

Job Attitudes

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Abstract

Job attitudes research is arguably the most venerable and popular topic in organizational psychology. This article surveys the field as it has been constituted in the past several years. Definitional issues are addressed first, in an attempt to clarify the nature, scope, and structure of job attitudes. The distinction between cognitive and affective bases of job attitudes has been an issue of debate, and recent research using within-persons designs has done much to inform this discussion. Recent research has also begun to reformulate the question of dispositional or situational influences on employee attitudes by addressing how these factors might work together to influence attitudes. Finally, there has also been a continual growth in research investigating how employee attitudes are related to a variety of behaviors at both the individual and aggregated level of analysis.

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INTRODUCTION

Job attitudes are one of the oldest, most popular, and most influential areas of inquiry in all of organizational psychology. As of this writing, the PsycINFO database reveals 33,348 records pertaining to “job attitudes,” “work attitudes,” “job satisfaction,” or “organizational commitment.” Of these entries, one of those terms appears in the title of 6,397 entries, and the trend appears to be accelerating. We are therefore pleased—and a bit daunted—to provide the first review of this literature for the *Annual Review of Psychology*. Previous reviewers (e.g., Brief & Weiss 2002, Miner & Dachler 1973, O’Reilly 1991, Staw 1984) have made reference to job

attitudes research. These reviews tended to treat the job attitudes literature in brief, or in service of another topic. In this review, we focus exclusively on job attitudes.

Despite this exclusive focus on job attitudes, given the breadth and depth of job attitudes research, we must place several bounds on this review. As is the tradition of the *Annual Review of Psychology*, we purposely orient our review with a recency bias in that we consider newer and current topics to a greater degree than older ones. Similarly, most of our citations are relatively recent works (articles published in the past 10 years). However, our focus on the current status of the job attitudes literature does not mean that we ignore the traditional

contributions of job attitudes research. Finally, our bibliography is selective rather than exhaustive.

In organizing this review, we first discuss the nature of and define job attitudes in the context of the larger social attitudes literature. We devote a substantial amount of space to discussions of discrete job attitudes, including job satisfaction, organizational commitment, and other attitudes. We then discuss states and traits in job attitudes research, including emotions and dispositional influences. We examine situational antecedents, including a discussion of how job and organizational characteristics and the social environment affect job attitudes. We conclude by reviewing research linking job attitudes to prominent work behaviors and outcomes.

WHAT ARE JOB ATTITUDES?

Link Between Job Attitudes and Social Attitudes

The substantive nature of job attitudes flows from the broader literature on social attitudes, so we begin our review by discussing how these literatures are related. A job attitude, of course, is a type of attitude, and therefore it is important to place job attitudes research in the broader context of social attitudes research. As noted by Olson & Zanna (1993, p. 119), “Despite the long history of research on attitudes, there is no universally agreed-upon definition.” Perhaps the most widely accepted definition of an attitude, however, was provided by Eagly & Chaiken (1993, p. 1): “A psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor.” Thus, the concept of evaluation is a unifying theme in attitudes research. One problem for attitudes research is that individuals may form an evaluation of (and thus hold an attitude about) a nearly limitless number of entities. Some of these attitudes may border on the trivial, at least in a general psychological sense (we may have an attitude about a famous actor, about oak wood, or about the color green), or may be

sufficiently segmented that they are only of specialized interest (e.g., an attitude about private enterprise, about expressionist art, etc.). Given this multiplicity of attitude objects, why is it justified to consider job attitudes as an important and central aspect of social attitudes?

There are three ways to answer this question. First, though it is reasonable, perhaps even necessary, to view job attitudes as social attitudes, there are important differences between these research traditions; the differences may tell us as much about social attitudes as they do about job attitudes. Though the attitudes literature has revealed many important and interesting insights, on the whole, the literature is limited in the range of populations, settings, and content or targets of the attitudes. As Judge et al. (2011) have noted, the limitations are in the form of what (e.g., overwhelmingly, political or cultural attitudes or identities as opposed to contextual attitudes about one’s job, one’s life, one’s family, etc.), with whom (e.g., heavy reliance on college undergraduates, which may limit the scope and nature of the investigations), and how (e.g., behavior is often not studied or is studied in a sterile, though well-controlled, experimental context) attitudes are studied. That the job attitudes literature provides different contexts, populations, and methods for studies suggests that social attitudes researchers would benefit as much from reading the job attitudes literature as the converse.

Second, job attitudes are important insofar as jobs are important entities. Even in times of economic duress, the vast majority of the adult population age 25–75 is employed in some capacity (most adults have a job). Although the time people spend working obviously varies greatly by the person, the average person spends more time working than in any other waking activity. But the meaning of work to individuals goes far beyond time allocation. As Hulin (2002) noted, people’s identities often hinge on their work, as evidenced by how the typical person responds to the question, “What do you do?” or “What are you?” Job attitudes are also closely related to more global measures of life satisfaction (Judge & Watanabe 1993).

Job satisfaction: an evaluative state that expresses contentment with and positive feelings about one’s job

Organizational commitment: an individual’s psychological bond with the organization, as represented by an affective attachment to the organization, a feeling of loyalty toward it, and an intention to remain as part of it

Job attitudes: evaluations of one’s job that express one’s feelings toward, beliefs about, and attachment to one’s job

Attitude: a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (of which job attitudes are examples)

Job attitudes matter because jobs matter—to people’s identities, to their health, and to their evaluations of their lives.

Third and finally, like any attitude (Olson & Zanna 1993), job attitudes matter to the extent they predict important behavior. This has been the dominant assumption in job attitudes research to such an extent that it is relatively rare to find an article in the top organizational journals that does not link job attitudes to behaviors. Although it certainly is not our argument that job attitudes are irrelevant to behavior—as we note, the evidence is clear that they are relevant—we also think job attitude research would benefit from some nuances in the attitude-behavior relationship that have been noted in social attitudes research. First, behavior may shape attitudes. This has been a prominent area of investigation in the attitudes literature generally, but curiously relatively little effort has been made on this front in job attitudes research (Judge et al. 2011). Second, as some have argued in the attitudes literature (e.g., Fazio & Olson 2003), the tripartite nature of attitudes—affect, cognition, and behavior—although an important heuristic representation, has its problems. Most significantly, research suggests that attitudes can form as a result of any one of these three factors in isolation, and that an affectively based attitude, for example, functions quite differently from a cognitively based attitude. Another problem is the assumption that all three components must be consistent with one another, which also is not supported by reviews of the literature that show even strongly held attitudes may not be manifested in behavior. Affect and cognitive components of attitudes can be at odds with one another and, as we note below, are quite difficult to separate in practice.

While keeping these concerns in mind, we address the departure of the study of job attitudes from the original tripartite definitions of social attitudes that emphasize cognitive, affective, and behavioral elements of attitude space but try to separate these aspects from one another as appropriate. Past studies on job satisfaction have focused on judgment-based,

cognitive evaluations of jobs on characteristics or features of jobs and generally ignored affective antecedents of evaluations of jobs as well as the episodic events that happen on jobs. Accordingly, we devote considerable space in this review to the affective nature of job satisfaction and how consideration of job affect necessitates revision in how we conceptualize and measure job attitudes, how we relate the concept to other variables, and how we study job attitudes and affect. Other topics—such as job attitudes at the between-unit level of analysis and the contrast between job attitudes and related phenomena like descriptions of a situation and motivation for behavior—are also discussed.

Definition of Job Attitudes

We define job attitudes as follows: Job attitudes are evaluations of one’s job that express one’s feelings toward, beliefs about, and attachment to one’s job. This definition encompasses both the cognitive and affective components of these evaluations while recognizing that these cognitive and affective aspects need not be in exact correspondence with one another (Schleicher et al. 2004). Although this definition is relatively simple, there are nuances and complexities that underlie it.

In this definition, we consider “job” a broad term that encompasses one’s current position (obvious), one’s work or one’s occupation (less obvious), and one’s employer (less obvious still). One’s attitudes toward one’s work need not be isomorphic with one’s attitudes toward one’s employer, and indeed these often diverge. Moreover, within each of these targets there are more specific targets whose boundaries are necessarily fuzzy. For example, is an attitude toward one’s advancement opportunities an evaluation of one’s job, one’s occupation, or one’s employer? To be sure, job attitudes have some hierarchical structure with global attitudes as a composite of lower-order, more specific attitudes (Harrison et al. 2006, Parsons & Hulin 1982). Yet delineating this structure across very different types of work, careers, and employers is difficult. It is possible that the structure of job

attitudes for an associate professor of medieval history at a prestigious university, a drive-up window worker at Burger King, and a stonemason are the same, but we are agnostic.

Multifaceted Nature of Job Attitudes

Job attitudes are multifaceted in their composition, in their structure, and in their temporal nature. Employees, of course, do not have only one job attitude. The composition of attitudes employees have about their job and their work vary along many dimensions, most notably their target (e.g., their pay versus their supervision), their specificity (e.g., their most recent pay raise versus their job as a whole), and their nature (e.g., evaluative assessments versus behavioral propensities). Structurally, job attitudes are hierarchically organized, with perhaps an overall job attitude being the most general factor, followed by still relatively general job attitudes such as overall job satisfaction, organizational commitment, and perhaps others, followed by more specific attitudes such as job satisfaction facets, specific dimensions of organizational commitment, and so on.

Are job attitudes latent variables—top-down constructs that are indicated by their more specific attitudes—or manifest variables—bottom-up constructs composed of their lower-order terms? Although clarity in thinking about concepts is often recommended in this literature (Bollen 2002), considerable confusion can be created by drawing false dichotomies. Specifically, we think job attitudes may be either manifest or latent, depending on how the researcher wishes to treat them (see also Ironson et al. 1989). Clearly, when considering the facets of job satisfaction, it is a manifest variable in that overall job satisfaction is composed of more specific satisfactions in different domains. Just as clearly, though, broad job attitudes can be latent variables in the sense that individuals' general attitudes about their job cause specific attitudes to be positively correlated. Thus, although it is important for researchers to consider the issue and to be clear about their treatment of attitudes, we do

not think that conceptualizations or measures of job attitudes are advanced by forcing false dichotomies into the literature. One researcher may treat overall job satisfaction as a latent construct and another may treat it as manifest. Although this is not a problem, the purposes of the research, and the modeling of the data, will of course be different under each approach.

Recent Emphasis on Affect

In our definition of job attitudes, we have purposely included both cognition (beliefs) and affect (feelings). We have learned, however, that affect and cognition are not easily separable. Neuropsychology has shown us that the thinking and feeling parts of the brain, although separable in architecture, are inextricably linked in operation (Adolphs & Damasio 2001). Higher-level cognition relies on evaluative input in the form of emotion; cognition and emotion are interwoven in our psychological functioning. Evidence indicates that when individuals perform specific mental operations, a reciprocal relationship exists between cerebral areas specialized for processing emotions and those specialized for processing cognitions (Drevets & Raichle 1998). Even measures of affect are substantially cognitive in nature (e.g., Ashby et al. 1999). As applied to job attitudes, when we think about our jobs, we have feelings about what we think. When we have feelings while at work, we think about these feelings. Cognition and affect are thus intimately related, and this connection is not easy to separate for psychology in general and job attitudes in particular. Although an evaluation of the nature of one's job may seem affect free in theory, it is practically impossible for one to evaluate one's pay as poor in an affect-free manner. New methodologies assist in this separation, but we do not believe this is a methodological issue. Rather, to a nontrivial degree, cognition and affect are inseparable, a statement that, if true, applies equally well to social and to job attitudes.

The difficulty of separating cognition and affect notwithstanding, historically, it is fair to say that organizational psychology theory and

Experience-sampling methodology (ESM):

a method of data collection, where job attitudes or other psychological states are measured repeatedly (such as once a day or more often) over time

measures have implicitly emphasized the cognitive nature of job attitudes (and, for reasons noted above, their behavioral consequences) to the neglect of their affective nature (Judge et al. 2011). In recent years, however, the pendulum has swung in the other direction, and there has been more progress on the affective components of job satisfaction, especially as they vary over time, with less attention to the importance of cognitive aspects of satisfaction. The assertion that researchers have variously emphasized cognition or affect may seem at odds with the previous one: If affect and cognition are inseparable, how can organizational psychologists have emphasized one over the other? To some degree, this apparent contradiction is answered by “what” (What role do discrete emotional states play in job attitudes?) and “how” (If job attitudes are affective in nature, does this necessarily alter the way in which they are studied?). We reserve discussion of the “what” question for later (see section titled State and Traits in Job Attitudes Research). We now turn to the “how” question.

Multilevel, Experience-Sampling Designs

If affect is central to a definition of job attitudes, a problem for job attitudes researchers is that affective reactions are likely to be fleeting and episodic. Lest researchers become enmeshed in a methodological stalemate—where the attempt to study propositions of newly developed theories is hamstrung by methods and analyses appropriate only to the needs of an older generation of theoretical models—the conceptualization and measurement of job attitudes are altered by the central role of affect. Put another way, if job attitudes are, at least in part, affective reactions, then job attitudes need to be measured in ways that are consistent with the necessarily ephemeral nature of affect.

Increasingly, job attitudes researchers have responded to this problem through the use of experience-sampling methodology (ESM), where job attitudes are measured once a day over a period of a week or two, or even several

times a day (e.g., Ilies & Judge 2002, Miner et al. 2005, Weiss et al. 1999). One great advantage of ESM designs is that they permit multilevel modeling of job attitudes, which allows for both within-individual (state) and between-individual (trait) effects. This research has shown that when job attitudes are measured on an experience-sampled basis, roughly one-third to one-half of the variation in job satisfaction is within-individual variation. Thus, typical “one-shot” between-person research designs miss a considerable portion of the variance in job satisfaction by treating within-individual variation as a transient error. We have more to say on this issue in the section titled States and Traits in Job Attitude Research.

DISCRETE JOB ATTITUDES

Defining the Construct Space

Having covered definitional material related to attitudes in general, we now turn our attention to discrete job attitudes. Research in organizational behavior has been largely conducted through the use of Likert scale measures of a variety of attitudes, perceptions, intentions, and motivations. Although on the surface many of these scales are similar in format and are closely correlated with one another, a large proportion of these scales do not measure attitudes and thus fall outside the scope of this review. We consider how measures of perceptions, intentions, and motivations are different from attitudes below, with special attention to where these constructs might fit in a causal sequence.

First, it is important to differentiate attitudes from perceptions and descriptions. Many variables are like attitudes, in that they involve cognitive judgments, and may lead to behavioral responses. However, these constructs are not attitudes if they do not include an explicit appraisal or evaluation of the object in question as it relates to personal values. For example, although role clarity scales (e.g., Rizzo et al. 1970) ask respondents to describe the extent to which their organization has clearly defined policies and procedures, routines, and expectations for

behavior, role clarity scales do not ask respondents to evaluate whether they find the policies, procedures, routines, and expectations good or bad, or excessive or insufficient. Thus, the evaluative component central to our definition of attitudes is missing. Similarly, most measures of organizational justice (e.g., Colquitt 2001) require respondents to describe how their organization treats them but do not require respondents to evaluate whether they like the treatment they receive. These perception-based scales are typically conceptualized as antecedents to attitudes (e.g., role clarity and justice lead to satisfaction) rather than as attitudes themselves. It is true that the Job Descriptive Index (JDI) (Smith et al. 1969), as its name implies, asks employees to describe their jobs. However, it is important to remember that many if not most of these descriptions are heavily evaluative in nature (e.g., pay is “BAD,” work is “PLEASANT,” etc.). Most measures of job attitudes are even more evaluative.

Second, general attitudes should be differentiated from attitudes toward behavior and intentions to engage in behaviors. There is a clear link between attitudes and intentions at a conceptual and empirical level. However, the theories of reasoned action and planned behavior (Ajzen 1991), which are the justification for much of the research on attitudes and intentions, clearly describe attitudes toward an object, attitudes toward a behavior, and intentions to perform a behavior as three distinct constructs occupying distinct places in a causal chain. Unlike attitudes toward a behavior, intentions are shaped by both opportunities to perform an action as well as social norms of others toward the behavior in question. Consistent with this differentiation of attitudes from intentions and action, a growing body of research we consider in a later section has shown that situational variables moderate the relationship between attitudes and behavior.

Third, motivational constructs such as effort expended toward a task and job engagement should also be differentiated from job attitudes. Most research agrees that engagement reflects

investment or involvement of one’s physical, cognitive, and emotional energy in work performance (Rich et al. 2010). However, one’s evaluations of these investments is not assessed—only the existence or nonexistence of these investments. Thus, engagement reflects how one directs one’s energies, rather than an attitude toward the behavior, job, or organization. Motivational energies are likely to be influenced by, and to influence, attitudes, but the actual energy to achieve ends and one’s attitudes toward the sources and objects of these energies are distinct constructs.

In sum, researchers should carefully differentiate attitude measures from descriptions of the work environment, intentions to act on the work environment, and motivations. These variables are conceptually closely related to one another and are likely to covary, but considerable definitional and theoretical work has been devoted to the differentiation of these constructs from one another, and researchers would be well advised to consider their models in light of what theory proposes they should measure and how these measures will relate to other constructs of interest.

With these thoughts in mind, we define job satisfaction as follows: Job satisfaction is an evaluative state that expresses contentment with, and positive feelings about, one’s job. As is apparent in this definition, we include both cognition (contentment) and affect (positive feelings) in our definition. Our definition also implies that overall or global job satisfaction results from a process of evaluation—typically, that consists of evaluation of one’s job facets or characteristics. This leads to the next section of our review—the interplay between global or overall job satisfaction and job satisfaction facets.

Global Job Attitudes

Another issue that pertains to job attitudes research is the level of specificity at which attitudes are measured. There are studies that measure global attitudes toward one’s job, the organization, and the social environment as a whole, which can be contrasted with more

Job Descriptive Index (JDI): perhaps the most validated measure of job satisfaction. In addition to a Job-In-General scale, the JDI includes the satisfaction facets: work, supervision, coworkers, pay, and promotion

Job performance:

employee behaviors that are consistent with role expectations and that contribute to organizational effectiveness; composed of task performance, citizenship behavior, withdrawal/counterproductivity, and creative performance

narrowly defined scales that measure specific facets of job attitudes. Conceptually, the bandwidth of measures should show fidelity to the variables expected to correlate with them (Fishbein & Ajzen 1974). If one wants to understand broad phenomena like overall total working conditions or job performance, broad attitudes such as overall job satisfaction should be examined. Conversely, if one is interested in more specific phenomena, such as the effect of compensation practices on employee attitudes or the impact of attitudes on helping behavior, more specific attitudes such as satisfaction with pay or coworkers should be examined. The most relevant level of attitudinal specificity will depend on the bandwidth of the antecedents and consequences under consideration.

Overall job satisfaction is probably the most researched attitude in organizational behavior. This global approach is exemplified by scales such as the affect-centric “faces” scale (Kunin 1955), Likert scales asking respondents to directly describe their level of satisfaction with work (Brayfield & Rothe 1951), or the more cognitive “job in general” scale (e.g., Ironson et al. 1989). These global measures attempt to capture an overarching level of satisfaction with the job across a variety of attributes. These global scales either ask respondents to indicate their overall reaction to the job as a whole or ask them for their summary judgment of all aspects of the job including work, pay, supervision, coworkers, and promotion opportunities. The principle of fidelity suggests that such global scales are likely to be best predicted by broad measures of the respondent, such as affective disposition or aggregate measures of job characteristics, and to be predictive of broad criteria such as job performance or work withdrawal.

Facets of Job Satisfaction

From an alternative perspective, researchers are often interested in the relative importance of specific facets of satisfaction. Much of the research on facet-level satisfaction has used the

JDI (Smith et al. 1969). The five facets of job satisfaction examined in the JDI are satisfaction with work, supervision, coworkers, pay, and promotions. These five facets are related to one another, but they show discriminant validity as well, with meta-analytic correlations among dimensions of satisfaction averaging about $r = 0.2$ to $r = 0.3$ (Kinicki et al. 2002), though our experiences with these facets suggest somewhat higher intercorrelations. The Minnesota Satisfaction Questionnaire (MSQ) and the Index of Organizational Reactions (IOR) also measure satisfaction with the same or similar dimensions (e.g., the MSQ has a dimension of advancement) and include other subdimensions as well (e.g., the MSQ has dimensions on job security and social status, among others). There are substantial correlations between these disparate measures’ scores for each dimension (Kinicki et al. 2002), though not so high as to suggest that there is no meaningful unique variance attributable to each dimension. Because of the importance of the JDI facets to job satisfaction research, we now consider these five satisfaction facets in turn.

Evidence from several lines of inquiry suggests that the facet of job satisfaction that is most closely related to global measures is satisfaction with the work itself. Of the facets, satisfaction with the work itself also has the strongest correlations with global measures of satisfaction (Ironson et al. 1989, Rentsch & Steel 1992). The antecedents of work satisfaction have been the subject of much research. The model of job characteristics described by Hackman & Oldham (1976) has received a great deal of support. This model proposes that skill variety, task identity, task significance, autonomy, and feedback all contribute to employee satisfaction with their work. Consistent with this model at a higher level of analysis, recent research has confirmed that employee empowerment climate in groups is associated with higher levels of individual job satisfaction (Seibert et al. 2004). There is also evidence that individuals who are higher in other orientation have weaker relationships between work

attributes and job satisfaction, which suggests that those who are less likely to pursue their self-interest in a systematic way are less prone to form satisfaction judgments based on the rational, calculating model proposed by job characteristics theory (Meglino & Korsgaard 2007).

There are also numerous studies that have focused specifically on employee satisfaction with organizational practices such as compensation and promotion policies. The dimensionality of pay satisfaction questionnaires has been examined, and research suggests that the four main dimensions of pay satisfaction include pay level, benefits, pay raise, and structure/administration (e.g., Judge & Welbourne 1994). Theoretical models of overall pay satisfaction suggest that satisfaction with compensation is based on a small discrepancy between the amount of pay that is received and the amount of pay the worker believes he or she should receive (Williams et al. 2006). Meta-analysis shows that comparisons of one's own pay to others have very strong correlations with pay satisfaction, whether the target of comparisons is internal to the organization ($r = 0.56$, $r_c = 0.94$) or external to the organization ($r = 0.57$, $r_c = 1.00$) (Williams et al. 2006).

The social context for work is emphasized by researchers exploring satisfaction with supervisors and coworkers. Perhaps mirroring a general lack of attention to the social aspects of the working environment in organizational behavior in general, relatively little research has focused on coworker satisfaction. In contrast to the nuanced dimensions of pay satisfaction, research has not explored the dimensionality of relationships with coworkers or supervisors. Instead, most researchers are content to measure a unidimensional satisfaction with coworkers. However, more theoretically developed measures of relationship attitudes developed in social psychology and relationship science literature suggest that such unidimensional measures fail to address the complexity of relationships sufficiently. For example, the Positive and Negative Quality in Marriage

Scale examines a two-dimensional space akin to positive and negative affectivity, demonstrating that it is possible for a relationship to be high on positive relationship qualities, high on negative relationship qualities, high on both positive and negative relationship qualities, or high on neither (e.g., Mattson et al. 2007).

Organizational Commitment

Besides examining satisfaction with one's job, other research has examined commitment toward the organization. Consistent with Solinger et al. (2008), we define organizational commitment as an individual's psychological bond with the organization, as represented by an affective attachment to the organization, internalization of its values and goals, and a behavioral desire to put forth effort to support it. As an attitude, organizational commitment reflects a psychological state linking an individual to the organization based on identification with the organization's values and goals (e.g., Allen & Meyer 1990, O'Reilly & Chatman 1986). Commitment scales also have multiple dimensions, but unlike satisfaction, most have examined the nature of commitment rather than the focus of commitment (but see Meyer et al. 2004 for an exception). Thus, research has primarily examined affective, normative, and continuance commitment, with an especially large body of research focused on affective commitment. Affective commitment scales require respondents to describe the extent to which they value the organization, feel attached to and included in the organization, and see the organization's goals as similar to their own. Continuance commitment scales require respondents to evaluate whether or not they are able to leave the organization in the near future, or if leaving the job would incur too many financial costs. Finally, normative commitment asks respondents to describe their evaluation of whether or not quitting a job is a negative behavior. It appears that affective commitment generally has the highest validity in predicting organizational behaviors such as job performance (Dunham et al. 1994).

Affective Events

Theory (AET): an integrative model emphasizing the links between job events and job affect and hypothesizing links between job affect and job behaviors that are unique to affect and affective events

A meta-analysis of this literature found that data do not strongly line up with the theoretical three-component model of commitment (Meyer et al. 2002). The tripartite typology of commitment has come under criticism by those who note that affective commitment is best understood as an attitude regarding the employing organization, whereas normative and continuance commitment are attitudes regarding the specific behaviors of staying or leaving (Solinger et al. 2008). The distinction between attitudes toward the organization and a behavior may explain why convergent validity for scales of commitment is so comparatively low. Thus, researchers have been encouraged to refine their thinking about organizational commitment by replacing the three-component model of commitment with the tripartite attitudes model from social attitudes research that focuses on affect toward the organization, cognition about the organization in terms of identification and internalization, and action readiness for generalized behaviors to support the organization.

Attitudes Toward Behaviors

Besides measures of the job and organization, there has also been a tradition of research on attitudes toward specific behaviors and goals. There is evidence for a structural model that positions attitudes toward a behavior as an antecedent to intentions, which in turn serve as an antecedent for action. For example, one study found that positive attitudes toward voluntary training and development activities generate intentions to engage in such activities and that these intentions are related to participation rates (Hurtz & Williams 2009). A similar relationship between attitudes toward job search and intentions to engage in job search was found in a longitudinal study with unemployed individuals (Wanberg et al. 2005). Consistent with the bandwidth-fidelity principle mentioned previously, it is expected that attitudes toward behaviors will be more strongly related to those behaviors than will generalized attitudes.

STATES AND TRAITS IN JOB ATTITUDES RESEARCH

Affective Events Theory

Research in organizational psychology has, in recent years, considered aspects of stable trait-like attitudes about work and their relationship with more ephemeral state attitudes. In an attempt to address organizational psychology's neglect of affect, Weiss & Cropanzano (1996) proposed a theory of job attitudes that emphasizes affect in the study of job attitudes (and the attitude-behavior relationship). This theory, termed Affective Events Theory (AET), emphasizes links between job events and job affect and hypothesizes links between job affect and job behaviors that are unique to affect and affective events. Specifically, AET emphasizes links between job affect and short-term or state-like behaviors, such as work withdrawal and organizational citizenship behaviors (non-task behaviors that contribute to the social and psychological environment of the workplace, such as helping and supporting others) rather than the more reasoned long-term behaviors (such as turnover) that have been related to job satisfaction.

As noted by Judge et al. (2011), AET is differentiated from other current approaches by (a) the distinctions between job structure or features and job events, although job features (e.g., organizational policies, which we review later) are likely to influence distributions of job events; (b) an emphasis on affect as an important feature of job attitudes; and (c) the hypothesized independent links between job affect and affect-driven behaviors, on the one hand, and between more evaluation-focused cognitions and judgment-driven behaviors, on the other. Dispositions are hypothesized to moderate the link between events and affect.

The promise of AET is clear. Analyses of affective events, affect, and the on-the-job consequences of affect may answer some questions about job attitudes and behaviors on the job that are unanswered by the traditional studies of relations between cognitive evaluations

and job performance (see, for example, Beal et al. 2005). Indeed, nearly every study published investigating moods or emotions at work or within-individual variation in job attitudes prominently features AET as a general framework.

Recent Research on Within-Individual Variation in Job Attitudes

As we have noted, job attitudes have both stable (between-individual variation) and dynamic (within-individual variation over time) qualities. We should therefore expect significant between-person and within-person variation in job attitudes. We also expect significant covariation between job attitudes and fluctuations in affect and similarly time-variant states (exogenous events, moods or emotions) that should predict it. Similarly, within-individual variation in job attitudes should be reflected in within-individual variation in job behaviors. This dynamic nature of job affects and job behaviors is illustrated by Organ & Ryan (1995), who note that predictions of organizational citizenship behaviors (OCBs) from affective states "... will somehow have to reckon with the problem of *detecting discrete episodes of OCB* (rather than subjective reactions that presumably reflect aggregations or trends of OCB over time) *and the psychological states antecedent to or concurrent with those episodes*" (p. 781, emphasis added). As we noted above, this problem has been addressed by ESM designs, which provide ecological momentary assessments of job attitudes and job behaviors. It is striking that most of these studies show nearly as much within-person variability in job attitudes as in moods and emotions. This certainly suggests support for the importance of affect to job attitudes. As noted by Judge et al. (2011), "It is not premature to conclude that ESM has become an expected element of the research."

It is not the case that one expects between-individual and within-individual relationships to operate in opposite directions or even to operate in the same direction but with dramatically different magnitudes. Rather,

our argument is that no inferences about the within-person level should be made solely on the basis of data collected at the between-person level. Chen et al. (2005) maintain that, because researchers know so little about how constructs operate at levels of analysis other than the one at which they are typically studied, assessments of the similarity of relationships between analogous constructs across levels "can and should play an integral role in the validation of multilevel constructs and theories" (p. 376).

The recent literature on within-person variation in job attitudes can be grouped into three overlapping categories. Studies that link moods or discrete emotional states to job attitudes comprise the first category. Within this category of studies, two further differentiations must be made. First is the issue of whether moods/emotions are antecedents (e.g., Bono et al. 2007, Ilies & Judge 2004, Judge et al. 2006, Weiss et al. 1999) or consequences (e.g., Judge & Ilies 2004) of job attitudes, with the former greatly outnumbering the latter. Of course there are reasons why either direction of influence might occur. Demonstrating causal directions in such studies is difficult, though some studies are noteworthy for their use of lagged designs, whereby job attitudes on Time 1 are used to predict affect on Time 2 (e.g., Judge & Ilies 2004) or affect at Time 1 is used to predict job attitudes at Time 2 (Ilies & Judge 2002). Another differentiation is the issue of whether broad mood factors (generally as represented by positive and negative affect) or discrete emotions are studied. Emotion researchers have struggled in vain to delineate an accepted taxonomy of "core" emotions (see Power 2006). Another challenge is that discrete emotions, although theoretically separable, are empirically less so. This is especially true with respect to positive emotions (Watson 2000). On the other hand, broad mood factors have controversies of their own, such as disagreements over the structure of mood: either the positive affect/negative affect rotation or the hedonic tone/arousal rotation.

The second category of studies investigates within-person variability in job attitudes

Moods and emotions:

affective states that are important to job satisfaction and that may be distinguished from one another in terms of generality, duration, and event specificity

Multilevel models:

models where multiple observations of job attitudes are nested within individuals, to predict or be predicted by other within-individual states, and wherein these within-individual relationships are predicted by between-individual differences

without including moods or emotions. Such studies have typically examined antecedents of job satisfaction. For example, one study found that daily interpersonal and informational justice were related to daily levels of job satisfaction (Loi et al. 2009). Another repeated measures study found that dispositional affect influenced employees' typical levels of satisfaction and moderated how sensitive employee job attitudes were to workplace events (Bowling et al. 2005).

The third category of studies links within-individual variation in job attitudes to within-individual variation in work behaviors. Although there is a growing body of within-person research showing how affect is related to job performance (e.g., Miner & Glomb 2010, Trougakos et al. 2011, Tsai et al. 2007), comparatively less research has investigated how variability in job attitudes is related to performance. Studies have shown that variations in job attitudes are related to higher levels of organizational citizenship (Ilies et al. 2006). Other research has found a relationship between variations in job attitudes and workplace deviance (Judge et al. 2006). However, it is unclear whether these findings are primarily the results of affect or if other components of attitudes such as appraisals, beliefs, or attitudes toward behaviors will also play a complementary role. This is clearly an area where more research is needed.

Before ending this section, we note another important distinction. Previously we mentioned multilevel models of job attitudes. Here we define multilevel models as models where multiple observations of job attitudes are nested within individuals, to predict or be predicted by other within-individual states, and wherein these within-individual relationships are predicted by between-individual differences. Although all ESM studies and multilevel models are often treated as synonymous in job attitude research, that is not necessarily a valid commingling. It is true that most ESM studies are multilevel in that both within- and between-person effects are modeled. However, that is not inherently the case. More importantly,

some multilevel models of job attitudes are not based on, or tested with, ESM designs. For example, if within-individual variation in job attitudes is studied over a very long period of time (say, yearly measurements over 10 years), both within- and between-individual variation would likely to be modeled, but it is unlikely data were collected using an ESM design.

DISPOSITIONAL ANTECEDENTS OF JOB ATTITUDES

Early Influences

The importance of personality to job satisfaction was explicitly recognized in the earliest writings on job attitudes (e.g., Hoppock 1935). These early findings, however, appeared to quickly fall out of favor, coinciding with the nadir of personality research in the 1970s and 1980s. This state of affairs changed with the publication of two seminal studies by Staw and colleagues, a study by Arvey and colleagues, and an integrative piece by Adler & Weiss (1988). Staw & Ross (1985) found that measures of job satisfaction were reasonably stable over time, even when individuals changed employers or occupations. Critics of the study noted that it is difficult to establish a dispositional basis of job satisfaction unless one actually measures dispositions, and that other, nondispositional factors might explain job attitude stability. Staw et al. (1986) corrected this deficiency: Using a unique longitudinal data set and childhood ratings of personality, Staw et al. reported results showing that affective disposition assessed at ages 12–14 correlated 0.34 ($p < 0.05$) with overall job satisfaction assessed at ages 54–62. In a similarly provocative study, Arvey et al. (1989) found significant consistency in job satisfaction levels between 34 pairs of monozygotic twins reared apart from early childhood. Judged from the vantage point of today, these studies may seem less revolutionary than they were at the time. It is not much of an overstatement to argue that in the late 1980s, dispositional explanations were eschewed or, more likely, ignored entirely in the literature.

Specific Dispositions

Although much early research on the importance of dispositions was able to describe whether there was a dispositional aspect to job satisfaction, this research did not specify which theoretically derived personality dispositions would be most likely related to consistencies in job attitudes. Subsequent research has attempted to clarify this omission. One study found that the dispositional taxonomy of positive and negative affectivity was related to job satisfaction over a period of several months, even after accounting for job changes and occupational quality variables (Watson & Slack 1993). Subsequent meta-analytic research demonstrated that the five-factor model of personality could also explain variations in job satisfaction, with neuroticism ($r_c = -0.29$), extraversion ($r_c = 0.25$), and conscientiousness ($r_c = 0.26$) showing especially strong relationships with job satisfaction (Judge et al. 2002).

Core Self-Evaluations

In a different approach to dispositional influences on job attitudes, Judge et al. (1997) focus on core self-evaluations (CSEs), fundamental beliefs individuals hold about themselves, their functioning, and the world. CSEs are hierarchical, with specific traits comprising a broad, general trait. Judge et al. (1997) identified four specific traits as indicators of CSEs based on these evaluative criteria: (a) self-esteem, (b) generalized self-efficacy, (c) neuroticism, and (d) locus of control. Increasingly, research has utilized direct measures of CSEs. Though CSE research has expanded well beyond job satisfaction research, there have been more than 50 studies of the link between CSEs and job satisfaction. Judge & Bono (2001) completed a meta-analysis of 169 independent correlations between each of the four core traits and job satisfaction. When the four meta-analyses are combined into a single composite measure, the overall core trait correlates $r_c = 0.37$ with job satisfaction.

Given the various ways of considering affective disposition noted in this review, one

might ask what either taxonomy adds beyond PA/NA (Watson 2000), the affective predisposition scale (Judge & Hulin 1993), or the Big Five personality model. This is a particularly relevant question given that CSEs are not uncorrelated with traits from these taxonomies. Judge et al. (2008) found that of the three taxonomic structures (five-factor model, PA/NA, and CSEs), CSEs were the most useful predictor of job satisfaction. Altogether, the three frameworks explained 36% of the variance in self-reported job satisfaction and 18% of the variance when using reports by significant others. Judge et al. (2008) further showed that these frameworks could be reduced to three sets of factors for the purposes of predicting job satisfaction: (a) CSEs/neuroticism (all four core traits, plus NA), (b) extraversion (including PA), and (c) conscientiousness. Their results showed that when these three factors were related to job satisfaction, however, only the first factor—CSE—consistently influenced job satisfaction across studies.

Best et al. (2005) presented further evidence for the influence of CSE on job satisfaction via appraisals of the work environment. The authors found that CSE was negatively related to perceptions of organizational obstacles to goal fulfillment (perceived organizational constraint). Perceived organizational constraint mediated between CSE and burnout, which negatively predicted job satisfaction. These results suggest that employees high in CSE are less likely to view their job tasks and organizational environment as stressful, shielding them from burnout and its deleterious effects on job satisfaction.

Studies that focus only on perceptual measures of job characteristics make it impossible to distinguish whether high-CSE individuals simply hold a rosier picture of objective attributes or whether they actually select into jobs with better attributes. To address this issue, Judge et al. (2000) examined the mediating role of objective job complexity, ascertained by coding job titles, as well as subjective job characteristics. They found that both subjective and objective indicators of job complexity

were partial mediators of the relationship between CSE—measured in childhood and early adulthood—and later job satisfaction for individuals between the ages of 41 and 50. These results suggest that CSEs influence not only how favorably people view their jobs, but also the actual level of complexity of the jobs they obtain.

In addition to selecting into more challenging jobs, people with a high CSE may find their work more satisfying because they choose personally meaningful goals. Self-concordance theory posits that goals pursued for fun or on the basis of personally relevant values increase subjective well-being and goal attainment. Judge et al. (2005) proposed that individuals with positive self-concept should be less vulnerable to external pressures and therefore more likely to set self-concordant goals. Self-concordant goals partially mediated between CSEs and life satisfaction and between CSEs and goal attainment. It appears that CSEs do lead to the pursuit of self-concordant goals, which increases life satisfaction and goal attainment. The authors concluded that CSEs “may serve more like a trigger than an anchor. People with positive CSEs strive for ‘the right reasons,’ and therefore ‘get the right results’” (p. 266).

Integration of State and Trait Perspectives

The foregoing description of research on job attitudes as temporary states of being does not necessarily mean that research investigating job attitudes as more traitlike (i.e., influenced by stable individual dispositions and unchanging job characteristics) is no longer relevant. An interactionist perspective on job attitudes suggests that dispositions have their effects on behavior through the interaction of individuals and the work environment (Magnusson 1999). People respond to their dispositionally influenced perceptions of the environment, so it is still possible for personality to affect attitudes even when situations are found to be important (Mischel & Shoda 1998). Thus, the question of whether attitudes can be attributed to states or traits is poorly posed; rather, the question

involves how situations contribute to the expression of traits and how traits contribute to the reactions to situations.

SITUATIONAL ANTECEDENTS OF JOB ATTITUDES

Job Characteristics

As the preceding section notes, there is strong evidence that perceptions of jobs are influenced by dispositions of the individual worker. However, there is also evidence that situations influence attitudes. One tradition of situational antecedents of job attitudes that has already been mentioned is the job characteristics model. Most research has examined how subjective perceptions of work characteristics are related to employee attitudes, convincingly demonstrating that employee self-reports of the five core characteristics (skill variety, task identity, task significance, autonomy, and feedback) identified by Hackman & Oldham (1976) are related to higher levels of job satisfaction. However, data measured from self-reports cannot be readily distinguished from the influence of dispositions, since evidence already discussed shows that personality traits are related to perceptions of job characteristics. When self-report and job analyst–based job characteristics are studied in tandem, the self-reported, more subjective perceptions of job characteristics are more closely related to job satisfaction than are analyst-based, more objective estimates of job characteristics (Judge et al. 2000). Organizational interventions to increase these sources of satisfaction via job enlargement have been shown to be effective at improving job satisfaction in the past (e.g., Neuman et al. 1989), which does bolster the argument that objective job characteristics influence job attitudes, although recent research on this topic is lacking.

Social Environment Characteristics

Although the features of the work itself have clearly been linked to higher levels of job satisfaction and engagement, such models omit the importance of the social environment.

Surprisingly, it is only in recent years that researchers have systematically demonstrated that social environment variables, such as relationships with coworkers and supervisors, can be as closely related to overall job satisfaction as job conditions are related to satisfaction. A comprehensive investigation of the relationships between job characteristics and work attitudes found that perceived social support predicted satisfaction levels above and beyond characteristics of the work itself (Morgeson & Humphrey 2006). Meta-analysis shows that there is a consistent positive relationship between coworker support behaviors and job satisfaction, job involvement, and organizational commitment (Chiaburu & Harrison 2008). This meta-analysis also found that the relationship between coworker support and the attitudes of satisfaction and commitment was stronger than the relationship between coworker antagonism and these attitudinal constructs.

Another method for examining the relationship between social characteristics of the work environment and job attitudes is to examine social network ties. Evidence from one study of network ties found that job-related affect scores tended to be similar among individuals who interacted with one another frequently (Totterdell et al. 2004). These results reinforce the notion that attitudes toward work are significantly related to the social relationships one has.

The demographic makeup of one's workgroup has also been a concern for researchers. Theory suggests that individuals who are demographically dissimilar from their coworkers may feel less accepted and therefore experience more negative job attitudes. Some research has shown that ethnic dissimilarity is negatively related to organizational commitment, but it is not related to job satisfaction (Liao et al. 2004). On the other hand, this same study found that differences from coworkers in extraversion and openness to experience are negatively related to satisfaction with coworkers. Other research found that perceived age similarity to one's coworkers is associated with higher levels

of engagement among older workers if they were also satisfied with their older coworkers (Avery et al. 2007). One study found that when supervisors were higher in control orientation than subordinates, subordinates were more satisfied with their supervisor compared with situations in which the supervisor and subordinate had similar levels of control orientation (Glomb & Welsh 2005). This is a rather unique example, showing that personality dissimilarity can sometimes have beneficial effects on job attitudes.

Leadership

In organizational context, leadership styles and behaviors can have a particularly powerful effect on employee job attitudes. Leader consideration has a meta-analytic correlation of $r_c = 0.78$ with subordinate satisfaction (Judge et al. 2004). The strength of this relationship suggests that leader consideration behaviors such as showing concern and respect for followers, looking out for their welfare, and expressing appreciation and support are nearly synonymous with the extent to which followers are satisfied with their leaders. Initiating structure has a somewhat weaker but still positive correlation of $r_c = 0.33$ with subordinate satisfaction with the leader.

Having established strong meta-analytic main-effect relationships between leadership and follower attitudes, researchers have turned their attention toward moderating relationships. The aforementioned relationship between leader-member exchange and employee attitudes is stronger when employees identify their supervisor with the organization (Eisenberger et al. 2010). Transformational leadership has been linked to more positive employee emotions during the course of the workday, and transformational leadership can buffer the relationship between emotion regulation and job dissatisfaction (Bono et al. 2007). Longitudinal research also shows that declines in supervisor support during the period of organizational entry were associated with declines in job satisfaction (Jokisaari & Nurmi 2009).

Conversely, negative leader behaviors, such as abusive supervision (Tepper 2000), are also associated with negative employee attitudes.

Organizational Practices

There is a substantial body of research within organizational psychology examining the nature of organizational practices and their influence on employee job attitudes. The largest body of research under this area concerns the relationship between organizational justice and employee attitudes. Much of the research on justice and pay practices has been grounded in discrepancy theory, which proposes that dissatisfaction is the result of a discrepancy between the pay that one thinks one should receive and the amount of pay one actually receives. Such discrepancies are strongly, negatively related to pay level satisfaction ($r_c = -0.54$) in meta-analytic research (Williams et al. 2006). Meta-analysis shows that distributive justice correlates at $r_c = 0.79$ with pay level satisfaction, suggesting that perceptions of distributive justice are nearly identical to attitudes toward organizational pay practices (Williams et al. 2006). Procedural justice of compensation also has a substantial but slightly smaller ($r_c = 0.42$) relationship with pay satisfaction.

Surprisingly, meta-analytic evidence suggests that the relationship between merit pay raises and pay-level satisfaction is quite small ($r_c = 0.08$) (Williams et al. 2006). One study demonstrated that pay satisfaction following a merit raise was much greater for those who received a high merit raise and who also had high pay-raise expectations (Schaubroeck et al. 2008). The authors noted that this result suggests that only individuals who believe that pay decisions are connected to performance will be more satisfied when merit raises are disbursed. Another study showed that pay satisfaction is often based on whom one compares oneself to—those who compare their pay to those who make much more than themselves are less satisfied than those who compare their pay to those who make only slightly more than themselves (Harris et al. 2008).

Besides the main effect of organizational practices related to compensation, research utilizing a polynomial regression approach to assess congruence suggests that the correspondence between employee values and organizational values is associated with more positive job attitudes (Edwards & Cable 2009). High levels of interpersonal justice are also significantly related to both organizational commitment and satisfaction with one's supervisor (Liao & Rupp 2005).

Although many studies have correlated individual reports of organizational characteristics as predictors of individual attitudes, concerns about common method variance have prompted many researchers to examine these phenomena using multiple reports of practices. For example, one study found that the favorableness of organizational changes, the extent of the change, and the individual relevance of the change combined to predict employee commitment (Fedor et al. 2006). One other study showed that establishment-level reports of high-performance human resources practices were associated with higher levels of employee job satisfaction and organizational commitment (Takeuchi et al. 2009). A study involving cross-level mediation found that the relationship between individual perceptions of organizational justice with job attitudes and job satisfaction was moderated by group-level justice climate (Mayer et al. 2007). These studies, taken together, suggest that collective perceptions of situations are predictive of individual attitudes and that there are indeed relationships between organizational characteristics and job attitudes.

Time and Job Attitudes

Some researchers have begun to examine the role of time itself as a situational shaper of employee attitudes. Researchers in this domain examine how employee attitudes tend to change over time from the point of hire to some subsequent point in time, typically using latent growth modeling or hierarchical linear modeling. One program of research has examined the pattern of “honeymoons

and hangovers” in employee attitudes from the point of hire to several months later (e.g., Boswell et al. 2005, 2009). These studies show that early in the employment relationship, most individuals have a period of highly positive job attitudes, followed soon after by a deterioration in their appraisal of their new jobs.

Other research has investigated the trajectory of organizational commitment over time. Most research suggests that like job satisfaction, organizational commitment tends to decline over time among organizational newcomers (Bentein et al. 2005). There is also evidence that individuals who perceive that there is a psychological contract breach in their organization will have a negative trajectory of organizational commitment as well (Ng et al. 2010).

As we have noted, job attitudes often vary over time. Affective events theory specifically argues for the idea that emotion-laden events in the workplace can explain the variability in job satisfaction people experience on a day-to-day basis. One cross-sectional study involving 2,091 call center representatives found that work emotions can be explained by work features and that the relationship between these work features and job satisfaction was mediated by emotions (Wegge et al. 2006). An experience-sampling study of 41 employees found that negative events had a strong positive relationship with negative moods at work, whereas positive events had a positive relationship with positive moods at work (Miner et al. 2005). Another diary study found that interpersonal conflicts with customers acted as an environmental trigger that produced more negative attitudes (Grandey et al. 2002). Collectively, these studies demonstrate again that job attitudes will differ depending upon when they are measured.

OUTCOMES OF JOB ATTITUDES

Overview

The final consideration in models of attitudes is their relationship with behavior. Because organizational behavior research is concerned

primarily with the outcomes of employee attitudes in organizations, the behavioral consequences of attitudes are clearly important. As we have noted previously, the dominant model linking attitudes to behaviors is the theory of planned behavior (Ajzen 1991), which proposes that general attitudes give rise to specific attitudes, which in turn can give rise to intentions to perform the behavior in question. A theory-building article also described how commitment can lead to behavior as a result of a translation of attitudes toward the organization, supervisor, and team to the development of specific commitments to goals, which in turn facilitates motivation to engage in specific actions (Meyer et al. 2004). Other studies propose a more emotion-centric view of the relationship between attitudes and behavior. For example, one study suggested that employees’ affect toward the job and organization will lead them to behave in ways that support the organization, as affect gives cues about the state of the environment and therefore suggests appropriate responses (Foo et al. 2009).

Consistent with prior theory, we emphasize the relationship between job attitudes and theoretical constructs rather than the relationship between job attitudes and specific behaviors. This decision is consistent with the prior discussion of the bandwidth-fidelity principle as well as research showing that broad attitudes are poor predictors of specific behaviors but are good predictors of broad classes of related behaviors (e.g., Fishbein & Ajzen 1974). As this principle of using broad attitudes to predict broad outcomes would suggest, one structural meta-analysis found that overall job attitude (a combination of satisfaction and commitment) was highly correlated with a broad measure of several aspects of contribution to the work role (Harrison et al. 2006).

We define job performance as employee behaviors that are consistent with role expectations and that contribute to organizational effectiveness. Consistent with an accumulated body of research, we consider job performance as a multidimensional construct, composed of task performance (duties and behaviors that

are formally required to perform one's job), organizational citizenship behavior (behaviors that go beyond formal role expectations and are generally contextual or interpersonal in nature), and withdrawal/counterproductivity (behaviors that are responses to dissatisfaction and that often go against organizational interests or norms). We also consider creative performance, as it is not clear that it fits well within the aforementioned categories of behaviors.

Task Performance

The link between job satisfaction and job performance has long been of interest to organizational psychologists. Meta-analysis suggests that there is indeed a substantial relationship between job satisfaction and job performance (Judge et al. 2001). Because this evidence comes primarily from cross-sectional studies, it is not possible to assess whether it is the case that job satisfaction causes job performance or if performance leads to satisfaction. To help answer this question, Ricketta (2008) meta-analyzed the relationship between performance and satisfaction in longitudinal research and found that the evidence was stronger for a satisfaction-to-performance link than for a performance-to-satisfaction link.

Although broad measures of satisfaction generally do correlate with job performance, other studies have examined the importance of facets of satisfaction as predictors of performance. Different facets of job satisfaction show different relationships with outcomes of interest. Of the JDI dimensions, satisfaction with work has the strongest relationship with motivation, but all dimensions have similar relationships with job performance, with corrected meta-analytic correlations ranging from $r_c = 0.15$ to $r_c = 0.23$ (Kinicki et al. 2002). Other research examining multiple dimensions of pay satisfaction at the school district level of analysis has shown that aggregated pay satisfaction is related to student academic competency (Currall et al. 2005).

Given the evidence for a substantive relationship between satisfaction and performance, researchers have begun to explore moderators.

One study explored the relationship between affective satisfaction (as measured by an overall index of positive and negative emotions about the job) and cognitive satisfaction (as measured by a cognitive appraisal of the characteristics of a job) as a potential moderated relationship (Schleicher et al. 2004). Their research showed that when affective attitudes toward a job and cognitive appraisal of a job were consistent with one another, there was a stronger relationship between performance and satisfaction than when affective and cognitive attitudes were less related to one another.

The relationship between organizational commitment and job performance has been established in a number of studies, although the relationship is not particularly strong (Wright & Bonett 2002). However, not all studies find only main effects. Meta-analytic research demonstrated that the positive relationship between commitment and performance declined significantly with increasing employee tenure, suggesting that less-tenured employees have a stronger attitude-behavior link (Wright & Bonett 2002). Another study that examined different clusters of affective and continuance commitment found that moderate levels of continuance commitment and low levels of affective commitment were particularly related to poorer supervisor ratings of performance (Sinclair et al. 2005). In another study, employees who were low in affective commitment had a negative relationship between stress and performance, whereas employees who were high in affective commitment had a positive relationship between stress and performance (Hunter & Thatcher 2007). This last study demonstrates that attitudes can moderate the relationship between other work-related constructs and behaviors.

Creative Performance

The relationship between employee attitudes and creative performance has been the topic of vigorous debate. Although much research demonstrates that positive mood states associated with job satisfaction encourage more flexible and open thought processes

(e.g., Lyubomirsky et al. 2005), others have contended that negative moods can generate active attention and critical thinking required for creativity (George & Zhou 2002). Some integrative recent work suggests that looking at positive or negative moods may be putting emphasis on the wrong portion of the affect circumplex, insofar as all activated moods, positive or negative, are associated with higher levels of creativity (De Dreu et al. 2008). Less research has looked at how these affective states pertain to the job attitudes–creativity link, although some work has been done in this area. One study showed that dissatisfied employees were more creative when they had high levels of continuance commitment and had support from the organization and coworkers (Zhou & George 2001). However, another study found that aggregate job satisfaction was positively related to measures of organizational innovation two years later (Shipton et al. 2006). As such, the form of the relationship between satisfaction and performance remains somewhat uncertain and may differ at the individual and group levels.

Citizenship Behavior

Although there is a conceptual reason to expect a moderate relationship between job attitudes and task performance, theory is even more strongly supportive of a relationship between citizenship behaviors and job attitudes (Organ & Ryan 1995). Meta-analysis demonstrates that overall satisfaction is related to citizenship behavior and that this relationship mediates the relationship between the personality traits of agreeableness and conscientiousness with citizenship (Ilies et al. 2009). Turning to facets of satisfaction, the relationship between citizenship behaviors and the JDI dimensions of pay, coworkers, and work are roughly equal in magnitude ($r_c = 0.16$ to $r_c = 0.23$), with an especially strong relationship between supervisor satisfaction and citizenship behaviors with $r_c = 0.45$ (Kinicki et al. 2002). Research in a union context using cross-lagged regression found that early union commitment was associated with voluntary informal participation in

the union ten years later (Fullagar et al. 2004). A meta-analytic path analysis study showed that job satisfaction and perceived fairness independently were related to higher levels of organizational citizenship behaviors, whereas a model suggesting that satisfaction mediates the relationship between fairness and citizenship behaviors was less well supported (Fassina et al. 2008). In sum, research does indeed show that job attitudes are related to citizenship.

Withdrawal/Counterproductivity

If positive job attitudes are expected to relate to positive behavioral decisions at work in the form of citizenship behavior, then negative attitudes are expected to relate to a broad class of negative behaviors at work in the form of withdrawal and counterproductivity. The negative behaviors constituting withdrawal include psychological withdrawal, absenteeism, turnover decisions, and decisions to retire.

Of the dimensions of the JDI, satisfaction with the work itself has the strongest relationship with both withdrawal cognitions and turnover intentions (Kammeyer-Mueller et al. 2005, Kinicki et al. 2002). Relationships between dimensions of performance and absenteeism are comparatively weaker for all other dimensions (Kinicki et al. 2002).

Most empirical tests suggest that job satisfaction is not directly related to turnover, but rather that job satisfaction leads to thoughts about quitting and comparison of one's job to alternatives, which in turn will eventually lead to turnover (e.g., Hom & Kinicki 2001). Research has also shown that job satisfaction is more likely to lead to turnover for individuals who are higher in cognitive ability, education, and occupation-specific training (Trevor 2001). In other words, job satisfaction is more likely to lead to withdrawal behavior in the form of turnover when there are opportunities for the attitude to express itself in the form of concrete behavior. Similar conclusions about the role of opportunity in the satisfaction–turnover relationship can be drawn from other research in this area (Lee et al. 2008). Evidence suggests that the relationship between satisfaction

and unit-level absence is also stronger when the unemployment rate is low (Hausknecht et al. 2008). This might occur because employees are less worried about being fired from their jobs when there are ample alternatives in the labor market.

There is also ample evidence that organizational commitment is related to deviance and work withdrawal. Most research has focused on the relationship between affective commitment and turnover. Multivariate research also consistently shows that attitudes toward the job and attitudes toward the organization have independent and complementary effects on turnover behavior (Kammeyer-Mueller et al. 2005). Evidence suggests that steeper declines in organizational commitment over time are related to increased intention to quit and actually quitting (Bentein et al. 2005). Research also suggests that when a group's mean satisfaction and dispersion of satisfaction scores are low, attendance is likely to be particularly low (Dineen et al. 2007).

There are also possible interactions between commitment and satisfaction in predicting work withdrawal. Theory suggests that committed employees who have low levels of satisfaction will be less likely to engage in work withdrawal since they have some level of organizational loyalty, whereas employees with low levels of commitment will tend to have lower attendance across the board. For example, one study demonstrated that when organizational commitment was low, group-level absenteeism was high regardless of job satisfaction, but when organizational commitment was high, absence was especially low among those who were most satisfied (Hausknecht et al. 2008).

Organizational Performance

Although there are many reasons to be interested in the relationship between individual-level job attitudes and individual work behavior, organizational leaders are especially interested in the degree to which employee attitudes are related to overall organizational performance. Most organizational interventions to improve employee attitudes toward their work are

designed to generate higher profits for the organization as a whole. Do these investments pay off? Meta-analysis suggests that there are indeed substantial, generalizable relationships between unit-level employee satisfaction and engagement with customer satisfaction, productivity, profit, turnover, and accidents (Harter et al. 2002). These results also were found in cross-lagged regression analyses in a diverse sample of individuals from 35 companies (Schneider et al. 2003), suggesting that employee job attitudes are related to subsequent organizational performance. Another study found that manager satisfaction levels were associated with customer satisfaction and store performance (Netemeyer et al. 2010). Moreover, this same study found an interaction that showed that when manager performance and manager satisfaction were high, employee and store performance were higher.

CONCLUSION

Although research on job attitudes has been at the core of the field of organizational psychology since its inception, new methods for conceptualizing and investigating job attitudes continue to enliven the field. In particular, the increased focus on within-persons studies has helped to significantly clarify the questions of states and traits in job attitudes research and to highlight the role of emotions and affective events as influences on job attitudes. A sizeable body of research has demonstrated that job attitudes are related to a variety of organizationally relevant behaviors including task performance, citizenship, creative performance, and organizational profitability.

As this review has also shown, new models of job attitudes involving within-person variability and team/organizational levels of analyses continue to enrich our understanding of core job attitudes. New models that demonstrate how situational perceptions mediate the relationship between dispositions and behavior, and models that demonstrate how dispositions moderate the relationship between situations and behavior, would be welcome.

SUMMARY POINTS

1. A job attitude is a social attitude; it may be one of the more central social attitudes because most individuals spend a majority of their waking hours at work, work is central to individuals' identities, and job attitudes have important consequences.
2. Affect and cognition are both important to job attitudes; at various times, each has occupied a more central place in research.
3. Job attitudes are multilevel concepts that show both traitlike (stable individual differences) and statelike (within-individual variation) properties.
4. A major thrust of recent research has used experience-sampling methodologies to study job satisfaction. This research has suggested that job satisfaction varies significantly on a day-to-day basis, and this variation is not merely transient error (it predicts and can be predicted by other meaningful concepts).
5. Of the major job satisfaction facets, work satisfaction appears to be the most important in predicting overall job satisfaction.
6. Personality is important to job attitudes; recent multilevel research suggests that personality affects individual differences in job satisfaction and within-individual relationships involving job satisfaction and other within-individual variables.
7. Recent research has shown that the social environment is important to job satisfaction, including coworker support, social networks, effective leadership, and demographic similarity between employee and coworkers.
8. Job attitudes predict many organizational behaviors; to achieve optimal prediction, correspondence needs to be maintained between the attitude and the behavior being predicted.

FUTURE ISSUES

1. Given that job attitudes are social attitudes, how do emerging research topics in social attitudes inform job attitudes research? Given that job attitudes research has some conceptual and methodological advantages, how might accumulated knowledge about job attitudes inform social attitudes research?
2. Recent evidence clearly indicates that job attitudes and moods/emotions covary. What is the causal direction: Do workplace attitudes cause moods/emotions, do moods/emotions cause job attitudes, or both?
3. How can state and trait perspectives on job attitudes—each of which has received considerable support but for which there is little integrative work—be further integrated?
4. Increasingly, researchers are conceptualizing job attitudes in a temporal context. Some of these temporal studies examine job attitudes over a relatively short period of time (daily variation over a week) whereas others examine temporal fluctuations over a very long time period (as long as 20 years). How does the time frame affect our understanding of temporal variations in job attitudes?

5. Although job satisfaction is the most widely studied job attitude, it is not the only one. Can disparate job attitudes be further integrated in future research under multidimensional frameworks?
6. Are there viable alternatives to self-report measures of job attitudes? How might our knowledge of job attitudes be informed by alternative measurement methodologies?
7. What interventions and organizational practices best influence job satisfaction, and are these interventions time bound (tend to degrade over time)?
8. If overall job satisfaction (or an even broader job attitude concept itself indicated by job satisfaction) predicts broad behavioral composites, does the specificity of emotions experienced at work mean they best predict more specific, time-variant behaviors?

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LITERATURE CITED

- Adler S, Weiss HM. 1988. Recent developments in the study of personality and organizational behavior. In *International Review of Industrial and Organizational Psychology*, ed. CL Cooper, IT Robertson, pp. 307–30. Chichester, UK: Wiley
- Adolphs R, Damasio AR. 2001. The interaction of affect and cognition: a neurobiological perspective. In *Handbook of Affect and Social Cognition*, ed. JP Forgas, pp. 27–49. Mahwah, NJ: Erlbaum
- Ajzen I. 1991. The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* 50:179–211
- Allen NJ, Meyer JP. 1990. The measurement and antecedents of affective, continuance, and normative commitment to the organization. *J. Occup. Psychol.* 63:1–18
- Arvey RD, Bouchard TJ, Segal NL, Abraham LM. 1989. Job satisfaction: environmental and genetic components. *J. Appl. Psychol.* 74:187–92
- Ashby FG, Isen AM, Turken AU. 1999. A neuro-psychological theory of positive affect and its influence on cognition. *Psychol. Rev.* 106:529–50
- Avery DR, McKay PF, Wilson DC. 2007. Engaging the aging workforce: the relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *J. Appl. Psychol.* 92:1542–56
- Beal DJ, Weiss HM, Barros E, MacDermid SM. 2005. An episodic process model of affective influences on performance. *J. Appl. Psychol.* 90:1054–68
- Bentein K, Vandenberghe C, Vandenberg R, Stinglhamber F. 2005. The role of change in the relationship between commitment and turnover: a latent growth modeling approach. *J. Appl. Psychol.* 90:468–82
- Best RG, Stapleton LM, Downey RG. 2005. Core self-evaluations and job burnout: the test of alternative models. *J. Occup. Health Psychol.* 10:441–51
- Bollen KA. 2002. Latent variables in psychology and the social sciences. *Annu. Rev. Psychol.* 53:605–34
- Bono JE, Foldes HJ, Vinson G, Muros JP. 2007. Workplace emotions: the role of supervision and leadership. *J. Appl. Psychol.* 92:1357–67
- Boswell WR, Boudreau JW, Tichy J. 2005. The relationship between employee job change and job satisfaction: the honeymoon-hangover effect. *J. Appl. Psychol.* 90:882–92
- Boswell WR, Shipp AJ, Payne SC, Culbertson SS. 2009. Changes in newcomer job satisfaction over time: examining the pattern of honeymoons and hangovers. *J. Appl. Psychol.* 94:844–58
- Bowling NA, Beehr TA, Wagner SH, Libkuman TM. 2005. Adaptation-level theory, opponent process theory, and dispositions: an integrated approach to the stability of job satisfaction. *J. Appl. Psychol.* 90:1044–53

- Brayfield AH, Rothe HF. 1951. An index of job satisfaction. *J. Appl. Psychol.* 35:307–11
- Brief AP, Weiss HM. 2002. Organizational behavior: affect in the workplace. *Annu. Rev. Psychol.* 53:279–307**
- Chen G, Bliese PD, Mathieu JE. 2005. Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organ. Res. Methods* 8:375–409
- Chiaburu DS, Harrison DA. 2008. Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *J. Appl. Psychol.* 93:1082–103**
- Colquitt JA. 2001. On the dimensionality of organizational justice: a construct validation of a measure. *J. Appl. Psychol.* 86:386–400
- Currall SC, Towler AJ, Judge TA, Kohn L. 2005. Pay satisfaction and organizational outcomes. *Pers. Psychol.* 58:613–40
- De Dreu CKW, Baas M, Nijstad BA. 2008. Hedonic tone and activation level in the mood-creativity link: toward a dual pathway to creativity model. *J. Personal. Soc. Psychol.* 94:739–56
- Dineen BR, Noe RA, Shaw JD, Duffy MK, Wiethoff C. 2007. Level and dispersion of satisfaction in teams: using foci and social context to explain the satisfaction-absenteeism relationship. *Acad. Manage. J.* 50:623–43
- Drevets WC, Raichle ME. 1998. Reciprocal suppression of regional cerebral blood flow during emotional versus higher cognitive processes: implications for interactions between emotion and cognition. *Cogn. Emot.* 12:353–85
- Dunham RB, Grube JA, Castaneda MB. 1994. Organizational commitment: the utility of an integrative definition. *J. Appl. Psychol.* 79:370–80**
- Eagly AH, Chaiken S. 1993. *The Psychology of Attitudes*. Belmont, CA: Wadsworth
- Edwards JR, Cable DM. 2009. The value of value congruence. *J. Appl. Psychol.* 94:654–77
- Eisenberger R, Karagonlar G, Stinglhamber F, Neves P, Becker TE, et al. 2010. Leader-member exchange and affective organizational commitment: the contribution of supervisor's organizational embodiment. *J. Appl. Psychol.* 95:1085–103
- Fassina NE, Jones DA, Uggerslev KL. 2008. Relationship clean-up time: using meta-analysis and path analysis to clarify relationships among job satisfaction, perceived fairness, and citizenship behaviors. *J. Manage.* 34:161–88
- Fazio RH, Olson MA. 2003. Attitudes: foundations, functions, and consequences. In *The Handbook of Social Psychology*, ed. MA Hogg, J Cooper, pp. 139–60. London: Sage
- Fedor DB, Caldwell S, Herold DM. 2006. The effects of organizational changes on employee commitment: a multilevel investigation. *Pers. Psychol.* 59:1–29
- Fishbein M, Ajzen I. 1974. Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychol. Rev.* 81:59–74
- Foo MD, Uy MA, Baron RA. 2009. How do feelings influence effort? An empirical study of entrepreneurs' affect and venture effort. *J. Appl. Psychol.* 94:1086–94
- Fullagar CJ, Gallagher DG, Clark PF, Carroll AE. 2004. Union commitment and participation: a 10-year longitudinal study. *J. Appl. Psychol.* 89:730–37
- George JM, Zhou J. 2002. Understanding when bad moods foster creativity and good ones don't: the role of context and clarity of feelings. *J. Appl. Psychol.* 87:687–97
- Glomb TM, Welsh ET. 2005. Can opposites attract? Personality heterogeneity in supervisor-subordinate dyads as a predictor of subordinate outcomes. *J. Appl. Psychol.* 90:749–57
- Grandey AA, Tam AP, Brauburger AL. 2002. Affective states and traits in the workplace: diary and survey data from young workers. *Motiv. Emot.* 26:31–55
- Hackman JR, Oldham GR. 1976. Motivation through the design of work: test of a theory. *Organ. Behav. Hum. Perf.* 16:250–79
- Harris MM, Anseel F, Lievens F. 2008. Keeping up with the Joneses: a field study of the relationships among upward, lateral, and downward comparisons and pay level satisfaction. *J. Appl. Psychol.* 93:665–73
- Harrison DA, Newman DA, Roth PL. 2006. How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Acad. Manage. J.* 49:305–25**

An important review of, and a call for more research on, moods and emotions in organizational research.

A meta-analysis showing the importance of coworkers to job attitudes.

Tests relative validity of three organizational commitment dimensions based on meta-analytic data.

Provides support for an overall job attitude factor and tests models of its relationship to withdrawal.

- Harter JK, Schmidt FL, Hayes TL. 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *J. Appl. Psychol.* 87:268–79
- Hausknecht JP, Hiller NJ, Vance RJ. 2008. Work-unit absenteeism: effects of satisfaction, commitment, labor market conditions, and time. *Acad. Manage. J.* 51:1223–45
- Hom PW, Kinicki AJ. 2001. Toward a greater understanding of how dissatisfaction drives employee turnover. *Acad. Manage. J.* 44:975–87
- Hoppock R. 1935. *Job Satisfaction*. New York: Harper
- Hulin CL. 2002. Lessons from industrial and organizational psychology. In *The Psychology of Work: Theoretically Based Empirical Research*, ed. JM Brett, F Drasgow, pp. 3–22. Mahwah, NJ: Erlbaum
- Hunter LW, Thatcher SMB. 2007. Feeling the heat: effects of stress, commitment, and job experience on job performance. *Acad. Manage. J.* 50:953–68
- Hurtz GM, Williams KJ. 2009. Attitudinal and motivational antecedents of participation in voluntary employee development activities. *J. Appl. Psychol.* 94:635–53
- Ilies R, Fulmer IS, Spitzmuller M, Johnson MD. 2009. Personality and citizenship behavior: the mediating role of job satisfaction. *J. Appl. Psychol.* 94:945–59
- Ilies R, Judge TA. 2002. Understanding the dynamic relationships among personality, mood, and job satisfaction: a field experience sampling study. *Organ. Behav. Hum. Dec. Process.* 89:1119–39
- Ilies R, Judge TA. 2004. An experience-sampling measure of job satisfaction and its relationships with affectivity, mood at work, job beliefs, and general job satisfaction. *Eur. J. Work Organ. Psychol.* 13:367–89
- Ilies R, Scott BA, Judge TA. 2006. The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. *Acad. Manage. J.* 49:561–75
- Ironson GH, Smith PC, Brannick MT, Gibson WM, Paul KB. 1989. Construction of a Job in General scale: a comparison of global, composite, and specific measures. *J. Appl. Psychol.* 74:193–200
- Jokisaari M, Nurmi J. 2009. Change in newcomers' supervisor support and socialization outcomes after organizational entry. *Acad. Manage. J.* 52:527–44
- Judge TA, Bono JE. 2001. Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: a meta-analysis. *J. Appl. Psychol.* 86:80–92
- Judge TA, Bono JE, Erez A, Locke EA. 2005. Core self-evaluations and job and life satisfaction: the role of self-concordance and goal attainment. *J. Appl. Psychol.* 90:257–68
- Judge TA, Bono JE, Locke EA. 2000. Personality and job satisfaction: the mediating role of job characteristics. *J. Appl. Psychol.* 85:237–49
- Judge TA, Heller D, Klinger R. 2008. The dispositional sources of job satisfaction: a comparative test. *Appl. Psychol. Int. Rev.* 57:361–72
- Judge TA, Heller D, Mount MK. 2002. Five-factor model of personality and job satisfaction: a meta-analysis. *J. Appl. Psychol.* 87:530–41
- Judge TA, Hulin CL. 1993. Job satisfaction as a reflection of disposition: a multiple source casual analysis. *Organ. Behav. Hum. Decis. Process.* 56:388–421
- Judge TA, Hulin CL, Dalal RS. 2011. Job satisfaction and job affect. In *The Oxford Handbook of Industrial and Organizational Psychology*, ed. SWJ Kozlowski. New York: Oxford Univ. Press
- Judge TA, Ilies R. 2004. Affect and job satisfaction: a study of their relationship at work and at home. *J. Appl. Psychol.* 89:661–73
- Judge TA, Locke EA, Durham CC. 1997. The dispositional causes of job satisfaction: a core evaluations approach. *Res. Organ. Behav.* 19:151–88
- Judge TA, Piccolo RF, Ilies R. 2004. The forgotten ones? The validity of consideration and initiating structure in leadership research. *J. Appl. Psychol.* 89:36–51
- Judge TA, Scott BA, Ilies R. 2006. Hostility, job attitudes, and workplace deviance: test of a multilevel model. *J. Appl. Psychol.* 91:126–38
- Judge TA, Thoresen CJ, Bono JE, Patton GK. 2001. The job satisfaction–job performance relationship: a qualitative and quantitative review. *Psychol. Bull.* 127:376–407**
- Judge TA, Watanabe S. 1993. Another look at the job satisfaction–life satisfaction relationship. *J. Appl. Psychol.* 78:939–48

Provides comprehensive quantitative review of the job satisfaction–job performance relationship.

- Judge TA, Welbourne TM. 1994. A confirmatory investigation of the dimensionality of the Pay Satisfaction Questionnaire. *J. Appl. Psychol.* 79:461–66
- Kammeyer-Mueller JD, Wanberg CR, Glomb TM, Ahlburg D. 2005. The role of temporal shifts in turnover processes: It's about time. *J. Appl. Psychol.* 90:644–58
- Kinicki AJ, McKee-Ryan FM, Schriesheim CA, Carson KP. 2002. Assessing the construct validity of the Job Descriptive Index: a review and meta-analysis. *J. Appl. Psychol.* 87:14–32
- Kunin T. 1955. The construction of a new type of attitude measure. *Pers. Psychol.* 8:65–77
- Lee TH, Gerhart B, Weller I, Trevor CO. 2008. Understanding voluntary turnover: path-specific job satisfaction effects and the importance of unsolicited job offers. *Acad. Manage. J.* 51:651–71
- Liao H, Joshi A, Chuang A. 2004. Sticking out like a sore thumb: employee dissimilarity and deviance at work. *Pers. Psychol.* 57:969–1000
- Liao H, Rupp DE. 2005. The impact of justice climate and justice orientation on work outcomes: a cross-level multifoci framework. *J. Appl. Psychol.* 90:242–56
- Loi R, Yang J, Diefendorff JM. 2009. Four-factor justice and daily job satisfaction: a multilevel investigation. *J. Appl. Psychol.* 94:770–81
- Lyubomirsky S, King L, Diener E. 2005. The benefits of frequent positive affect: Does happiness lead to success? *Psychol. Bull.* 131:803–55
- Magnusson D. 1999. Holistic interactionism: a perspective for research on personality development. In *Handbook of Personality: Theory and Research*, ed. LA Pervin, OP John, pp. 219–47. New York: Guilford. 2nd ed.
- Mattson RE, Paldino D, Johnson MD. 2007. The increased construct validity and clinical utility of assessing relationship quality using separate positive and negative dimensions. *Psychol. Assess.* 19:146–51
- Mayer D, Nishii L, Schneider B, Goldstein H. 2007. The precursors and products of justice climates: group leader antecedents and employee attitudinal consequences. *Pers. Psychol.* 60:929–63
- Meglino BM, Korsgaard MA. 2007. The role of other orientation in reactions to job characteristics. *J. Manage.* 33:57–83
- Meyer JP, Becker TE, Vandenberghe C. 2004. Employee commitment and motivation: a conceptual analysis and integrative model. *J. Appl. Psychol.* 89:991–1007
- Meyer JP, Stanley DJ, Herscovitch L, Topolnytsky L. 2002. Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences. *J. Vocat. Behav.* 61:20–52
- Miner AG, Glomb TM. 2010. State mood, task performance, and behavior at work: a within-persons approach. *Organ. Behav. Hum. Decis. Process.* 112:43–57
- Miner AG, Glomb TM, Hulin C. 2005. Experience sampling mood and its correlates at work. *J. Occup. Organ. Psychol.* 78:171–93
- Miner JB, Dachler HP. 1973. Personnel attitudes and motivation. *Annu. Rev. Psychol.* 24:379–402
- Mischel W, Shoda Y. 1998. Reconciling processing dynamics and personality dispositions. *Annu. Rev. Psychol.* 49:229–58
- Morgeson FP, Humphrey SE. 2006. The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *J. Appl. Psychol.* 91:1321–39
- Netemeyer RG, Maxham JG, Lichtenstein DR. 2010. Store manager performance and satisfaction: effects on store employee performance and satisfaction, store customer satisfaction, and store customer spending growth. *J. Appl. Psychol.* 95:530–45
- Neuman GA, Edwards JE, Raju NS. 1989. Organizational development interventions: a meta-analysis of their effects on satisfaction and other attitudes. *Pers. Psychol.* 42:461–89
- Ng TWH, Feldman DC, Lam SSK. 2010. Psychological contract breaches, organizational commitment, and innovation-related behaviors: a latent growth modeling approach. *J. Appl. Psychol.* 95:744–51
- Olson JM, Zanna MP. 1993. Attitudes and attitude change. *Annu. Rev. Psychol.* 44:117–54
- O'Reilly CA. 1991. Organizational behavior: where we've been, where we're going. *Annu. Rev. Psychol.* 42:427–58
- O'Reilly CA, Chatman J. 1986. Organizational commitment and psychological attachment: the effects of compliance, identification, and internalization of prosocial behavior. *J. Appl. Psychol.* 71:492–99

Tests underlying causal directions of the relationship between job attitudes and performance.

A study that illustrates the insights produced by multilevel conceptualizations of job attitudes.

Reviews theoretical bases for attitudes research, with a special focus on bringing commitment research more in line with general attitudes research.

An early and important paper suggesting the importance of personality to job attitudes.

- Organ DW, Ryan K. 1995. A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Pers. Psychol.* 48:775–802
- Parsons CK, Hulin CL. 1982. An empirical comparison of item response theory and hierarchical factor analysis in applications to the measurement of job satisfaction. *J. Appl. Psychol.* 67:826–34
- Power MJ. 2006. The structure of emotion: an empirical comparison of six models. *Cogn. Emot.* 20:694–713
- Rentsch JR, Steel RP. 1992. Construct and concurrent validation of the Andrews and Withey job satisfaction questionnaire. *Educ. Psychol. Meas.* 52:357–67
- Rich BL, Lepine JA, Crawford ER. 2010. Job engagement: antecedents and effects on job performance. *Acad. Manage. J.* 53:617–35
- Rickett M. 2008. The causal relation between job attitudes and performance: a meta-analysis of panel studies.** *J. Appl. Psychol.* 93:472–81
- Rizzo JR, House RJ, Lirtzman SI. 1970. Role conflict and ambiguity in complex organizations. *Admin. Sci. Q.* 15:150–63
- Schaubroeck J, Shaw JD, Duffy MK, Mitra A. 2008. An under-met and over-met expectations model of employee reactions to merit raises. *J. Appl. Psychol.* 93:424–34
- Schleicher DJ, Watt JD, Greguras GJ. 2004. Reexamining the job satisfaction-performance relationship: the complexity of attitudes. *J. Appl. Psychol.* 89:165–77
- Schneider B, Hanges PJ, Smith DB, Salvaggio AN. 2003. Which comes first: employee attitudes or organizational financial and market performance? *J. Appl. Psychol.* 88:836–51
- Seibert SE, Silver SR, Randolph WA. 2004. Taking empowerment to the next level: a multiple-level model of empowerment, performance, and satisfaction.** *Acad. Manage. J.* 47:332–49
- Shipton HJ, West MA, Parkes CL, Dawson JF, Patterson MG. 2006. When promoting positive feelings pays: aggregate job satisfaction, work design features, and innovation in manufacturing organizations. *Eur. J. Work Organ. Psychol.* 15:404–30
- Sinclair RR, Tucker JS, Cullen JC, Wright C. 2005. Performance differences among four organizational commitment profiles. *J. Appl. Psychol.* 90:1280–87
- Smith PC, Kendall L, Hulin CL. 1969. *The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes.* Chicago: Rand McNally
- Solinger ON, van Olffen W, Roe RA. 2008. Beyond the three-component model of organizational commitment.** *J. Appl. Psychol.* 93:70–83
- Staw BM. 1984. Organizational behavior: a review and reformulation of the field's outcome variables. *Annu. Rev. Psychol.* 35:627–66
- Staw BM, Bell NE, Clausen JA. 1986. The dispositional approach to job attitudes: a lifetime longitudinal test.** *Admin. Sci. Q.* 31:437–53
- Staw BM, Ross J. 1985. Stability in the midst of change: a dispositional approach to job attitudes. *J. Appl. Psychol.* 70:469–80
- Takeuchi R, Chen G, Lepak DP. 2009. Through the looking glass of a social system: cross-level effects of high-performance work systems on employees' attitudes. *Pers. Psychol.* 62:1–29
- Tepper BJ. 2000. Consequences of abusive supervision. *Acad. Manage. J.* 43:178–90
- Totterdell P, Wall T, Holman D, Diamond H, Epitropaki O. 2004. Affect networks: a structural analysis of the relationship between work ties and job-related affect. *J. Appl. Psychol.* 89:854–67
- Trevor CO. 2001. Interactions among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover. *Acad. Manage. J.* 44:621–38
- Trougakos JP, Jackson CL, Beal DJ. 2011. Service without a smile: comparing the consequences of neutral and positive display rules. *J. Appl. Psychol.* 96:350–62
- Tsai W, Chen C, Liu H. 2007. Test of a model linking employee positive moods and task performance. *J. Appl. Psychol.* 92:1570–83
- Wanberg CR, Glomb TM, Song Z, Sorenson S. 2005. Job-search persistence during unemployment: a 10-wave longitudinal study. *J. Appl. Psychol.* 90:411–30
- Watson D. 2000. *Mood and Temperament.* New York: Guilford
- Watson D, Slack AK. 1993. General factors of affective temperament and their relation to job satisfaction over time. *Organ. Behav. Hum. Decis. Process.* 54:181–202

- Wegge J, van Dick R, Fisher GK, West MA, Dawson JF. 2006. A test of basic assumptions of Affective Events Theory (AET) in call centre work. *Br. J. Manage.* 17:237–54
- Weiss HM, Cropanzano R. 1996. **Affective events theory: a theoretical discussion of the structure, causes and consequences of affective experiences at work.** *Res. Organ. Behav.* 19:1–74
- Weiss HM, Nicholas JP, Daus CS. 1999. An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organ. Behav. Hum. Decis. Process.* 78:1–24
- Williams ML, McDaniel MA, Nguyen NT. 2006. A meta-analysis of the antecedents and consequences of pay level satisfaction. *J. Appl. Psychol.* 91:392–413
- Wright TA, Bonett DG. 2002. The moderating effects of employee tenure on the relation between organizational commitment and job performance: a meta-analysis. *J. Appl. Psychol.* 87:1183–90
- Zhou J, George JM. 2001. When job dissatisfaction leads to creativity: encouraging the expression of voice. *Acad. Manage. J.* 44:682–96

A seminal article providing a framework for the study of moods and emotions in job attitudes research.



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