fairly conservative test of the research hypotheses.

The first hypothesis was that employees who had more positive emotion at time 1 would receive more favorable evaluations from their supervisors and higher pay at time 2. The longitudinal findings presented in Table 2 support this hypothesis for both supervisor evaluations and pay. Positive emotion at time 1 had a fairly strong effect on supervisor ratings at time 2 (Beta = 0.31, $p < 0.01$, one-tailed) and had a weak, but significant, effect on pay time 2 (Beta = 0.05, $p < 0.05$, one-tailed). The strongest predictor of both of these dependent variables was the level of that variable at time 1. Education was also a weak (marginally significant), predictor of pay.

The second hypothesis was that employees who had higher levels of positive affect at time 1 would have more observed job enrichment at time 2. The results reported in Table 3 do not support this prediction. Positive emotion at time 1 had a very weak and non-significant relationship to job enrichment at time 2 (Beta = 0.03, ns.). Observed job enrichment at time 1 was a strong predictor of observed job enrichment at time 2.

The third hypothesis was that employees who had positive affect at time 1 would receive more support from their supervisors and coworkers at time 2. The longitudinal findings presented in Table 4 support this hypothesis. Positive emotion at time 1 had a substantial effect on supervisor support at time 2 (Beta = 0.25, $p < 0.01$, open-tailed), and a modest and marginally significant effect on coworker support (Beta = 0.09, $p < 0.10$, one-tailed). The dependent variables at time 1 were significantly, but not strongly, related to themselves at time 2. In addition, age predicted greater supervisor support, while education was a marginally

Table 1 Means, Standard Deviations and Intercorrelations among Study Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Positive Emotion	3.23	0.43	—															
2. Supervisor Evaluation at Time 1	5.51	1.11	0.30	—														
3. Supervisor Evaluation at Time 2	5.18	1.18	0.16	0.58	—													
4. Supervisor Support at Time 1	3.01	0.79	0.33	0.36	0.04	—												
5. Supervisor Support at Time 2	2.83	0.77	0.32	0.13	0.21	0.29	—											
6. Coworker Support at Time 1	3.13	0.55	0.15	0.02	-0.05	0.19	-0.02	—										
7. Coworker Support at Time 2	3.05	0.47	0.14	0.16	0.21	0.21	0.35	0.19	—									
8. Job Enrichment at time 1	3.63	0.73	0.22	0.17	0.18	0.10	0.18	-0.06	0.04	—								
9. Job Enrichment at Time 2	4.32	1.17	0.23	0.34	0.31	0.22	0.24	0.06	0.18	0.61	—							
10. Pay at Time 1	11,069.55	7,098.11	0.12	0.08	0.12	0.02	0.06	-0.03	0.03	0.38	0.25	—						
11. Pay at Time 2	11,809.80	5,989.48	0.24	0.23	0.14	0.01	0.11	-0.02	0.04	0.48	0.32	0.95	—					
12. Education	12.12	2.37	0.04	0.09	0.15	0.08	0.08	-0.06	0.09	0.34	0.38	0.17	0.20	—				
13. Age	34.82	11.89	0.13	0.18	0.02	0.15	0.19	0.03	0.02	0.11	-0.04	0.14	0.14	-0.24	—			
14. Gender	0.49	0.50	-0.09	-0.13	-0.12	0.10	0.00	0.04	0.05	-0.33	-0.05	-0.30	-0.34	0.02	-0.04	—		
15. Rated Intelligence	3.40	0.89	0.15	0.24	0.21	0.11	0.09	-0.10	0.11	0.40	0.40	0.19	0.30	0.51	-0.07	-0.02	—	

Table 2   Work Achievement

Results of longitudinal multiple regression: Beta weights of positive emotion, work achievement variables, and control variables at time 1 as predictors of work achievement at time 2

Predictors	Supervisor Evaluation	Pay
s($n = 191$)		
Positive Emotion	0.31***	0.05**
Dependent Variable at Time 1	0.38***	0.94***
Education	0.14	0.05*
Age	0.23	−0.02
Gender[a]	−0.04	0.02
Rated Intelligence	0.08	0.01
Adjusted R Square	0.41***	0.90***

[a]Gender is coded: 0 = males, 1 = females.
***$p < 0.01$.
** $p < 0.05$.
* $p < 0.10$.

Table 3   Job Enrichment

Results of longitudinal multiple regression: Beta weights of positive emotion, job enrichment, and control variables at time 1 as predictors of job enrichment at time 2

Predictors	Job Enrichment
	($n = 129$)
Positive Emotion	0.03
Job Enrichment at Time 1	0.53***
Education	0.12
Age	0.05
Gender[a]	0.05
Rated Intelligence	0.04
Adjusted R Square	0.35***

[a]Gender is coded: 0 = males, 1 = females.
***$p < 0.01$.
** $p < 0.05$.
* $p < 0.10$.

Table 4   Supportive Social Context

Beta weights of positive emotion, social context variables, and control variables at time 1 as predictors of social context variables at time 2

Predictors	Supervisor Support	Coworker Support
	($n = 251$)	($n = 209$)
Positive Emotion	0.25***	0.09*
Dependent Variable at Time 1	0.18***	0.16**
Education	0.12*	0.11*
Age	0.17***	0.00
Gender[a]	0.03	0.07
Rated Intelligence	−0.05	0.07
Adjusted R Square	0.15***	0.04**

[a]Gender is coded: 0 = males, 1 = females.
***$p < 0.01$.
** $p < 0.05$.
* $p < 0.10$.

significant predictor of both greater supervisor and coworker support.

Discussion

Our findings suggest that employees who travel through organizational life in a good mood will reap more favorable outcomes from their workplaces in comparison to their more negative counterparts. Four of the five predicted relationships were supported. As Hypothesis 1 predicted, employees who had positive emotion on the job had more favorable supervisor evaluations and greater pay 18 months later, suggesting greater achievement on the job. As Hypothesis 3 predicted, employees with positive emotion at time 1 had greater supervisor and coworker support at time 2, suggesting a more supportive social context. Only Hypothesis 2 was not supported; the proposed relationship between positive emotion and job enrichment was not significant.

Although we presented a preliminary test of the framework summarized in Figure 1, we did not provide a complete test of the model. We did not measure the proposed intervening processes, but instead assumed, on the basis of past research, that positive emotion leads to persistence, enhanced cognitive functioning, and altruism in the employee, as well as to interpersonal attraction, halo, and increased social influence on others. Because most of the hypothesized relationships

between affect and outcomes were upheld, the plausibility of the overall theoretical model was strengthened. Therefore, it is now important for future research to test the relative contribution of each of these intervening variables and to examine whether they do indeed mediate the relationship between positive emotion and favorable outcomes at work.

The results of this study, along with the literature used to develop the model in Figure 1, suggest that

knowledge about the consequences of job attitudes can be enhanced by going beyond traditional correlates of job satisfaction, such as absenteeism and turnover. The findings also suggest that affective measures other than job satisfaction can be useful for predicting important individual outcomes. We used theory and research on constructs related to positive emotion such as optimism, positive and negative affect, and depression to identify a wider range of psychological and social processes likely to bring favorable outcomes to the employee. This wide-ranging literature, along with the preliminary empirical support found for the model proposed here, suggests that an expanded search for the consequences of emotion should continue along several lines of inquiry.

We examined only five dependent variables as indicators of the three categories of favorable outcomes at work. The effect of positive emotion on a wider range of outcomes might be examined. For example, our arguments suggest that, all other factors being equal, employees who feel and express positive emotion on the job may receive more frequent and more substantial promotions, may generate more favorable impressions among clients, may receive more outside offers for employment, and may be trusted more by peers and supervisors. Further, although the model presented here focused on the link between positive emotion and outcomes that are favorable to the employee, many of our arguments could easily be extended to explain outcomes that are also favorable to the organization. Certainly, the literature that shows people with positive emotion working more persistently, more quickly, and with more creativity implies a direct link between affect and organizational outcomes. However, as Staw et al. (1986) note, a crucial moderator may be whether the work role can be best served through enthusiasm and action versus a more critical (and perhaps negative) posture. This may be an important dilemma for future research to solve empirically.

The model developed here suggests that organizational researchers may also have devoted insufficient attention to the influence of emotion on social relations at the workplace. Job satisfaction research typically considers how employees act in isolation in the work context. In contrast, the emphasis here on the broader literature on positive emotion, along with our findings that employees with positive emotion received greater support from supervisors and coworkers 18 months later, suggests that emotion shave a significant influence on peers and superiors. This research suggests that positive emotion may bring about tangible rewards, at least in part, through its effects on relationships with others. It is, of course, not yet clear whether positive emotion yields interpersonal benefits because of real or imagined contributions by the individual. Additional research is needed to examine whether positive emotion actually improves group and interpersonal functioning in organizations, as well as the particular types of organizations in which such effects might be greatest.

The basic psychological literature on emotion not only suggests a wider range of consequences for job attitudes; it also suggests a wider set of determinants. Already, the broader formulation of job attitude research mentioned at the outset of this paper has opened organizational research to enduring (Staw et al., 1986) and even genetically-based dispositions (Arvey et al. 1989), along with social information processing (Salancik and Pfeffer 1978), as predictors of positive emotion.[3] However, the broad psychological literature on positive emotion suggests still other important determinants that have been given little empirical or theoretical attention by organizational researchers. In spite of the early work by Roethlisberger and Dickson (1946) and Herzberg (1966), organizational researchers have devoted only modest attention to physical characteristics of the workplace as predictors of employee outcomes. The psychological literature suggests that simple physical variables such as noise, crowding and temperature are powerful determinants of mood. For example, there is consistent evidence that high temperatures bring about a negative mood (Anderson 1989, Zajonc et al. 1989). These findings, when combined with the model presented here, suggest that simple physical variables (or what have been labeled "hygiene factors") may ultimately have an overlooked influence on the outcomes that employees receive from the workplace. Supporting this position have been recent studies on the effects of physical space on job attitudes (e.g., Oldham and Rotchford 1983, Hatch 1987), and some provocative research by Baron (1992) on the consequences of both lighting and scent. When people work under lighting conditions that are favorable in terms of illuminance and spectral distribution, they appear to set higher work goals, resolve conflicts more cooperatively, and exhibit more creative thinking. Baron (1992) also reports that similar results have been found when individuals work in the presence of pleasant rather than unpleasant scents.

Our general perspective emphasized that employees with positive emotions will be more successful in organizational life than employees with negative emotions. We do not, however, wish to convey the impression that negative emotions will always lead to unfavorable

outcomes. Research is needed on the conditions under which employees' negative emotions benefit both themselves and their organizations. It seems plausible, as noted by Staw et al. (1986), that negative emotions may be functional in a job in which critical evaluation is an important part of the role (e.g., an inspector or a resource allocator). Likewise, the use of heuristics and the speed of response often associated with positive affect (Isen and Means, 1983, Isen et al., 1982) may not be applicable in situations in which cautious and deliberate decision-making is needed.

There also may be hidden costs to conveying positive emotion in interactions with subordinates, peers and superiors. Employees who respond to interruptions from others by being positive or friendly may reinforce such behavior, and thus be interrupted with increasing frequency. As a result, warm and friendly employees may be unable to get their work done, while negative or hostile employees—whom others may dread interrupting—may be more productive because they work with fewer diversions (Pfeffer, 1989). Dissatisfaction and negative emotion may also lead to constructive conflict. Bell and Staw (1992), for example, found that students who were the least satisfied with their MBA program were the ones who made the greatest number of suggestions for the program's improvement.

Similarly, Janis (1989) has emphasized that poor decisions may be made by groups composed of members who have strong interpersonal attraction, that express positive feelings to one another, and avoid unpleasant open conflict. He describes this situation as groupthink, a decision-making pathology of highly cohesive groups that suppress dissent and have the optimistic illusion that they are invulnerable. His work suggests that groups that are characterized by excessive positive emotion will make poor decisions because members do not critically evaluate each decision and its consequences. Janis posits that encouraging argumentation, and thus a moderate level of expressed negative emotion, will help groups engage in critical thinking.

Finally, it should be noted that there are some occupations in which employees who express negative emotions garner social and financial rewards from the organization. For example, bill collectors and police interrogators are paid, in part, for the expression of negative emotions that degrade the self-esteem of others, so as to convince them to pay their overdue bills or to confess a crime (Hochschild 1983, Rafaeli and Sutton 1989). Nonetheless, even in occupations where people are paid for acting in a negative manner, a closer examination reveals that employees are re-warded for being friendly to their superiors and coworkers, and that acting nasty is only one of the many social influence strategies used during interactions with a recalcitrant public (Rafaeli and Sutton 1991, Sutton 1991).

Conclusion

This study was not meant to provide a definitive answer to how emotion shapes behavior and outcomes in organizations, but to help open the topic for serious research. We have attempted to map the likely consequences of positive affect in organizations and to point to its most plausible mediatory processes. This study should therefore be viewed as an early step in a broad campaign—a long-term program of research that may ultimately link the myriad of human emotions with a set of relevant outcomes for both individuals and work organizations.

This research cast its conceptual net beyond the job satisfaction literature. The perspective proposed here implies that organizational researchers may have devoted too much effort in defining and measuring job satisfaction and not enough time exploring the broader implications of emotion in the workplace. The present study focused on what is probably the most widely-studied, and most widely agreed-upon dimension of human emotion, the positive-negative continuum (Zajonc et al. 1989). But other possible emotions are also candidates for study in the organizational context. For example, it may be fruitful to delineate reactions to stressful jobs into specific emotions such as fear, frustration, dread and fatigue, since the consequences of these specific emotions may differ from that of the more global construct of distress. Likewise, instead of using broad concepts of job involvement such as organizational identification or internalization, it may be important to assess specific emotions that occur at work such as pride, joy, hope and excitement. Finally, rather than treating the emotions of guilt and jealousy as (usually unmeasured) mediating processes in equity models (Adams 1965), it may be useful to consider these emotions as interesting variables in their own right. Just as Stearns and Stearns' (1986) writings imply that the experience and control of anger may have an important influence on employee success, the occurrence and management of many emotions may have direct effects on work outcomes.

From the above discussion it should be clear that positive affect, though important, is not the only emotional state of relevance to organizational behavior. Ideally, future research will start to explore the full

etiology of emotions at work and match these with likely organizational and personal consequences. A second challenge will be to explore the transmission of various emotional states throughout the organization. Already there is social psychological research on the interpersonal transmission of emotions such as fear and anxiety (Kerckhoff and Back 1968, Barley and Knight 1992). Negative emotion may likewise spread rapidly in organizations, creating job dissatisfaction that is endemic to the setting. Positive emotion, in contrast, may be slower to build and more dependent on objective improvements in outcomes. By understanding the transmission of emotion in organizations, we can start to identify how people determine the interpersonal environments in which they work (Schneider 1987) and how psychological states may ultimately influence organizational norms and structures (Staw and Sutton 1992).

In closing, however, it is interesting to view the implications of the theory and data presented here for the vast job satisfaction literature. Although it is a widely accepted truism that job satisfaction has little or no impact on employee performance, our conceptual perspective and supporting evidence suggests that this truism may require some modification. First, because the concept of positive emotion is a broader (and perhaps more dispositional) construct than job satisfaction, it is likely that its effects are more widespread and enduring than those of satisfaction. Second, when one shifts the dependent variables of interest from organizational to employee outcomes, as we have done in this research, the effects of job attitudes may become larger. This shift has particularly striking implications for the literature on employee performance evaluations. When one adopts the employee's perspective instead of the organization's perspective on performance evaluations, job satisfaction is transformed from a source of unwanted measurement error to a way of getting ahead at work. More generally, our theory and data imply that even if employee attitudes have little or no impact on aspects of performance that benefit the organization, displaying and feeling positive attitudes on the job may cause organizations to perform in ways that benefit upbeat employees.

Acknowledgements

Appendix

We list below the items composing the scales used in this study. Each item is followed by parentheses. The first symbol in parentheses indicates the source of data for an item: I = respondent self-report during the 90 minute structured interview; IO = observations made of the respondent by the interviewer at the end of the structured interview; TO = structured observations made by trained interviewers; and S = evaluations reported by the respondent's immediate supervisor. The second symbol in parentheses indicates the number of response anchors used for the item. The third symbol in parentheses indicates whether the item was positively or negatively coded. Positive ($+$) coding means that larger values reflect more of the construct; negative ($-$) coding means that larger values reflect less of the construct.

Items Measuring Positive Emotion

How often do you feel this way at work?
I feel down-hearted and blue. $(I, 4, -)$
I get tired for no reason. $(I, 4, -)$
I find myself restless and can't keep still. $(I, 4, -)$
I find it easy to do the things I used to do. $(I, 4, +)$
My mind is as clear as it used to be. $(I, 4, +)$
I feel hopeful about the future. $(I, 4, +)$
I find it easy to make decisions. $(I, 4, +)$
I am more irritable than usual. $(I, 4, -)$
I still enjoy the things I used to. $(I, 4, +)$
I feel that I am useful and needed. $(I, 4, +)$

How do you see yourself in your work?
Sad/Happy $(I, 7, +)$

Here is [a picture of a] ladder. [It] describes how much pep and energy a person has. The top of the ladder indicates always being full of pep and energy, and the bottom of the ladder represents never having any pep or energy. Please tell me which step on the ladder indicates how much pep and energy you've had lately. $(I, 7, +)$

Check the column that indicates how often the employee did each of the following:
Smiled. $(TO, 4, +)$
Chuckled or laughed. $(TO, 4, +)$
Said something that he/she might have expected to "get a laugh" from someone. $(TO, 4, +)$

Items Measuring Supervisor Evaluation

Check the box on each line that best describes [the person who reports to you]:
Does very high quality work/Does very low quality work. $(S, 7, -)$
Does a large amount of work/Does very little work. $(S, 7, -)$
Very dependable/Very undependable. $(S, 7, -)$
Always arrives on time/Always late. $(S, 7, -)$
Very creative/Not at all creative. $(S, 7, -)$
Likes working very much/Dislikes working very much. $(S, 7, -)$
Enjoys having responsibility/Avoids having responsibility. $(S, 7, -)$
Gets along well with other people/Doesn't get along well with other people. $(S, 7, -)$

Items Measuring Supervisor Support

Please tell [the interviewer] how true each statement is of [your supervisor]:

Stands up to outsiders for the people he/she supervises. ($I, 4, +$)
Takes a personal interest in those he/she supervises. ($I, 4, +$)
Keeps informed about the way his/her people think and feel about things. ($I, 4, +$)
Goes out of his/her way to praise good work. ($I, 4, +$)

Items Measuring Coworker Support

How good are [your coworkers] about giving you the help you need to do your job? ($I, 4, +$)
How well do you feel that [your coworkers] share with you and among themselves news about important things that happen at (STUDY EMPLOYER)? ($I, 4, +$)
How well do you feel that [your coworkers] get along together? ($I, 4, +$)
How well do you feel that [your coworkers] stick together? ($I, 4, +$)
How ready are [your coworkers] to defend each other from outside criticism? ($I, 4, +$)

Items Measuring Observed Job Characteristics

How much variety is there in the job? ($TO, 7, +$)
The job requires an individual to do the same things over and over again. ($TO, 6, -$)
The job provides an individual the opportunity to do a number of different kinds of things at work. ($TO, 6, +$)
How much autonomy is there in the job? ($TO, 7, +$)
The job *denies* the individual any chance to use his/her personal initiative or discretion at work. ($TO, 6, -$)
He/She is given enough freedom to decide how to do his/her work. ($TO, 6, +$)
The job allows an individual to make a lot of decisions on his/her own. ($TO, 6, +$)
To what extent does doing *the job itself* provide the employee with "feedback" about how well he/she is doing? ($TO, 7, +$)
Just doing the work required by the job provides many opportunities for a person to figure out how well he/she is doing. ($TO, 6, +$)
The job is meaningful. ($TO, 6, +$)

Item Measuring Rated Intelligence

Rate [respondent's] apparent intelligence. ($IO, 5, +$)

Endnotes

[1] The more supportive social context may be limited to representatives of the formal organization. Employees who persevere and use enhanced cognitive functioning to do exceptional work may be criticized and shunned by their peers because they are "rate busters" (Lawler 1973).

[2] There is some evidence that the effects of negative and positive mood on helping are not symmetrical. Research by Cialdini and his colleagues suggests that people induced to be in bad moods as a result of some transgression (e.g., knocking a stack of the investigator's computer cards on the floor) are more prone to be help a person in need (see Cialdini et al. 1982). Cialdini developed the Negative State Relief model to explain these findings: Altruism promotes positive feelings, and thus is one of many methods that people can use to return to a good mood when they are in a bad mood. His research indicates that people who are in bad moods can be returned to a good mood by encountering any reinforcer. Thus subjects who commit transgressions, but are given ice cream before being given a chance to help someone, are no more likely to engage in altruism than subjects in neutral moods. The implications of Cialdini's research for the relationship between negative affect and altruism in organizational settings are unclear. Employees may use altruism now and then to break out of foul moods. But we see no reason to expect that employees who generally are dissatisfied or depressed will be more helpful to others at the workplace. Depression is associated with less activity in general and less social interaction in particular. Thus it seems reasonable to expect that people who generally travel through organizational life in a bad mood will have less energy for helping others and will encounter fewer opportunities to do so.

[3] The present study focused on the consequences rather than the causes of positive emotion. Yet, as with prior research suggesting that job attitudes stem partly from stable dispositions (Staw et al. 1986), we did uncover evidence of stability in employee positive emotion during the course of this longitudinal study. The three items measuring displayed positive emotion were not measured at time 2. As a result, we could only calculate correlations between the 12 self-report positive emotion items at time 1 and at time 2. The correlation between positive emotion at time 1 and at time 2 was 0.49 ($n = 267$, $p < 0.001$). In addition, a t-test indicates no significant difference ($p = 0.85$) between the level of positive emotion at time 1 (mean = 3.53) and at time 2 (mean = 3.54).

References

Abramson, L. Y., M. E. Seligman and J. D. Teasdale (1987), "Learned Helplessness in Humans: Critique and Reformulation," *Journal of Abnormal Psychology*, 87, 32–48.

Adams, J. S. (1965), "Inequality in Social Exchange," in L. Berkowitz (Ed.), *Advances in Social Psychology*, 2, 267–299.

Alexander, E. R. and R. D. Wilkins (1982), "Performance Rating Validity: The Relationship of Objective and Subjective Ratings of Performance," *Group and Organization Studies*, 7, 485–496.

Alloy, L. B. and L. Y. Abramson (1979), "Judgments of Contingency in Depressed and Non-depressed Students: Sadder but Wiser?" *Journal of Experimental Psychology: General*, 108, 441–485.

——, —— and D. Viscusi (1981), "Induced Mood and the Illusion of Control," *Journal of Personality and Social Psychology*, 41, 1129–1140.

Ammons, R. B. and C. H. Ammons (1962), *The Quick Test*, Missoula, MT: Psychological Test Specialists.

Anderson, C. A. (1989), "Temperature and Aggression: Ubiquitous Effects of Heat on the Occurrence of Human Violence," *Psychological Bulletin*, 106, 74–96.

Arvey, R. D. and J. E. Campion (1982), "The Employment Interview: A Summary and Review of Recent Research," *Personnel Psychology*, 35, 281–322.

Arvey, R. D., T. J. Bouchard Jr., N. L. Segal and L. M. Abraham (1989), "Job Satisfaction: Environmental and Genetic Components," *Journal of Applied Psychology*, 74, 187–192.

Asch, S. E. (1946), "Forming Impressions of Personality," *Journal of Abnormal and Social Psychology*, 41, 258–290.

Bandura, A. (1982), "Self-efficacy Mechanism in Human Agency," *American Psychologist*, 37, 122–147.

_____ (1991), "Social Cognitive Theory of Self-regulation," *Organizational Behavior and Human Decision Processes*, 50, 248–287.

Barley, S. R. and D. Knight (1992), "Toward a Cultural Theory of Stress Complaints," in B. M. Staw and L. L. Cummings (Eds.), *Research in Organizational Behavior*, Vol. 14, 1–48, Greenwich, CT: JAI Press.

Baron, R. A. (1993), "Affect and Organizational Behavior: When and Why Feeling Good (or Bad) Matters," in K. Murnighan (Ed.), *Social Psychology in Organizations: Advances in Theory and Research*, Englewood Cliffs, NJ: Prentice-Hall, 63–88.

Beehr, T. A. (1976), "Perceived Situational Moderators of the Relationship Between Subjective Role Ambiguity and Role Strain," *Journal of Applied Psychology*, 61, 35–40.

Bell, N. M. and B. M. Staw (1992), "The Functions of Dissatisfaction," Working paper, Johnson School of Management, Cornell University, Ithaca, NY.

Bell, P. A. (1978), "Affective State, Attraction, and Affiliation: Misery Loves Happy Company, Too," *Personality and Social Psychology Bulletin*, 4, 616–619.

Berkowitz, L. (1978), "Do We Have to Believe We Are Angry with Someone in Order to Display "Angry" Aggression toward the Person?" in L. Berkowitz (Ed.), *Cognitive Theories in Social Psychology*, New York: Academic Press.

_____ and W. H. Conner (1966), "Success, Failure, and Social Responsibility," *Journal of Personality and Social Psychology*, 4, 664–669.

Caplan, R. D., C. Cobb, J. R. P. French Jr., R. V. Harrison and S. R. Pinneau Jr. (1980), *Job Demands and Worker Health*, Ann Arbor, MI: Institute for Social Research.

Cardy, R. L. and G. H. Dobbins (1986), "Affect and Appraisal Accuracy: Liking As an Integral Dimension in Evaluating Performance," *Journal of Applied Psychology*, 71, 672–678.

Carnevale, P. J. D. and A. M. Isen (1986), "The Influence of Positive Affect and Visual Access on the Discovery of Integrative Solutions in Bilateral Negotiation," *Organizational Behavior and Human Decision Processes*, 37, 1–13.

Cialdini, R. B. (1984), *Influence: How and Why People Agree to Things*, New York: Morrow.

_____, D. T. Kenrick and D. J. Baumann (1982), "Effects of Mood on Prosocial Behavior in Children and Adults," in N. Eisenberg (Ed.), *The Development of Prosocial Behavior*, New York: Academic Press, 339–359.

Cobb, S. and S. V. Kasl (1977), *Termination: The Consequences of Job Loss*, HEW Publication No. (NIOSH) 77-224, Washington, DC: U.S. Department of Health, Education and Welfare.

Cooper, W. H. (1981), "Ubiquitous Halo," *Psychological Bulletin*, 90, 218–244.

Coyne, J. C. (1976), "Depression and the Response of Others," *Journal of Abnormal Psychology*, 85, 186–193.

Crowne, D. P. and D. Marlowe (19640, *The Approval Motive: Studies in Evaluative Dependence*, New York: Wiley.

Deaux, K. (1985), "Sex Differences," *Annual Review of Psychology*, 36, 49–82.

Drachman, D., A. DeCarufel and C. A. Insko (1978), "The Extra Credit Effect in Interpersonal Attraction," *Journal of Experimental Social Psychology*, 14, 458–465.

Dunning, D. and A. L. Storey (1991), "Depression, Realism, and the Overconfidence Effect: Are the Sadder Wiser When Predicting Future Actions and Events?" *Journal of Personality and Social Psychology*, 61, 521–532.

Ebbson, E., B. Dunean and V. Konecni (1975), "Effects of Context of Verbal Aggression on Future Verbal Aggression: A Field Experiment," *Journal of Experimental Psychology*, 11, 192–204.

Eder, R. W. and G. R. Ferris (1989), *The Employment Interview: Theory, Research, and Practice*, Newbury Park, CA: Sage Publications.

Ekman, P. (1982), "Methods for Measuring Facial Action," in K. R. Scherer and P. Ekman (Eds.), *Handbook of Methods in Nonverbal Behavior Research*, Cambridge: Cambridge University Press, 45–90.

_____ (1985), "Telling Lies," New York: Berkeley.

Fiske, S. T. and S. E. Taylor (1991), *Social Cognition*, New York: McGraw-Hill.

Foa, U. G. (1971), "Interpersonal and Economic Resources," *Science*, 171, 345–351.

Forbes, R. J. and P. R. Jackson (1980), "Non-verbal Behavior and the Outcome of Selection Interviews," *Journal of Occupational Psychology*, 53, 65–72.

Ganster, D. C., M. R. Fusilier and B. T. Mayes (1986), "Role of Social Support in the Experience of Stress at Work," *Journal of Applied Psychology*, 71, 102–110.

George, J. M. (1989), "Mood and Absence," *Journal of Applied Psychology*, 74, 317–324.

_____ and A. P. Brief (1992), "Feeling Good-Doing Good: A Conceptual Analysis of Mood at Work—Organizational Spontaneity Relationship," *Psychology Bulletin*, 112, 310–329.

Glick, W. H., G. D. Jenkins Jr. and N. Gupta (1986), "Method versus Substance: How Strong Are Underlying Relationships Between Job Characteristics and Attitudinal Outcomes?" *Academy of Management Journal*, 29, 441–464.

Gouaux, C. (1971), "Induced Affective States and Interpersonal Attraction," *Journal of Personality and Social Psychology*, 20, 37–43.

Gouldner, A. W. (1960), "The Norm of Reciprocity: A Preliminary Statement," *American Sociological Review*, 25, 161–178.

Gupta, N. and T. A. Beehr (1982), "A Test of the Correspondence Between Self-reports and Alternative Data Sources about Work Organizations," *Journal of Vocational Behavior*, 20, 1–13.

Hackman, J. R. and G. R. Oldham (1980), "Work Redesign," Reading, MA: Addison-Wesley.

Hatch, M. J. (1987), "Physical Barriers, Task Characteristics, and Interaction Activity in Research and Development Firms," *Administrative Science Quarterly*, 32, 387–399.

Herzberg, F. (1966), *Work and the Nature of Man*, Cleveland, OH: World.

Hochschild, A. R. (1983), *The Managed Heart*, Berkeley, CA: University of California Press.

House, J. S. (1981), *Work Stress and Social Support*, Reading, MA: Addison Wesley.

Imada, A. S. and M. D. Hakel (1977), "Influence of Nonverbal Communication and Rater Proximity on Impressions and Decisions in Simulated Employment Interviews," *Journal of Applied Psychology*, 62, 295–300.

Isen, A. M. (1970), "Success, Failure, Attention, and Reaction to Others: The Warm Glow of Success," *Journal of Personality and Social Psychology*, 15, 294–301.

____ (1984), "Toward Understanding the Role of Affect in Cognition," in R. S. Wyer and T. Srull (Eds.), *Handbook of Social Cognition*, Hillsdale, NJ: Erlbaum, 174–236.

____, M. Clark and M. F. Schwartz (1976), "Duration of the Effect of Good Mood on Helping: 'Footprints in the Sands of Time,'" *Journal of Personality and Social Psychology*, 34, 385–393.

____ and K. A. Daubman (1984), "The Influence of Affect on Categorization," *Journal of Personality and Social Psychology*, 47, 1206–1217.

____, ____ and G. P. Nowicki (1987), Positive Affect Facilitates Creative Problem-solving, *Journal of Personality and Social Psychology*, 52, 1122–1131.

____ and N. Geva (1987), "The Influence of Positive Affect on Acceptable Level of Risk: The Person with a Large Canoe Has a Large Worry," *Organization Behavior and Human Decision Processes*, 39, 145–154.

____, N. Horn and D. L. Rosenhan (1973), "Effects of Success and Failure on Children's Generosity," *Journal of Personality and Social Psychology*, 27, 239–247.

____, M. M. Johnson, E. Mertz and G. F. Robinson (1985), "The Influence of Positive Affect on the Unusualness of Word Associations," *Journal of Personality and Social Psychology*, 48, 1413–1426.

____ and P. F. Levin (1972), "Effects of Feeling Good on Helping: Cookies and Kindness," *Journal of Personality and Social Psychology*, 21, 384–388.

____ and B. Means (1983), "The Influence of Positive Affect on Decision-making Strategy," *Social Cognition*, 2, 18–31.

____, ____, R. Patrick and G. P. Nowicki (1982), "Some Factors Influencing Decision-making Strategy and Risk-Taking," in M. S. Clark and S. T. Fiske (Eds.), *Affect and Cognition: The 17th Annual Carnegie Symposium on Cognition*, Hillsdale, NJ: Erlbaum, 243–261.

____, T. E. Nygren and F. G. Ashby (1988), "The Influence of Positive Affect on the Subjective Utility of Gains and Losses: It's Not Worth the Risk," *Journal of Personality and Social Psychology*, 55, 710–717.

____ and R. Patrick (1983), "The Influence of Positive Affect on Risk Taking: When the Chips Are Down," *Organization Behavior and Human Performance*, 31, 194–202.

____, A. S. Rosenzweig and M. J. Young (1990), "The Influence of Positive Affect on Clinical Problem-solving," Working paper, Cornell University, Ithaca, NY.

____ and T. E. Shalker (1982), "The Effect of Feeling State on Evaluation of Positive, Neutral, and Negative Stimuli: When You 'Accentuate the Positive,' Do You 'Eliminate the Negative?'" *Social Psychology Quarterly*, 45, 58–63.

Janis, I. L. (1989), *Crucial Decisions: Leadership in Policymaking and Crisis Management*, New York: Free Press.

Janson, P. and J. K. Martin (1982), "Job Satisfaction and Age: A Test of Two Views," *Social Forces*, 60, 1089–1102.

Jenkins, G. D., Jr., D. A. Nadler, E. E. Lawler III and C. Cammann (1975), "Standardized Observations: An Approach to Measuring the Nature of Jobs," *Journal of Applied Psychology*, 60, 171–181.

Kerckhoff, A. C. and K. W. Back (1968), *The June Bug: A Study of Hysterical Contagion*, New York: Appleton–Century–Crafts.

Kiesler, C. A. (1971), *The Psychology of Commitment: Experiments Linking Behavior to Belief*, New York: Academic Press.

Kipnis, D. and R. Vanderveer (1971), "Ingratiation and the Use of Power," *Journal of Personality and Social Psychology*, 17, 280–286.

Krzystofiak, F., Robert C. Cardy and J. Newman (1988), "Implicit Personality and Performance Appraisal: The Influence of Trait Inferences on Evaluations of Behavior," *Journal of Applied Psychology*, 73, 515–521.

Kuiper, N. A. (1978), "Depression and Causal Attributions for Success and Failure," *Journal of Personality and Social Psychology*, 36, 236–246.

Langer, E. J. (1975), "The Illusion of Control," *Journal of Personality and Social Psychology*, 32, 311–328.

Lawler, E. E., III (1973), *Motivation in Work Organizations*, Monterey, CA: Brooks/Cole.

Locke, E. A. (1976), "The Nature and Causes of Job Satisfaction," in Marvin D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*, Chicago: Rand McNally (pp. 1297–1349).

Mackie, D. M. and L. T. Worth (1991), "Feeling Good, but Not Thinking Straight: The Impact of Positive Mood on Persuasion," in J. P. Forgas (Ed.), *Emotion and Social Judgments*, Oxford, England: Pergamon Press.

McGovern, T. V. and H. E. Tinsley (1978), "Interviewer Evaluations of Interviewee Nonverbal Behavior," *Journal of Vocational Behavior*, 13, 163–171.

Mehrabian, A. and J. A. Russell (1975), "Environmental Effects of Affiliation Among Strangers," *Humanitas*, 11, 219–230.

Nolen-Hoeksema, S., J. S. Girgus and M. E. Seligman (1986), "Learned Helplessness in Children: A Longitudinal Study of Depression, Achievement, and Explanatory Style," *Journal of Personality and Social Psychology*, 51, 435–442.

Oldham, G. R., C. T. Kulik, M. L. Ambrose and L. P. Stepina (1986), "Relations Between Job Facet Comparisons and Employee Reactions," *Organizational Behavior and Human Decision Processes*, 38, 28–47.

____ and N. L. Rotchford (1983) "Relationships Between Office Characteristics and Employee Reactions: A Study of the Physical Environment," *Administrative Science Quarterly*, 28, 542–556.

Oldham, G. R., G. Nottenburg, M. K. Kassner, G. Ferris, D. Fedor and M. Masters (1982), "The Selection and Consequences of Job Comparisons," *Organizational Behavior and Human Performance*, 29, 84–111.

Organ, D. W. (1988), *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington, MA: Lexington Books.

Pedhauzer, E. J. (1982), *Multiple Regression in Behavioral Research: Explanation and Prediction*, New York: CBS College Publishing.

Peterson, C. and L. C. Barrett (1987), "Explanatory Style and Academic Performance Among University Freshman," *Journal of Personality and Social Psychology*, 53, 603–607.

Petty, M. N., G. W. McGee and J. W. Cavender (1984), "A Meta-analysis of the Relationship Between Job Satisfaction and Individual Performance," *Academy of Management Review*, 4, 712–721.

Pfeffer, J. (1989), Personal communication.

Quinn, R. P. (1977), *Effectiveness in Work Roles: Employee Responses to Work Environments—Vol. 1*, DLMA report no. 92-26-72-35-3, Washington, DC: U.S. Department of Labor, NTIS No. PB280-669/3G1, pp. 491–506.

____ and L. J. Shepard (1974), *The 1972–73 Quality of Employment Survey*, Ann Arbor, MI: Institute for Social Research.

____ and G. L. Staines (1979), *The 1977 Quality of Employment Survey*, Ann Arbor, MI: Institute of Social Research.

Rafaeli, A. and R. I. Sutton (1989), "The Expression of Emotion in Organizational Life," in L. L. Cummings and B. M. Staw (Eds.), *Research in Organizational Behavior*, Greenwich, CT: JAI Press, 11, 1–42.

____ and ____ (1991), "Emotional Contrast Strategies as Means of Social Influence: Lessons from Bill Collectors and Interrogators," *Academy of Management Journal*, 34, 749–775.

Rasmussen Jr., K. G. (1984), "Nonverbal Behavior, Verbal Behavior, Resume Credentials, and Selection Interview Outcomes," *Journal of Applied Psychology*, 69, 551–556.

Roethlisberger, F. J. and W. J. Dickson (1946), *Management and the Worker*, Cambridge, MA: Harvard University Press.

Salancik, G. R. (1977), "Commitment and the Control of Organizational Behavior and Belief," in B. M. Staw and G. R. Salancik (Eds.), *New Directions in Organizational Behavior*, Chicago: St. Clari Press, 1–54.

____ and J. Pfeffer (1978), "A Social Information Processing Approach to Job Attitudes and Task Design," *Administrative Science Quarterly*, 23, 224–253.

Schnieder, B. (1987), "The People Make the Place," *Personnel Psychology*, 40, 437–453.

Schwartz, N. and H. Bless (1991), "Happy and Mindless, But Sad and Smart? The Impact of Affect Staves on Analytic Reasoning," In J. P. Forgas (Ed.), *Emotion and Social Judgments*, Oxford, England: Pergamon Press.

____, ____ and G. Bohner (1991), "Mood and Persuasion: Affective States Influence the Processing of Persuasive Communication," In M. Zanna (Ed.), *Advances in Experimental Social Psychology*, Vol. 24, New York: Academic Press.

Seashore, S. E. (1954), *Group Cohesiveness in the Industrial Work Group*, Ann Arbor: Institute for Social Research, University of Michigan.

Seligman, M. E. P. and P. Schulman (1986), "Explanatory Style as a Predictor of Productivity and Quitting Among Life Insurance Sales Agents," *Journal of Personality and Social Psychology*, 50, 832–838.

Smither, J. W., H. Collins and R. Buda (1989), "When Ratee Satisfaction Influences Performance Evaluations: A Case of Illusory Correlation," *Journal of Applied Psychology*, 74, 599–605.

Snyder, M. (1974), "Self Monitoring of Expressive Behavior," *Journal of Personality and Social Psychology*, 30, 526–537.

Staw, B. M. and S. Barsade (1992), "Affect and Managerial Performance," Working paper, Haas School of Business, University of California, Berkeley.

____, N. E. Bell and J. A. Clausen (1986), "The Dispositional Approach to Job Attitudes: A Lifetime Longitudinal Test," *Administrative Science Quarterly*, 31, 56–77.

____ and R. I. Sutton (1993), "Macro Organizational Psychology," in K. Murnighan (Ed.), *Social Psychology in Organizations: Advances in Theory and Research*, Englewood Cliffs, NJ: Prentice-Hall, 350–384.

Stearns, C. Z. and P. N. Sterns (1986), *Anger: The Struggle for Emotional Control in America's History*, Chicago: The University of Chicago Press.

Sutton, R. I. (1991), "Maintaining Norms about Emotional Expression: The Case of Bill Collectors," *Administrative Science Quarterly*, 36, 245–268.

____ and A. Rafaeli (1988), "Untangling the Relationship Between Displayed Emotions and Organizational Sales: The Case of Convenience Stores," *Academy of Management Journal*, 31, 461–487.

Sweeney, P. D., D. Shaeffer and S. Golin (1982), "Attributions about Self and Others in Depression," *Personality and Social Psychology Bulletin*, 8, 37–42.

Taylor, S. E. and J. D. Brown (1988), "Illusion and Well-being: A Social Psychological Perspective on Mental Health," *Psychological Bulletin*, 103, 193–210.

Traub, G. S. and J. Spruill (1982), "Correlations Between the Quick Test and Wechsler Adult Intelligence Scale—Revised," *Psychological Reports*, 51, 309–310.

Vinokur, A., Y. Schul and R. D. Caplan (1987), "Determinants of Perceived Social Support: Interpersonal Transactions, Personal Outlook, and Transient Affective States," *Journal of Personality and Social Psychology*, 53, 11137–1145.

Waldman, D. A. and B. J. Avolio (1986), "A Meta-analysis of Age Differences in Performance," *Journal of Applied Psychology*, 71, 33–38.

Watson, D. and A. Tellegen (1985), "Toward a Consensual Structure of Mood," *Psychological Bulletin*, 98, 219–235.

Weiner, B. and S. Graham (1984), "An Attributional Approach to Emotional Development," in C. E. Izard, J. Kegan and R. B. Zajonc (Eds.), *Emotion, Cognition, and Behavior*, Cambridge, England: Cambridge University Press, 167–191.

Weistein, N. D. (1980), "Unrealistic Optimism about Future Life Events," *Journal of Personality and Social Psychology*, 39, 806–820.

Wright, J. S. and W. Mischel (1982), "Influence of Affect on Cognitive Social Learning Person Variables," *Journal of Personality and Social Psychology*, 43, 901–914.

Zajonc, R. B., S. T. Murphy and M. Inglehart (1989), "Feeling and Facial Efference: Implications of the Vascular Theory of Emotion," *Psychological Review*, 96, 395–416.

Zalesny, M. D. and J. K. Ford (1990), "Extending the Social Information Processing Perspective: New Links to Attitudes, Behaviors, and Perceptions," *Organizational Behavior and Human* *Decision Processes*, 47, 205–246.

Zung, W. W. (1965), "A Self-rating Depression Scale," *Archives of General Psychiatry*, 12, 63–70.