

Job Satisfaction and Job Affect

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March, 2009

A chapter to appear in: S. W. J. Kozlowski (Ed.), *The Oxford Handbook of Industrial and Organizational Psychology*. New York: Oxford University Press.

Abstract

Job satisfactions – multidimensional psychological responses to one’s job – have a long and rich tradition of research in psychology. Comparing and contrasting job attitudes with social attitudes, the present chapter presents various theoretical models of job attitudes. These theoretical approaches give rise to an integrative model which draws most heavily from the Cornell model of job attitudes. We then consider newer theoretical approaches, including engagement, affective events, personality, and unit-level satisfaction. Capitalizing on recent trends in personality, affect, and multilevel research, we also present a core self-evaluations multilevel model. We conclude with a discussion of measurement issues in job satisfaction research.

Job Satisfaction and Job Affect

Employees may and often do have many attitudes about their job and their work. These attitudes vary along many dimensions, including target, specificity, intensity, salience, and stability. In this chapter we discuss portions of the theoretical and empirical literature on one job attitude: job satisfaction. Job satisfaction is an application of the original conceptual definitions of social attitudes although the deviations that job attitudes have taken from these beginnings are as important as the direct linear connections. We discuss theoretical models of antecedents of job satisfactions. Our discussion of these theoretical models emphasizes constructs (e.g., frames of reference, organizational withdrawal), rather than individual variables, as manifestations of the constructs (e.g., local unemployment, turnover); there are more individual variables that may be regarded as antecedents or consequences of job attitudes than can be reasonably discussed in this chapter. We focus our discussion on three general areas: the theoretically necessary breadth of measures of constructs, the strength and generality of the job satisfaction/job behavior relationship, and new directions of job attitude research.

We discuss differences and similarities between social attitudes and job satisfactions in terms of their relations with individual job behaviors and general behavioral constructs. Our juxtaposition of job satisfactions with social attitudes is important for several reasons. First, though it is reasonable, perhaps even necessary, to view job satisfactions as social attitudes, there are important differences between these concepts; the differences may tell us as much about social attitudes as they do about job satisfactions. Second, the differences may also suggest questions about the ecological validity of investigations of social attitudes that have studied a limited range of populations, settings, and content or targets of the attitudes. In short, the social attitudes literature has revealed many insights into psychology, but it is often limited by *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., a 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 satisfaction literature often addresses these issues suggests that social attitudes researchers would benefit as much from reading the job attitudes literature as the converse. Finally, and as we note immediately below, although theorizing about the nature of social attitudes has served job attitudes research well, some of these theoretical concepts are increasingly being challenged, usually implicitly, by new developments from many areas of psychological research.

We address the departure of the study of job attitudes from the original tripartite definitions of social attitudes that emphasized *cognitive*, *affective*, and *behavioral* elements of attitude space (Campbell, 1963; Thurstone, 1928). 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 satisfaction, how we relate the concept to other variables, and how we study job attitudes and affect. Other topics—such as job satisfaction at the between-unit level of analysis, and the contrast between job satisfaction and employee engagement—are also discussed.

Definition and Nature of Job Satisfaction

We define job satisfaction as follows: *Job satisfactions are multidimensional psychological responses to one's job. These responses have cognitive (evaluative) and affective (emotional) components.*¹ Although cognitions are easier to separate from affect in theory than in practice (Adolphs & Damasio, 2001), isolating the two components conceptually does not deny their close – at certain levels inseparable – connections. Job satisfactions refer to internal evaluations of the favorability of one's job. These evaluations are revealed by outward (i.e., verbalized) and inward (i.e., felt) emotional responses. The multidimensional responses can be arrayed along good/bad, positive/negative continua. They may be quantified using assessment techniques that assess evaluations of features or characteristics of the job, emotional responses to events that occur on the job, and, depending on how one defines attitudes, behavioral dispositions, intentions, and enacted behaviors. We intentionally define job satisfactions in the plural to recognize that while it is meaningful to consider job satisfaction in a global or general sense, it is no less meaningful to consider satisfactions with more specific aspects of one's job (one's pay, one's coworkers, and so on).

Our definition is consistent with definitions of social attitudes offered by Campbell (1963), Eagley and Chaiken (1993), Fishbein (1980), Fishbein and Ajzen (1972; 1975), Thurstone (1928), Triandis (1980), and others. These definitions stress the role of cognitive evaluations in social attitudes but also include affect and behaviors as components of attitudes. Eagley and Chaiken, for example, defined an attitude as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. However, they include overt and covert (subconscious) cognitive, affective, and behavioral classes of responding as well.

The original tripartite conceptual definition of attitudes comprising cognitive, affective, and behavioral elements has eroded in industrial-organizational (I-O) psychology until we are left with assessments of attitudes as cognitive evaluations of social objects. This change seems to have occurred almost by default, perhaps as a result of the *Zeitgeist* in American psychology that has led to the adoption of theoretical positions favoring cognitions even in the absence of definitive data (Zajonc, 1980; 1984). The “cognitive revolution” served psychology well. The many contributions of this revolution—and there have been many—notwithstanding, we are in the midst of another revolution.

This “affective revolution” (Barsade, Brief, & Spataro, 2003) does not deny cognition. It is less oppositional than augmentative. It acknowledges that affective reactions have an evaluative component. Affective responses are more than evaluations, just as all evaluative judgments are not affective, although affect may influence cognitive evaluations. Evaluations of an object very likely influence emotional responses to the object to an unknown degree; the two types of responses are not the same.

Cranny, Smith, and Stone (1992) stated that “Although a review of published works shows that constitutive definitions of the construct vary somewhat from one work to the next, there appears to be general agreement that job satisfaction is an *affective (that is emotional) reaction* to a job that results from the incumbent’s comparison of actual outcomes with those that are desired (expected, deserved, and so on)” (p. 1, emphasis added). This definition appears to assume that comparisons of actual outcomes with those desired from a job will reflect variance due to *emotional* reactions and that these emotional reactions can be captured using structured, paper and pencil measures of judgments and evaluations. There is little doubt that until very

recently this was the generally agreed upon definition; comparisons of job outcomes with desired outcomes were treated as a reasonable basis for measurement of job attitudes.

As a result of the focus of research on satisfaction as a stable individual difference variable, we have a good picture of a network of relations, with job attitudes--assessed as cognitive-affective evaluations of job characteristics--as its core construct. These relations are useful and reliable (Roznowski & Hulin, 1992). This network, however, is a deficient view of the broader construct of job attitudes that includes affective or emotional reactions.

Weiss and Cropanzano (1996) and George (1989) have argued that affect and mood on the job are important components of job attitudes and potentially important predictors of some job behaviors. The possibility that on-the-job affect will spillover, more generally than do job attitudes, to non-job behaviors that reflect "emotional well-being" cannot be overlooked. Testing a theory that includes affect, however, requires assessments that capture the dynamic, within person manifestations of affect and emotional reactions. Otherwise we become enmeshed in a methodological stalemate (Larson & Csikszentmihalyi, 1983) whereby researchers attempt to study propositions of newly developed theories with methods and analyses appropriate only to the needs of an older generation of theoretical models. Weiss, Nicholas, and Daus (1999), Totterdell (2000), Miner (2001), Miner, Glomb, and Hulin (2001, 2005), Ilies and Judge (2002), and Dalal, Lam, Weiss, Welch, and Hulin (in press) have assessed affective responses on the job using assessments and analyses that handle the within person and multi-level demands of conceptualizations and assessments of affect as a dynamic variable.

Summary. The foregoing indicates that the inclusion of affect into definitions of job satisfactions is well-grounded historically (consistent with definitions of social attitudes), but the measurement and theoretical meaning of this grounding is only beginning to be understood and

exploited. It is now clear that traditional research designs, historical causal models, and characteristic measurement strategies may do a poor job of capturing the affective nature of job satisfactions. The conceptual and empirical efforts required to capture the essence of job affect will be emphasized at several points later in this chapter.

Conceptual Similarity and Empirical Differences between Social and Job Attitudes

If we define attitudes as psychological tendencies expressed by cognitive, affective, and behavioral evaluations of a particular entity, then, in the study of job satisfaction, different aspects of the job or the job as a whole become the target of the evaluations. The conceptual overlap between social attitudes and job satisfactions is apparent. Empirical differences are also apparent. Relations between social attitudes and behaviors and between job satisfactions and behaviors are an important difference. At the risk of oversimplification, job attitudes often correlate more strongly with specific job behaviors than social attitudes correlate with specific behaviors (Ajzen & Fishbein, 2005; Campbell, 1963; Eagley & Chaiken, 1993; Fishbein, 1980; Fishbein & Ajzen 1972, 1974, 1975; Wicker, 1969). Reasons for the lack of reliable relations between social attitudes and specific behaviors have been discussed by Campbell (1963), Doob (1947), Hull, (1943), Fishbein and Ajzen (1974) and Thurstone (1928). Eagley and Chaiken (1993), on the other hand, conclude that the relationship between attitudes and specific behaviors is reliable if a number of other variables are taken into consideration.

Doob, Hull, Thurstone, and Fishbein and Ajzen have argued that when we identify an individual's attitude toward an object, we have only identified that person's general orientation toward the object; we have not identified if or how they may choose to enact a specific behavior regarding that object. Their attitude will, however, correspond to the centroid of a broad behavioral construct comprising many specific behaviors. Correlations between general attitudes

toward an object and specific, isolated behaviors toward that construct are subject to many sources of variance having much to do with behavioral thresholds, distributions, base rates, opportunities, norms, etc., that may overwhelm any underlying relationship between an attitude and a behavioral orientation toward the object. Moreover, all too often the specific behavior in question may not even be an appropriate operationalization of the behavioral construct of interest. For example, many purportedly “aggressive” responses in popular experimental designs may equally plausibly be interpreted as compliant or conforming responses (Ritter & Eslea, 2005). To assess attitude/behavior correspondence properly, the correspondence between a general attitude toward object and the general value, positive or negative, of a broad family of enacted behaviors should be assessed (Fishbein, 1980; Fishbein & Ajzen, 1972; 1974). Regrettably, however, the content and measurement of important behavioral families (constructs) have been not been the focus of adequate research in social psychology: arguably, the “criterion problem” (Austin & Villanova, 1992) is more severe in social psychology than in I-O psychology.

Fishbein and Ajzen (1974; 1975) further argued we need to distinguish among attitudes toward an object, attitudes toward a behavior, and behavioral intentions to carry out that act. The first two constructs predict the last but behavioral intentions establish the correspondence between attitudes and an act. Relations between attitudes toward acts and behavioral intentions are generally high; relations between attitudes toward an object and intentions to engage in specific behaviors related to that object are occasionally moderately large but are generally modest. Intentions, however, are related to behaviors. This argument shifted the focus from studies of general attitudes and a variety of relevant behaviors and behavioral constructs to analyses of the antecedents of specific behavioral intentions. In this research strategy, every

behavior requires the analysis of a different behavioral intention. Behavioral intentions are the *idiot savants* of social and I-O psychology; they do one thing very well but that is all they do. Dawes and Smith (1985) refer to relations between intentions and behaviors as a *reductio ad absurdum*.

Job satisfaction and job behaviors. Research on relations between job satisfaction and specific behaviors has generated a set of generally positive results. Job attitudes are reliably related to a variety of specific job behaviors (Hulin, 1991; Roznowski & Hulin, 1992). Relations between general job satisfaction and multiple-act behavioral families are stronger and theoretically more useful than relations between general job satisfaction and specific behaviors (Fisher & Locke, 1992; Roznowski & Hulin, 1992). Nonetheless, the general finding is that a wide variety of important specific behaviors are consistently related to job satisfactions. If one has an applied goal predicting a specific behavior, then a measure of intentions to engage in that behavior during the time period of interest is the predictor of choice. However, if corrections for attenuation, sampling variance, and restrictions due to base rates of infrequent behaviors are applied to the observed relations between job attitudes (satisfactions) and specific job behaviors, the resulting estimates of population correlations are noteworthy and may provide a better basis for understanding the attitude/behavior nexus (Hulin, 1991, 2001).

Scientists in other fields of study rarely study variables; they typically study theoretical constructs. The reliable relations between general job attitudes and specific behaviors should not distract us from the scientific goal of establishing relations between general constructs. The practical benefit for applied endeavors can be found by disentangling the relations involving specific behaviors.

Roznowski and Hulin (1992) concluded that once an individual joins an organization, a vector of scores on a well-constructed, validated set of job satisfaction scales is the most informative data an organizational psychologist or manager can have about an individual employee and his or her likely behaviors. As evidence for this they cite a range of empirical relations between job satisfactions and specific job behaviors that include attendance at work (Smith, 1977; Scott & Taylor, 1985), turnover decisions (Carsten & Spector, 1987; Hom, Katerberg & Hulin, 1979; Hom 2001; Hulin, 1966; 1968; Mobley, Horner, & Hollingsworth, 1978; Miller, Katerberg, & Hulin, 1979), decisions to retire (Hanisch & Hulin, 1990, 1991; Schmitt & McCune, 1981), psychological withdrawal behaviors (Roznowski, Miller, & Rosse, 1992), pro-social and organizational citizenship behaviors (Bateman & Organ, 1983; Farrell, 1983; Roznowski, Miller, & Rosse, 1992), union representation votes (Getman, Goldberg, & Herman, 1976; Schriesheim, 1978; Zalesny, 1985), hostile or punitive behaviors directed towards coworkers or supervisors (Hershcovis, Turner, Barling, Arnold, Dupré, Inness, LeBlanc, & Sivanathan, 2007), and customers' perceptions of the service provided by employees (Snipes, Oswald, LaTour, & Armenakis, 2005).

Attendance at work, psychological withdrawal, and pro-social behaviors appear to be manifestations of a general family of responses, labeled *work withdrawal*, that reflect attempts to withdraw from the quotidian work tasks that make up a job while maintaining organizational and work-role memberships. Turnover and retirement decisions are manifestations of a family of behaviors labeled *job withdrawal* (Hanisch & Hulin, 1990; 1991). Voting patterns in union representation elections and pre-vote activity may be manifestations of a family of behaviors that represent formal attempts to change characteristics of a work situation (Hulin, 1992). A focus on general behavioral families, rather than on individual behavioral manifestations of the underlying

constructs, should generate more reliable relations and greater understanding of the behavioral responses to job satisfactions.

There are many conceptual similarities between social attitudes and job satisfactions. There are also important differences between these constructs as studied. Job attitudes, *qua* evaluations of the job, may be more salient and accessible for workers than the social attitudes typically assessed in social attitude research. Having a dissatisfying job is nearly inescapable from first awakening until the return home. A job is not something we think of only occasionally, as most do about religion, capital punishment, an honor system on campus, people of another race or country, or donating blood. We experience jobs on a nearly constant basis during our working hours; stress caused by job dissatisfaction is our constant companion at work and even on daily commutes. Individuals are also aware of strongly positive job attitudes or job affect throughout the day. The salience and importance of jobs and job attitudes may ensure that job attitudes and job behaviors are more nearly congruent than are many social attitudes and social behaviors.

Job attitudes are also highly personal; one's job intimately involves the self. Job satisfactions represent evaluations of the respondent's own job, the activity that serves to identify us, not an evaluation of an abstract concept or object as social attitudes typically are. We are what we do. We no longer wear our occupation as our name, as did Archer, Baker, Bowman, Butcher, Brewer, Carpenter, Cartwright, Chandler, Clark, Cooper, Cook, Currier, Dalal, Farrier, Fletcher, Gandhi, Guerrero, Hunter, Jagger, Judge, Mason, Miller, Miner, Porter, Sawyer, Scribner, Shoemaker, Smith, Sodawaterbottleopenerwala, Squire, Tailor, Tanner, Tinker, Wagner, Weaver and others among our ancestors, but our job remains a major source of our self-identity. We are defined privately and socially by what we do (Green, 1993; Hulin, 2001). Work

is a source of autonomy. In individualist cultures, autonomy is among the most strongly held values. In the U.S. and other individualistic cultures, our autonomy often rests on the foundation of a job, the money it provides, the goods that can be purchased with that money, and the abstract value of “standing on one’s own two feet.” Attitudes toward that part of ourselves that one evaluates in a standard job attitude scale cannot be divorced from the individual respondent whose attitudes are being assessed. This degree of personal investment in the attitude object is typically absent from social attitudes assessed in most attitude studies.

Job satisfaction and job performance. Recent evidence suggests that job satisfaction is related to job performance. Judge, Thoresen, Bono, and Patton (2001) have provided an updated meta-analysis of this literature. Their meta-analysis addressed several potential problems with an earlier meta-analysis (Iaffaldano & Muchinsky, 1985) that reported a non-significant relationship. Iaffaldano and Muchinsky averaged results from specific facets of job satisfaction. Their estimated .17 corrected (.146 uncorrected) correlation between satisfaction and performance was based on the average of the correlations between specific job satisfaction facets and job performance. A composite of the facets or other estimate of the shared variance among the facets is a stronger basis for the relation between general job attitudes with job performance. Addressing these limitations and correcting the estimate for inter-rater unreliability, Judge et al (2001) estimated the corrected correlation to be .30 (the uncorrected average correlation was .19; the average corrected correlation was .24 when correcting based on intra-rater [internal consistency] reliability). Table 1 provides a comparison of these findings with other meta-analytic estimates relating overall job satisfaction to other work outcomes. Readers will differ in how they evaluate the strength of these correlations, and of course the outcomes are not monolithic in either their breadth or measurement. These caveats notwithstanding, the

consistency of the estimates is rather remarkable. We would also note that these correlations are underestimates of the *cumulative impact* of job satisfaction for reasons both statistical (the low base rates of withdrawal behaviors downwardly bias correlations [Hulin, 1991]) and conceptual (job satisfaction is not related to only one of these behaviors, but is related to families of behaviors).

An important area for research is the nature of job performance (Borman, 1991; Campbell, 1992). It is a broad construct, not a behavior. Job performance comprises many specific behaviors typically measured through a subjective supervisory evaluation. That job performance is composed of many behaviors is an advantage in terms of its psychometric breadth. It is a disadvantage in terms of isolating its antecedents, consequences, and correlates. Research on the job satisfaction-job performance relationship will continue, but we are unlikely to understand the nature of the relationship without knowledge of the myriad antecedent behaviors of job performance and how these behaviors combine and interact with exogenous factors to generate overall job performance. Judge et al. (2001) found similar correlations regardless of the gross nature of the measure of job performance (supervisory evaluations, objective output, etc.), but even objective output is a result of many behaviors by an employee, technological influences, group contributions, feedback from managers, and opportunities.

Moreover, it has been suggested that the more “discretionary” or “contextual”—rather than task-oriented—aspects of job performance are driven primarily by motivational processes, including job attitudes (e.g., Smith, Organ & Near, 1983). Extrapolating from this, one might predict that job satisfaction’s meta-analytic relationships with “discretionary” forms of performance, such as organizational citizenship behavior (OCB) and counterproductive work behavior (CWB), should be somewhat stronger (in absolute value) than the .30 relationship

estimated by Judge et al. for overall performance. Although this does appear to be the case for CWB, it does not appear to be so for OCB (see Dalal, 2005).

Further progress on this front was provided by Harrison et al. (2006). Their path analysis based on meta-analytic data supported very broad job attitude (indicated by overall job satisfaction and organizational commitment) and individual effectiveness factors indicated by specific job behaviors (task and interpersonal aspects of job performance, and withdrawal behaviors of lateness, absenteeism, and turnover). When so broadly aggregated, the estimated correlation between job satisfaction and job performance was .50. The model that fit the data best included a progression of withdrawal from lateness to absence to turnover.

Teasing apart the causal nature of satisfaction-performance relationships, investigating mediators and moderators of the relationship, and disaggregating performance to understand what specific behaviors typically compose it may be illuminating. Some job behaviors may result from job satisfaction; others may cause job satisfaction. Still others may be both causes and effects of job satisfaction. The temporal dynamic relations among these constructs and behaviors remain to be explicated. If job performance is disaggregated, behavioral families can be reconstructed, as have behavioral families in the withdrawal area, to highlight relations with antecedents and advance theoretical understanding.

Summary. Reliable relations between job satisfactions and job behaviors may reflect the unavailability of feelings about jobs, and the salience of jobs to most employees. If we cannot avoid the negative feelings engendered by a job, we avoid as much of the job as we can; we engage in work withdrawal. Job attitudes, if strong enough, may lead to job withdrawal in the form of retirement or quitting. Voting in favor of union representation is an attempt to

permanently change the nature of one's job. Positive job attitudes are less likely to engender withdrawal behaviors or attempts to change the work situation.

Theoretical Models of Job Attitudes²

In this section we provide a review of the theoretical models of job attitudes. These models attempt to account for the antecedents and complexity of job attitudes among individual workers. The models, for the most part, are not alternative explanations for these attitudes because they focus on different aspects of the general construct. Some specify the characteristics of jobs that workers attend to and evaluate or affectively react to, others specify the process by which job characteristics are evaluated, and still others focus on individual needs as the basis for job reactions. Direct tests of the comparative validity of the models are generally not possible. We offer a description of the models to provide an introduction to the theoretical bases of some of the research in this area.

The Cornell Model

The Cornell Model of job attitudes (Smith, Kendall, & Hulin, 1969; Hulin, 1991) was the theoretical foundation of a series of studies of job and retirement attitudes. Two products of this research effort were the Job Descriptive Index (JDI), the most widely used scientific measure of job satisfaction in use today (Cranny, Smith, & Stone, 1992, p. 2; DeMeuse, 1985) and the Retirement Descriptive Index (RDI). A modified version of the Cornell Model is depicted in Figure 1. This figure depicts sources of influence on frames of reference and how they might influence the *costs* of work role membership and the *value* of work role outcomes to job incumbents, with hypothesized effects on relations between job inputs, job outcomes, and job attitudes.

The Cornell Model is differentiated from other theories of job attitudes by the influences of frames of reference on evaluations of job outcomes, as initially formulated (Smith, Kendall, & Hulin, 1969), and also on job inputs, as modified by Hulin (1991) incorporating March and Simon's (1958) input/outcome economic model of job attitudes. Frames of reference can be defined simply as the relative standards individuals use in evaluating their job outcomes. As shown in Figure 1, frames of reference are posited as moderators of the effect of job outcomes on job satisfactions in the sense that whether a certain level of outcomes is judged satisfying depends rather fundamentally on one's standards. These individual standards are influenced by what one has experienced in the past as well as one's immediate economy, living standards, and jobs.

Frame of reference influence on standards for evaluating job outcomes was adapted from Helson's (1948; 1964) work on adaptation level theory. The concept of frames of reference as generated and modified by individuals' experience was used to account in part for differences in job satisfactions of individuals on objectively identical jobs. Some employees working on objectively unpleasant jobs, with few positive outcomes, express positive evaluations of their work and working conditions while some employees on objectively desirable jobs evaluate their jobs quite negatively.

Data supporting the influence of frames of reference were provided by Kendall (1963) and Hulin (1966). Kendall reported an analysis of data from employees of 21 organizations in 21 different communities. Significant negative correlations between community prosperity and job satisfactions were obtained. Hulin (1966) extended Kendall's study on a sample of 1950 employees working in 300 different communities employed by the same organization, doing the same work, at the same wage rates. The results confirmed the effects of frames of reference,

indexed by economic conditions of communities, extent of sub-standard housing, and productive farming in the area on job satisfactions. There were consistent negative correlations between economic conditions in communities (scored positively) and job attitudes, and positive correlations between percentage of sub-standard housing and job attitudes. These results were interpreted as meaning that prosperous communities with few slums, as well as the jobs of other workers in the community, influenced employees' frames of reference for evaluating work, working conditions, and pay; prosperous conditions lead to higher frames of reference and lower job satisfactions. Workers living in poor communities tend to positively evaluate their job because the alternative may be a worse job or no job at all.

Utility of direct and opportunity costs is similarly a moderating variable, but of the effect of job inputs on job satisfactions. Utility of direct and opportunity costs can be defined as how individuals evaluate, and value, the costs or investments that represent work role inputs. Utilities in this case are similar to frames of reference in that each often reflects local labor market conditions. They are not, however, the same. As noted previously, utilities concern inputs whereas frames of reference concern outcomes, and this is not a distinction with little difference. Even more than frames of reference, utilities are tied to one's labor market experiences. As noted by Hulin, Roznowski, and Hachiya (1985, p. 242), "During times when a large number of alternative jobs are available, the utility of alternative activities forgone in order to occupy any specific position with an organization increases. The more abundant and desirable the alternatives, and the greater the expected utility of these other activities to a worker, the less the satisfaction experienced with the present job." As for the other side of the coin, when the labor market is slack (high local unemployment, few positions open in one's area), individuals will

attach less relative value to their inputs and, all else equal, experience more satisfaction with the work role.

Summary. The Cornell Model highlights the influences of factors exogenous to the individual and the organization on job attitudes and how these factors are translated into evaluations of jobs through their influence on individual differences. This inclusion of factors that characterize broader social and economic settings of organizations and jobs emphasizes limitations of the study of employees removed from their social, organizational and economic contexts. Additional direct tests of the model, while difficult, would prove worthwhile, and would provide a relevant economic perspective to job attitude research.

Thibaut and Kelley's Comparison Level Model of Satisfaction

Thibaut and Kelley's (1959) comparison level model was developed to account for satisfactions an individual derived from a dyadic relationship or membership in a group. The core of the model involves comparisons of outcomes from a focal role with outcomes directly or vicariously experienced by the individual in past dyadic roles. The distribution of role outcomes establishes the *comparison level*, *CL*. Roles that provide outcomes less than the *CL* are dissatisfying; those with role outcomes greater than the *CL* are satisfying. Generalizing Thibaut and Kelley's model to job satisfactions assumes that group or dyadic membership and work roles are analogous (*vis-à-vis* attitudes) and that the influence of other role is from outcomes directly or vicariously experienced.

A second comparison level, *comparison level for alternatives*, denoted as CL_{ALT} , is also important in the Thibaut and Kelley Model. CL_{ALT} refers to the outcomes one could receive from the best alternative role available to the person. These alternative role outcomes are conceptually related to opportunity costs of holding a given job. The difference between the outcomes from

the current role and CL_{ALT} determines the likelihood of the individual changing roles. These relationships hypothesized by Thibaut and Kelley are shown in Table 2.

The situations depicted in Table 2 show the relations among current role outcomes, CL , comparisons for alternatives, CL_{ALT} , satisfaction, and likely role withdrawal behaviors. $>$ or $<$ indicates a situation in which the outcomes from the focal role are greater or less, respectively, than CL and CL_{ALT} . Satisfaction is influenced by CL , behavior by CL_{ALT} . The relations among CL , CL_{ALT} , satisfactions, and role withdrawal are complex. The empirical literature suggests that satisfaction is correlated with job withdrawal—leaving a job—operationalized by a number of behaviors. However, local economic conditions may reduce job withdrawal through the operation of CL_{ALT} because there are few alternatives available with superior outcomes. We expect relations between job attitudes and organizational, both work and job, withdrawal (Hanisch & Hulin, 1990; 1991; Hulin, 1991). *The specific withdrawal behaviors enacted may differ depending on situational constraints* (Hanisch, Hulin, & Seitz, 1996).

Summary. Thibaut and Kelley's comparison level model highlights interactions of factors exogenous to the individual or the job in the determination of job attitudes and the consequent job behaviors. The bases for CL and satisfactions are outcomes from past roles; the bases for withdrawal behaviors are outcomes from currently available alternative work roles. Past roles and currently available alternative roles are exogenous factors that limit relationships between endogenous factors and job satisfactions and constrain the effectiveness of organizational interventions designed to influence job attitudes or control organizational withdrawal behaviors.

Value-Percept Model

Locke (1976) defines *values* as that which one desires or considers important. His value-percept model holds that job satisfaction results from the attainment of important values. The

model expresses job satisfaction as follows: Satisfaction with a job characteristic = (want – have) × importance, or

$$S_i = (V_{ci} - P_i) \times V_i$$

Where S_i is satisfaction with the i^{th} job characteristic, V_{ci} is value content (amount wanted) of the i^{th} characteristic, P_i is the perceived amount of the i^{th} characteristic provided by the job, and V_i is the importance of the i^{th} characteristic to the individual. Locke hypothesizes that discrepancies between what is desired by the person and what is received from the job are dissatisfying only if the job attribute is important to the individual. A discrepancy between the pay level wanted and the pay provided, for example, is assumed to be more dissatisfying to individuals who value pay highly than those who value pay to a lesser degree. Because individuals consider multiple facets when evaluating their job satisfaction, the cognitive calculus is repeated for each job facet. Overall satisfaction is estimated by aggregating across all contents of a job weighted by their importance to the individual.

Wainer (1976; 1978) and others (e.g., Aiken, 1966; Ree, Carretta, & Earles, 1998) have discussed the general issue of weighting (multiplying by importance or other variables) and combining correlated facets of any general construct. As long as the facets are correlated and the variability of importance weights (i.e., V_i s) is not very large, linear restraints make considerable improvement in the weighted linear combination over a unit weighting of standardized scores of the facets unlikely. Moreover, the reliability of weighted discrepancy scores, generated by multiplying a difference between two unreliable variables by a third unreliable variable, may be problematical. In spite of the theoretical information in importance, empirical gains from weighting deficiencies by importance may not be realized (Mikes & Hulin, 1968).

Despite these psychometric considerations, Rice, Gentile, and McFarlin (1991) found that facet importance moderated the relationships between facet amount and facet satisfaction. They also found that facet importance did not moderate the relationship between facet satisfaction and overall job satisfaction. Simple aggregations of facet satisfactions may predict overall satisfaction because facet importance (intensity) is already reflected in each facet extensity (satisfaction score). Another issue is that without substantial individual differences in values, Locke's theory loses its cogency. Although individuals may differ in what they value in a job, some attributes are generally more valued and others less valued. Cross-cultural research on populations of workers differing substantially in values could address this issue. Dispositional research showing personality traits underlying values might also contribute to understanding individual differences in values as defined by the Locke model.

Summary. The Value-Percept Model expresses job satisfactions in terms of employees' values and job outcomes. The model highlights the role of individual differences in values but its use of weighting may be problematic. The model would benefit from additional tests, and research on the cultural, dispositional, and other exogenous factors that might explain value differences.

Job Characteristics Model

The job characteristics model (JCM) argues that enrichment of specified job characteristics is the core factor in making employees satisfied with their jobs. The model, formulated by Hackman and Oldham (1976), specifies five core job characteristics that make work challenging and fulfilling, and make jobs that provide them more satisfying and motivating than jobs that provide them to a lesser degree:

- (1) *Task identity*—degree to which one can see one's work from beginning to end;

- (2) *Task significance*—degree to which one’s work is seen as important and significant;
- (3) *Skill variety*—extent to which job allows employees to perform different tasks;
- (4) *Autonomy*—degree to which employee has control and discretion for how to conduct his or her job; and
- (5) *Feedback*—degree to which the work itself provides feedback concerning how the employee is performing the job.

The JCM has received direct and indirect support. When individuals are asked to evaluate the importance of different facets of work such as pay, promotion opportunities, coworkers, and so forth, the nature of the work itself consistently emerges as the most important job facet (Jurgensen, 1978). This is not surprising because job satisfaction researchers have known for some time that of the major job satisfaction facets—pay, promotion opportunities, coworkers, supervision, the overall organization, and the work itself—satisfaction with the work itself is generally the facet most strongly correlated with overall job satisfaction (e.g., Rentsch & Steel, 1992) or the factor regarded as the most important (Herzberg, Mausner, Peterson, & Capwell, 1957). That work satisfaction is the facet of job satisfaction that correlates most strongly with overall satisfaction, and is the facet with the strongest correlations with outcomes, suggests this focus of the JCM, the nature of the work itself, is on a solid foundation. Meta-analyses of relationships between workers’ reports of job characteristics and job satisfaction have produced generally positive results (Fried & Ferris, 1987; Loher, Noe, Moeller, & Fitzgerald, 1985). However, facets of jobs other than the work itself have been shown to be reliably related to behaviors important to employees and organizations (Getman, Goldberg, & Herman, 1976). Satisfaction with pay and supervision was shown to be related to union representation votes;

satisfaction with the work itself was not. Satisfaction with supervision was related to attendance at work on a day when a severe snow-storm made attendance optional (Smith, 1977).

Although direct tests of the JCM have been supportive, they have not supported the algebraic combination of the intrinsic factors. Specifically, in the original formulation, the five intrinsic job characteristics were combined into what Hackman and Oldham (1980) called a Motivating Potential Score (MPS). According to the authors, the five job characteristics were combined in the following manner:

$$MPS = \frac{(SV+TI + TS)}{3} \times A \times F$$

Where SV=*skill variety*, TI=*task identity*, TS=*task significance*, A=*autonomy*, and F=*feedback*.

This weighted combination of the five core characteristics has not been supported. An additive (unit-weighted) combination better predicts satisfaction (e.g., Fried & Ferris, 1987). While important, we do not believe this problem represents a “fatal flaw” in the scientific integrity or practical utility of the theory. As our previous reviews have shown, complex algebraic formulations of unreliable assessments do not accurately model human psychology. However, that statement does not render irrelevant the concepts that gave rise to the formulation.

Growth Need Strength (GNS) is a component of the model that accounts for individual differences in receptiveness to challenging job characteristics. According to Hackman and Oldham (1976), GNS is employees’ desire for personal development, especially as it applies to work. High GNS employees want their jobs to contribute to their personal growth; work characteristics are especially important to individuals who score high on GNS. The relationship between work characteristics and job satisfaction is stronger for high-GNS employees (average

$r=.68$) than for low-GNS employees (average $r=.38$) (Frye, 1996). However, task characteristics are related to job satisfaction even for those who score low on GNS.

Despite empirical support, there are limitations to the theory beyond the aforementioned issue involving the algebraic combination of assessments of job characteristics. Specifically, a serious limitation with the JCM is that most of the studies have used self-reports of job characteristics, which have garnered a well-deserved share of criticism (Roberts & Glick, 1981).

Another limitation concerns the GNS construct. It is not clear what this construct measures; little construct validity evidence is available. Are other individual differences involved in the job characteristics/job attitude relationship? Empirical research by Turner and Lawrence (1965) and a review by Hulin and Blood (1968) highlighted the role of differences in cultural background in reactions to job characteristics. Is GNS a reflection of cultural background? ... of personality traits such as conscientiousness? In the research on JCM, the construct validity of GNS has been neglected.

In addition, the direction of causal arrows linking job satisfaction and perceptions of job characteristics are not clear. The relationship between perceptions of job characteristics and job satisfaction may be bidirectional (James & Jones, 1980; James & Tetrick, 1986) or perhaps from satisfaction to perceptions of task characteristics. Finally, there is little evidence that GNS moderates the relationship between job characteristics and outcomes as proposed.

Summary. JCM hypothesizes that job satisfactions depend on characteristics of the work itself and, as does the Value-Percept Model, that the roots of job satisfactions are within the individual and the job and their nexus. GNS may be influenced by individuals' cultural backgrounds as these lead to individual differences in need configurations; other influences are minimized.

Dispositional Influences

The earliest writings on job satisfaction recognized the importance of dispositional influences on job satisfaction. Hoppock (1935) found that questions about levels of emotional adjustment substantially separated satisfied and dissatisfied employees. This replicated earlier results by Fisher and Hanna (1931). Weitz (1952) developed a “gripe index” to take into account individuals’ tendencies to feel negatively, or positively, about many aspects of their lives, to gauge more accurately relative dissatisfaction with one’s job. Smith (1955) found individuals prone to poor emotional adjustment were more susceptible to feelings of monotony. The Cornell Model was based in part on the idea that there existed very satisfied garbage collectors and very dissatisfied executives and that these “anomalous” satisfaction levels could be explained.

However, of the thousands of studies published on the topic of job satisfaction prior to 1985, few considered individual differences as the *sources* of job satisfactions. Even fewer focused on personality. This state of affairs began to change with the publication of two seminal studies by Staw and colleagues, a study by Arvey and colleagues, and an integrative piece by Adler and Weiss (1988) on the benefits of developing and using personality measures designed specifically to be applied to normal, working adults as opposed to residents of Minnesota mental hospitals or their visitors (for many years, personality was assessed most commonly with the Minnesota Multiphasic Personality Inventory [MMPI], a measure well-validated for diagnosing psychological disorders but poorly suited for assessing employees’ personalities). Staw and Ross (1985) found that measures of job satisfaction were reasonably stable over time, even when individuals changed employers or occupations. The Staw and Ross study has been criticized (e.g., Davis-Blake & Pfeffer, 1989; Gerhart, 1987; Gutek & Winter, 1992; Newton & Keenan, 1991) on the grounds that it is difficult to establish a dispositional basis of job satisfaction unless

one actually measures dispositions, and that other, non-dispositional factors might explain job attitude stability. Staw, Bell, and Clausen (1986) corrected this deficiency; using a unique longitudinal data set and childhood ratings of personality, Staw et al. (1986) reported results showing that affective disposition assessed at ages 12-14 correlated .34 ($p < .05$) with overall job satisfaction assessed at ages 54-62. In a similarly provocative study, Arvey, Bouchard, Segal, and Abraham (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. In the late 1980's, it is not much of an overstatement to argue that dispositional explanations were eschewed or, more likely, ignored entirely, in the literature.

The Staw and Arvey et al. studies are as significant for the stimulus they provided as for their substantive findings. Judge and Hulin (1993) attempted to develop an improved measure of the dispositional influence on job satisfaction. Drawing from Weitz's (1952) "gripe" checklist, which asked individuals to indicate their satisfaction with a list of objectively neutral objects common to every day life (your telephone number, your first name, 8½" × 11" paper), Judge and Hulin found that employees' responses to neutral objects were correlated with job satisfaction, a finding replicated by Judge and Locke (1993). Judge and Hulin also found the scores on this instrument had an independent path to job turnover four months after the initial assessment *after controlling for job satisfaction*. Despite favorable psychometric evidence for the measure (Judge & Bretz, 1993; Judge & Hulin, 1993), it remains unclear what construct this measure assesses. Other research found support for other dispositional taxonomies, including positive and negative affectivity (PA and NA; Watson & Slack, 1993) and the five-factor model of personality (Judge, Heller, & Mount, 2002).

In a different approach to dispositional influences on job attitudes, Judge, Locke, and Durham (1997) focus on core self-evaluations, fundamental beliefs individuals hold about themselves, their functioning, and the world. Core self-evaluations (CSEs) are hierarchical with a broad, general trait comprising specific traits. They argue that core self-evaluations are assessed by traits that meet three criteria: (1) evaluation-focus (the degree to which a trait involves evaluation, as opposed to description); (2) fundamentality (in Cattell's [1965] personality theory, fundamental or source traits underlie surface traits); and (3) breadth or scope (according to Allport [1961], cardinal traits are broader in scope than secondary traits). Judge et al. (1997) identified four specific traits as indicators of CSEs based on these evaluative criteria: (1) Self-esteem, (2) Generalized self-efficacy, (3) Neuroticism, (4) Locus of control. Questions remain about the degree to which locus of control can be represented by this broad factor (Bono & Judge, 2003). Increasingly, research has utilized direct measures of core self-evaluations. However, the use of such measures does not obviate, entirely, the need to determine the degree to which locus of control belongs in the taxonomy.

In the 12 years since it was first introduced, core self-evaluations (CSE) has been the subject of more than 350 studies (according to a PsycINFO search completed in October 2008). Although the Judge et al. (1997) paper introduced CSE to explain job satisfaction, most of these studies have linked CSE to applied behaviors, including both subjective (e.g., performance ratings) and objective (e.g., sales volume) measures of job performance (Erez & Judge, 2001), responses to performance feedback (Bono & Colbert, 2005), interpersonal interactions with customers (Salvaggio, Schneider, Nishii, Mayer, Ramesh, & Lyon, 2007), job search persistence after unemployment (Wanberg, Glomb, Song, & Sorenson, 2005), adjustment to foreign assignments (Johnson, Kristof-Brown, Van Vianen, De Pater, & Klein, 2003), and translating

early life advantages (e.g., childhood socioeconomic status, education attainment of one's parents) into later earnings (Judge & Hurst, 2007).

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 and Bono (2001) completed a meta-analysis of 169 independent correlations (combined $N=59,871$) between each of the four core traits and job satisfaction. When the four meta-analyses were combined into a single composite measure, the overall core trait correlates .37 with job satisfaction. Given the various ways of considering affective disposition noted in this review, one might one might ask what either taxonomy adds beyond PA/NA (Watson, 2000), the affective predisposition scale (Judge & Hulin, 1993, Judge & Locke, 1993), or the Big Five personality model (Goldberg, 1990; McCrae & Costa, 1997). This is a particularly relevant question given that CSEs are not uncorrelated with traits from either taxonomy (Judge, Erez, Bono, & Thoresen, 2002).

Judge, Heller, and Klinger (2008) found that of the three taxonomic structures (five-factor model, PA/NA, core self-evaluations), core self-evaluations 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: (1) Core self-evaluations/neuroticism (all four core traits, plus NA), (2) Extraversion (including PA), (3) 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. This study—and several others like it, conducted using multiple methods and statistical approaches—suggests that CSE has the most robust associations with job satisfaction.

Best, Stapleton, and Downey (2005) presented further evidence for the influence of CSE on job satisfaction via appraisals of the work environment. In a study of Veterans Administration employees in a wide range of positions, the authors found that core self-evaluations was negatively related to perceptions of organizational obstacles to goal fulfillment (perceived organizational constraint; $\beta = -.32, p < .05$). Perceived organizational constraint mediated between CSE and burnout, which negatively predicted job satisfaction ($\beta = -.44, p < .05$). CSE, furthermore, had a direct negative effect on burnout ($\beta = -.31, p < .05$). 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 drawback in earlier research, Judge, Bono, and Locke (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 41-50. These results suggest that core self-evaluations 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 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 (Sheldon & Elliot, 1998). Judge, Bono, Erez, and Locke (2005)

proposed that individuals with positive self-concept should be less vulnerable to external pressures and, therefore, more likely to set self-concordant goals. In longitudinal studies of college students and employees of several different firms, participants disclosed goals they had set for the following two months and answered questions that captured the level of self-concordance of each goal. In both studies, self-concordant goals partially mediated between core self-evaluations and life satisfaction and between core self-evaluations and goal attainment. It appears that core self-evaluations do lead to the pursuit of self-concordant goals, which increases life satisfaction and goal attainment. However, the influence of goal attainment on life satisfaction was mixed. The authors concluded that core self-evaluations “may serve more like a trigger than an anchor. People with positive core self-evaluations strive for ‘the right reasons,’ and therefore ‘get the right results’” (p. 266).

Summary. Though organizational psychologists have productively studied numerous traits in relation to job satisfaction, it appears that CSE has the most robust associations with the concept (Judge et al., 2008). Although we can be confident of the predictive validity of CSE, it is a complex concept, and research fully elucidating the process by which it influences job satisfaction remains to be conducted.

Comparisons of Theoretical Approaches

In Figure 2 we provide an integration of the job satisfaction models just discussed. There is much similarity among the models. Job outcomes are typically judged in relation to a set of standards. There are a number of hypothesized influences on the standards involved in evaluating job outcomes. These influences range from exogenous economic/environmental influences that affect employees’ frames of reference for evaluating specific job outcomes to individuals’ personality characteristics or values, and perhaps biological factors. Job outcomes (and perhaps

inputs) and standards are processed through a comparator and the result of these cognitive processes is an evaluation of one's job, job satisfaction.

This integrative model is, for good reason, similar to the Cornell model. Although the Cornell model has never been directly tested in its entirety, the absence of evidence has not diminished our belief in the merits of the model. Tests of the model are needed. What the integrative model does, however, is add to the Cornell model in two respects. First, it recognizes that work role contributions and outcomes do not exist in a vacuum. They are products of one's personality and one's environment. Accordingly, the integrative model adds personality (core self-evaluations or other traits), and includes links from personality and environmental factors to work role contributions and outcomes. It also includes links from personality to utilities and frames of reference. Personality impacts both the opportunities available to individuals, and how they appraise those opportunities. Similarly, personality may impact individuals' alternatives, and how these alternatives translate into frames of reference. Second, we explicitly include the comparison process as a unique variable in the model. This reflects the important (arguably central) role that such comparisons play in the Cornell Model, Thibaut and Kelly, and Value-Percept model.

One way to summarize these models of job attitudes is to highlight the sources of the influences on job attitudes. The JCM and Locke's Value-Percept model emphasize the influence of job characteristics, with the influence of each job characteristic hypothesized to be moderated by the values or GNS of the employees. Core Self-Evaluations and the other dispositional models stress direct influences from person and other micro-variables. The Cornell and the Thibaut and Kelley Models, the most macro of the models, both include substantial influences of variables external to the person/job nexus. Both are relatively balanced in terms of their

hypothesized influences of job and person characteristics on job attitudes. Only two, the Thibaut and Kelley and the Cornell Models, emphasize macro, exogenous variables external to the individual and his/her job.

The structure and content of the theoretical explanations of the antecedents of job attitudes are also similar in terms of what is omitted. First, unlike social psychological theories of attitudes, none of the aforementioned organizational theories explicitly discusses attitude *formation* (i.e., the establishment of an attitude where none previously existed). Previously, we argued that a job is likely to be much more salient to a person than many topics—such as blood donation or capital punishment—studied by social psychologists. Thus, we believe that forming an attitude toward one's job (unlike, say, toward blood donation) is simply unavoidable. The study of job satisfaction therefore focuses, appropriately enough, on determinants of its level rather than determinants of its existence *per se*.

Second, and more importantly, none of these theories that link a variety of antecedents and satisfactions through the mechanism of cognitive evaluations and comparisons of one's standards and job outcomes (or inputs) includes on-the-job affect or emotions that may arise from dispositions or from transient events. Affect has been de-emphasized to such an extent that this component of attitude space has nearly disappeared. We do not imply that cognitive evaluations of one's job are free of feelings. We do suggest that assessments and inclusions of affect, assessed using methods that capture this dynamic source of variance, might provide unique insights in our attempts to understand job attitudes and predict important behaviors. This idea is developed in a subsequent section.

New Theoretical Developments

In this section, we discuss theoretical (and empirical) developments that seek to augment the traditional view of job attitudes. One such development is the proposition that job attitudes other than job satisfaction are important. In this regard, we discuss the most recently suggested attitudinal construct—employee engagement—and contrast it to job satisfaction. The remaining two developments challenge the conventional wisdom that the between-person level of analysis is the sole level of importance vis-à-vis job satisfaction: they argue that the within-person level (at which state affect is of focal importance) and the between-organization level should also be considered. These latter two developments, in conjunction, argue for multilevel conceptualizations of job satisfaction.

Employee Engagement and Job Satisfaction

A PsycINFO search in October 2008 revealed more than 23,500 hits for the term “job satisfaction.” Additional searches revealed that job satisfaction has been studied much more heavily than all the other job attitudes *combined*. Nonetheless, due perhaps to the “disappointing” observed relationships between job attitudes and job performance (though see Judge et al., 2001), organizational psychologists persist in the quest for new job attitudes. Describing—and decrying—this tendency, Roznowski and Hulin (1992) wrote: “Job satisfaction...has been around in scientific psychology for so long that it gets treated by some researchers as a comfortable ‘old shoe,’ one that is unfashionable and unworthy of continued research” (p. 124). This admonition notwithstanding, yet another job attitude, “employee engagement,” has recently been suggested. The impetus for this construct has come largely from practitioners, with academia playing catch-up.

In the context of employee engagement, Macey and Schneider (2008) have proposed a distinction between, on the one hand, absorption in and enthusiasm for the work tasks, and, on the other, satiation or contentment. It is the former, they contend, that drives job performance. Although the proposed distinction is intuitively appealing, any new job attitude such as employee engagement faces (or at least ought to face) significant barriers to entry.³

Specifically, the observed empirical relationships among the various job attitudes are quite strong, especially after controlling for measurement error (e.g., Harrison et al., 2006). This suggests that employees do not make the fine-grained conceptual distinctions among these attitudes emphasized by researchers. Thus, construct redundancy among the job attitudes is a major concern.⁴ This concern is heightened in the case of employee engagement, because construct definitions of employee engagement frequently include words related to other job attitudes (e.g., the words “involvement” and “commitment”), and because inventories used to measure employee engagement frequently contain items similar to those in inventories used to measure other job attitudes as well as positive affect (Dalal, Baysinger, Brummel, & LeBreton, in preparation). Construct redundancy leads directly to a lack of incremental validity vis-à-vis criteria. It is unclear whether employee engagement can explain significant incremental variance in behavior/performance criteria, over and above the variance explained by job satisfaction and the other extant responses made by incumbents to their jobs.

A related concern is that any observed incremental effects of employee engagement may be at least partly artifactual. This concern is motivated by another form of construct redundancy, in this case the redundancy between employee engagement (the putative predictor variable) and various behavior/performance criteria. For example, inventories used to measure employee engagement contain items similar to those in inventories used to measure organizational

citizenship behavior (Dalal, Brummel, Wee, & Thomas, 2008). It is therefore unclear to what extent the incremental validity claimed for employee engagement over and above job satisfaction and other job attitudes is due to predictor-criterion redundancy versus genuine conceptual advances regarding the construct space of job attitudes.

Thus, Macey and Schneider's (2008) potentially promising distinction between absorption/enthusiasm and satiation/contentment notwithstanding, considerable obstacles remain to be overcome before the construct of employee engagement can be argued to add significantly to our knowledge about employees' attitudinal reactions to their jobs. We note that, although the aforementioned problems may be most severe in the case of employee engagement, they are hardly unique to that construct. For example, many items in popular organizational commitment inventories are clearly redundant with items in inventories measuring withdrawal cognitions (e.g., Bozeman & Perrewé, 2001).

These problems seem to highlight the continued importance of job satisfaction. There is little reason to suspect predictor-criterion redundancy in the case of job satisfaction's relationships with behavior/performance criteria. Moreover, although--or rather because--there is certainly reason to suspect predictor-predictor redundancy among the various job attitudes, the onus is on proponents of the newer job attitudes to distinguish these attitudes conceptually and empirically from job satisfaction. Until such time as this occurs, practitioners seeking to assess job attitudes are advised to begin with job satisfaction.

Work Role Affect

The tripartite view of job attitudes—cognitive, affective, and behavioral components—may have kept attitude research as one of the most active research areas in social science for the past several decades. Whatever the current research emphasis in social science—behaviors,

cognitions, or emotions—attitudes, as originally defined, met the criteria for “relevant” research. The de-emphasis of an affect component of social attitudes has been paralleled by a similar treatment of affect or emotions in job attitudes. Weiss and Brief (2001) note the neglect of affect in the history of job satisfaction research. Weiss and Cropanzano (1996) have also drawn attention to the field’s neglect of affect and proposed a theory of job attitudes that emphasizes affect on an equal footing with cognitive evaluations, hypothesizes different antecedents for cognitive evaluations vs. affect, and hypothesizes different sets of behaviors as consequences of individual differences in affect as contrasted with cognitive evaluations.

This theory, Affective Events Theory (AET), emphasizes links between job events and job affect, and hypothesizes links between job affect and job behaviors that are independent of the links between traditional job attitudes (cognitive evaluations of jobs) and job behaviors. AET hypothesizes links between job affect and spontaneous, short-term behaviors, such as work withdrawal and organizational citizenship behaviors, rather than the more reasoned long-term behaviors such as turnover or retirement that have been related to job satisfactions. These two fuzzy sets of behaviors are identified by Weiss and Cropanzano as affect- and judgment-driven behaviors. Figure 3 depicts our rendition of AET.

Affect is defined conceptually as individuals’ emotional reactions to their jobs and to the events that happen on their jobs. It refers to how an individual *feels on the job*. This is in contrast to the cognitive representation of job attitudes—evaluations of stable features and characteristics of jobs. How we conceptualize our job in the morning when we arrive at work is very likely relatively stable and consistent with how we view the job at the end of the day. Empirically the correlations between affect on adjacent days range from .50 to .65 depending on the scale (PA, NA, or hedonic tone) across 12 days in two studies (Miner et al., 2005; Miner, 2001). These

morning, pre-workday, feelings may be influenced by longer than normal commuting delays caused by heavy traffic or construction, an incident of road rage, a blizzard in April, an overnight spike in gas prices, a warm sunny day in February, and other positive and negative exogenous factors. These feelings are further modified by events that occur on the job during the day. An argument with a coworker, unexpected praise from a supervisor, or a comment by someone about the availability of jobs and starting salaries at another organization will influence our feelings on the job (Miner et al., 2005). These events and the changes in affect they trigger may be ephemeral but may also have long-term influences on how we evaluate our jobs. Feelings and affect levels triggered by job events, for all their ephemerality, however, have consequences for behaviors on the job: (not) helping our coworkers, getting somebody to cover for us so we can attend a meeting called by our supervisor, or how long we spend on the phone with a customer needing assistance, and so forth (Miner, 2001). Within a framework of stable evaluations of one's job, it is possible to feel anger, frustration, elation, and unhappiness on a job that one evaluates positively and to feel all these emotions in one day and to respond behaviorally, both positively and negatively, to episodes of positive and negative affect.

AET is differentiated from other current approaches by a) the distinctions between job structure or features and job events, although job features (e.g., HR policies) are likely to influence *distributions* of job events, b) an emphasis on affect as a component of job attitudes (see also Clore & Schnall, 2005), and c) the hypothesized independent links between job affect and affect driven behaviors, on the one hand, and between job satisfactions (cognitive evaluations of jobs) and judgment driven behaviors, on the other. Dispositions are hypothesized to moderate the link between events and affect.

Job features and job events should be treated as fuzzy sets. Features differentiating between these two sets of variables would be permanence, frequency, and predictability; job events are more transient and less predictable than stable job features. A sub-set of job events that becomes sufficiently frequent and predictable may cross the boundary between features and events. Affect- and judgment-driven behaviors are fuzzy sets; they do not yield crisp classification of all job behaviors into one category or the other. The fuzziness of the boundaries does not invalidate AET as a useful framework. All classes of events in social science are fuzzy sets to some degree.

Job affect is inherently dynamic. We should expect significant within person co-fluctuations in affect and exogenous events. Job events serve as stochastic shocks to an underlying affect level and cycle. Job events are individually unpredictable and infrequent; their influence contributes to the dynamic nature of job affect. This problem is illustrated by Organ and Ryan (1995) who note predictions of organizational citizenship behaviors (OCB's) 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). This problem has been addressed, and partially solved, by event signal methods (ESM), or ecological momentary assessments (EMA), and multilevel statistical analyses that combine within- and between-person effects (Beal & Weiss, 2003; Hoffman, Griffin, & Gavin, 2000; Raudenbush & Bryk, 2002).

The demands of studying affect levels as dynamic variables have been explored and discussed by Totterdell (1999) and by Weiss, Nicholas, and Daus (1999). Miner et al. (2005) assessed affect on the job using palmtop/handheld computers to administer mood checklists at

four random times during the work day. The within-person, dynamic nature of affect and mood on the job is highlighted by the intra-class correlations that revealed that approximately 60% of the variance in mood or job affect scores resided within persons; approximately 40% of the variance in mood scores could be attributed to between person differences. Similarly high percentages of within-person variance were obtained by Dalal et al. (in press), across two studies and several conceptualizations of affect (i.e., global happiness-versus-unhappiness, positive affect, and negative affect). This within person variance would be treated as error in most studies of job attitudes based on static, cross-sectional designs. Relations involving within person differences and other variables would be impossible to study if affect assessments were aggregated and studied as stable, between person individual differences. Near real-time assessments of job affect permit analyses of within person relations between negative and positive job events and mood on the job after controlling for mood assessed at the beginning of each work day (Miner et al., 2005).

One important aspect of this new approach to job attitudes is the possibility of within person relations between, say, affect and behaviors, that are independent of affect/behavior relations found between individuals. One example of this comes from the medical literature assessing the relationship between exercise and blood pressure (Schwartz & Stone, 1998). When assessed between individuals, we find a negative relationship: those who exercise frequently have lower blood pressure than those who exercise rarely. The same relationship, assessed within individuals, is positive: a person's blood pressure is higher *when* he or she is exercising than when he or she is not. Similarly, Miner (2001) has found that, between individuals, those with more positive affect levels are more likely to exhibit citizenship and helping behaviors. Within

persons the relationship is negative; individuals report lower levels of positive affect while they are helping coworkers.

The overall point is not that we should necessarily expect relationships to operate in different directions, or even to operate in the same direction but with dramatically different magnitudes, at the within-person versus between-person levels of analysis. Rather, the point is simply that no inferences about the within-person level should be made solely on the basis of data collected at the between-person level. Indeed, Chen, Bliese, and Mathieu (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).

In this vein, AET offers a new approach to the study of job attitudes. It emphasizes a source of variance in job attitudes—within-person variance—that has been largely ignored in the past. It represents more than adding a variable, affect, to the study of job attitudes. Appropriate definitions of affect and within person relations require changed research directions and methods if we are to avoid methodological stalemates that occur when (within person) hypotheses derived from newer theories are inappropriately tested using data and methods derived to test older (between person) hypotheses. 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, Weiss, Barros, & MacDermid, 2005).

We recognize that our distinction between cognition and affect is imperfect, as is our decision to identify affect as within-individual and cognition as between-individual. In

evaluating our jobs both cognition and affect are likely involved and, though we assume cognition is less ephemeral than affect, we realize this, if true, is a relative rather than absolute distinction that at times is false. It is also the case that much of the conceptual development of affect has emphasized the ephemeral event basis of affect while similar developments of job attitudes have emphasized their more stable organizational characteristic basis.

At a neurological level, affect and cognition may well be inseparable. Higher-level cognition, Damasio (1994) argues, relies on evaluative input in the form of emotion; cognition and emotion are interwoven in our psychological architecture. 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. Some cognitive effort may be required to deal with these feelings so we can work effectively. Cognition and affect are thus closely related, in our psychology and even in our psychobiology. 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). There are cognitive theories of emotion (Reisenzein & Schoenpflug, 1992), and emotional theories of cognition (Smith-Lovin, 1991). Moreover, partly for this reason (that cognition and affect are inextricably linked), and partly because cognitions change as the situations upon which the appraisals are based change, cognitions are neither wholly between-individual, nor is affect entirely within-individual. Individuals' cognitions do change, and there are between-individual (i.e., trait) differences in characteristic affect experienced. That being said, an imperfect and probabilistic/fuzzy distinction is not the same as no distinction whatsoever; partial overlap does not necessarily imply redundancy.

A modified version of AET includes personality as a moderator of both the cognitive, between-individual links and the affective, within-individual links. Job events may produce one kind of affect for one kind of person (in the figure as well as its discussion here, **P** denotes personality traits of the individual), and a different kind of affect for another (**P1**). A discussion of politics may be stimulating and enjoyable for an open person and irritating for a closed one. A social interaction may be positive-mood inducing for an extravert and stressful for an introvert. Impulsive people (those low on conscientiousness, high on neuroticism, high on extraversion, or all three) may be more likely to act on their affects (**P2**) than others. Similarly, prudent individuals (those high on conscientiousness) may be more cognitively-driven in their behaviors, or more resolute in acting on cognitions (**P4**). Some individuals, such as those high in need for cognition or low in openness, may be more likely to make judgments/evaluations about their jobs based on workplace features (**P3**).

Personality, Within-Individual Variation, and Core Self-Evaluations

Thus far, we have reviewed three recent, distinct contributions to job satisfaction and job affect research: (1) growing acceptance that job satisfaction is, to a substantial degree, rooted in individuals' dispositions in general, and individuals' personalities, including core self-evaluations in particular; (2) the study of job affect as a point of departure from the relatively cognitively-oriented nature of past job satisfaction research; and (3) the growing recognition that job satisfaction and job affect both have transient qualities that can only be discovered (and predicted) using ESM designs that focus on within-individual variation.

Putting these streams of thought together, Figure 4 represents an integrative model focused on core self-evaluations as both a state-like, within-individual variable, and a trait-like individual difference variable. We label this model the Core Self-Evaluations Job Affect

Multilevel (CSEJAM) model. Dealing first with the within-individual portion of the CSEJAM model, we posit that various aspects of one's work and life environment are sources of state core self-evaluations. Performing one's job well, achieving valued outcomes, attaining success in one's occupation, meeting or exceeding important work, job, and career goals, performing interesting, challenging, and meaningful work, obtaining worthwhile and positive job feedback (whether from the work itself or from others), and positive or affirming non-job experiences all might augment one's state core self-evaluations. Conversely, failing at one's work, losing one's job, reaching a dead-end in one's occupation, failing to meet goals, performing stultifying or disappointing work, receiving negative feedback, and isolating or dispiriting life experiences should dampen one's state CSE. State CSE should, in turn, be associated with job affect. That job affect might be moods at work, discrete emotions at work, or job satisfaction. Consistent with Figure 3, such job affects should lead to episodic, affect-driven behaviors.

We should note that the within-individual portion of the model is flexible as to the time-frame involved. Within-individual variation may occur over minutes, hours, days, and even years. Within-individual changes in the Big Five personality traits have been considered from intervals ranging from diurnal (Fleeson, 2004) to life-course (Roberts et al., 2006); there is no reason to believe that variation in self-concept should not be similarly considered.

Turning to the between-individual part of the CSEJAM model in Figure 4, the model includes, denoted by solid lines, effects of trait CSE on intercepts of the four within-individual variables. With appropriate (group-mean) centering, this means that trait CSE should predict average levels of the concepts (averaged across within-individual observations). For example, if a study were conducted where a measure of trait CSE were administered at the onset of the study, and state CSE and job affects were measured on a daily basis for two weeks (or a weekly

basis for, say, six weeks, or a yearly basis for, say, six years), individuals with high scores on the trait CSE measure at the onset of the study would be predicted to have higher average levels of state CSE and the job affects. More noteworthy are the moderating effects, denoted by dotted lines, of trait CSE on the within-individual relationships in the model. These predict that the degree to which, say, outcomes translate into state CSE varies by individuals' trait CSE levels. One would hypothesize that job rewards would be more likely to bolster the self-confidence (state CSE) of those who have characteristically high (trait CSE) levels, because such individuals would be more likely to believe themselves deserving of such rewards. Similarly, job affects might be more likely to translate into action (affect-driven behaviors) for those with high trait CSE levels, because such individuals are more likely to believe that their actions matter.

Unit-Level Job Satisfaction

Thus far, we have discussed job satisfaction at the conventional, between-person level of analysis. We have also discussed job satisfaction (and affect) at the within-person level of analysis. Recently, however, researchers have been interested in job satisfaction at aggregate levels of analysis, such as the organization, work-unit, or work-group. Except where specifically noted, for reasons of parsimony we subsequently refer to all these levels as the "unit" level.

In speaking of unit-level job satisfaction, we seek not to anthropomorphize the organization (obviously, organizations themselves cannot be satisfied or dissatisfied) but rather to discuss an aggregate of the satisfaction of employees within the organization. Specifically, unit-level job satisfaction is typically conceptualized as the mean job satisfaction score of employees within the organization. However, there is an important distinction to be made in what this mean score tells us about the nature of job satisfaction in its aggregated form.

For example, a unit-level satisfaction score of 3 on a 1-5 scale could be due to several individual-level distributions, including (but not limited to): (1) a rectangular distribution, in which equal numbers of employees report scores of 1, 2, 3, 4 and 5 (in which case the unit's score reflects the score of 20% of individual employees); (b) a bimodal distribution, in which half of all employees report a score of 1 whereas the other half report a score of 5 (in which case the unit's score does not reflect the score of any employee); and (c) a "distribution" in which all employees report a score of 3 (in which case the unit's score reflects every employee's score). Only in the last of these cases is within-unit consensus (as measured by indices of inter-individual agreement) high. Thus, in the former two cases, the average would represent *average individual-level job satisfaction*, whereas the latter case might appropriately be considered *unit-level satisfaction*. The broader point – that consensus is needed in order to properly consider job satisfaction as a unit-level phenomenon – is, of course, fully consistent with both theory and empirical demonstrations in the multilevel literature (Chan, 1998; Klein, Dansereau, & Hall, 1994; Kozlowski & Klein, 2000; Morgeson & Hofmann, 1999).

Defining unit-level job satisfaction is, of course, a prelude to assessing its relationship with other same-level constructs. Previously, we noted that relationships at one level of analysis could differ from analogous relationships at a different level of analysis. Two recent meta-analyses (Kokkinou & Dalal, 2008; Van Rooy, Whitman & Viswesvaran, 2007) investigated the satisfaction-performance relationship at the organization level; they assessed the relationship between organization-level job satisfaction and organization-level performance. However, several potential moderators of the relationship need to be taken into account. Whether the level of analysis was the organization versus work-unit versus work-group, whether the study was conducted in the field versus in a classroom or laboratory setting, and whether organizational

performance was measured by financial metrics versus by aggregated ratings of individual employee performance may all make a difference. Both meta-analyses found results virtually identical to each other as well as to the results obtained by Judge et al. (2001) at the individual-employee level: in other words, a corrected satisfaction-performance correlation of approximately 0.30. Moreover, similar to the individual-employee level, temporal precedence remains an open question at the organization or unit level: the lagged satisfaction-performance and performance-satisfaction relationships examined by Kokkinou and Dalal (2008) were of very similar magnitude.

We offer these meta-analyses as an example of a specific avenue of research on organization or unit-level job satisfaction rather than to indicate that research at this level of analysis is already a “closed shop.” On the contrary, such research is in its early stages, and provides opportunities for empirical and theoretical contributions. For instance, little is known thus far about the organization-level antecedents of organization-level satisfaction, although high-performance HRM practices (e.g., Huselid, 1995) may play a role.

Studying job satisfaction at aggregate levels also serves to connect research in organizational psychology with research in economics, which has examined the satisfaction-performance relationship at the level of *countries*. This research (e.g., Bruni & Porta, 2005), which itself builds on psychological research concerning subjective well-being or life satisfaction, has related country-mean well-being/satisfaction scores to country-GDP per capita scores, in order to test the assumption that a country’s economic performance influences the satisfaction of its citizens (interestingly, investigating the reverse causal direction—namely, the idea that satisfied countries perform better economically—does not appear to be a major focus of economic research).

Measurement of Job Attitudes

Job Satisfaction

Measurement of job affect creates problems for researchers. Affective reactions are likely to be fleeting and episodic; state variables rather than consistent chronic, trait-like variables (Telegen, Watson, & Clark, 1999; Watson, 2000). Measurement of affect should reflect its state-like, episodic nature.

Triandis (1980), Fishbein (1980), Eagley and Chaiken (1993) and others have included affective responses in the assessments of social attitudes. Emotional or affective responses to objects or entities assessed as stable variables have typically not improved predictions of behavioral intentions or behaviors. One may regard social and job attitudes as “acquired behavioral dispositions” (Campbell, 1963) without treating relations with behavioral intentions or behaviors as the touchstone of the usefulness of an affective component of attitudes. Further, typical assessments of affect, as stable, chronic responses, may not adequately reflect true affect or emotional responses toward objects.

Much satisfaction research has been based on homegrown, unvalidated measures consisting of, generally, a collection of Likert-type items that ask the respondents to evaluate their pay, the work they do, their supervision, etc. Some scales have been based on collections of items asking respondents how satisfied they were with different features of their jobs. Other scales have been based on items asking about how well the respondents’ jobs fulfilled their needs. The Job Descriptive Index (JDI, Smith, Kendall, & Hulin, 1969), modified by Roznowski (1989), the Job Diagnostic Survey (JDS, Hackman & Oldham, 1976), the Minnesota Satisfaction Questionnaire (MNSQ, Dawes, Dohm, Lofquist, Chartrand, & Due, 1987; Weiss, Dawis, England, & Lofquist, 1967), and the Index of Organizational Reactions (IOR, Dunhan & Smith,

1979; Dunham, Smith, & Blackburn, 1977) represent significant exceptions to this use of unvalidated scales purporting to assess job attitudes. The JDI appears to be the most widely applied measure of job satisfaction in use today (Cranny, Smith, & Stone, 1992, p. 2; DeMeuse, 1985; Zedeck, 1987); the JDS, MNSQ, and the IOR have been used collectively on an additional several thousands of employees. Unfortunately, these four standardized, validated instruments together may account for only a slight majority of the published research on job satisfaction.

The standardized instruments listed above have been evaluated psychometrically; they converge dimensionally with each other when they assess satisfaction with similar job characteristics (Dunham, Smith, & Blackburn, 1977), are related to appropriate individual differences and job characteristics, and have reasonable levels of temporal stability or internal consistency. The four instruments, however, differ substantially. The MSQ assesses the extent to which jobs are evaluated as providing need fulfillment of a number of “basic” needs. The JDS assesses the degree to which jobs provide core characteristics (responsibility, task feed back, task significance, etc.) to the employee. The IOR asks respondents to evaluate job features and scores these into eight facets of job satisfaction (work itself, the organization, career future and security, pay, etc.). The JDI assesses five facets of job satisfaction (work itself, pay, promotional opportunities and policies, supervision, coworkers) by asking respondents to describe their job in terms of the presence or absence of 72 characteristics of the work itself, coworkers, etc. A complete evaluation of the psychometric properties of all available scales requires more space than we have available.

Investigators interested in research on job attitudes have access to several standardized and validated measures that provide information on different aspects of individuals’ job attitudes. In spite of the dimensional convergence, the instruments are not equivalent; the use of one rather

than another will generate marginally to significantly different results. The choice of a measure of job attitudes in any study is not an irrelevant detail. The widespread use of the JDI may reflect the extensive psychometric research that accompanied its initial publication (Smith, Kendall, & Hulin, 1969) and that has appeared in the 30+ years since (e.g., Balzer, Kihm, Smith, Irwin, Bachiochi, Robie, Sinar, & Parra, 1997; Hanisch, 1992; Roznowski, 1989). For example, the unusually careful (for organizational psychologists) attention devoted by the JDI's developers to item comprehensibility/readability allows the JDI to be administered without modification to employees with less education and/or lower reading ability (Stone, Stone, & Gueutal, 1990). The five scales that compose the JDI also have been used extensively as antecedents and outcomes of varying levels of job attitudes in studies ranging from community characteristics and their effects on job attitudes (Kendall, 1963; Hulin, 1969) to longitudinal studies of the effects of sexual harassment (Glomb, Munson, Hulin, Bergman, & Drasgow, 1999). This data base provides researchers with the evidence necessary to evaluate the properties and functioning of this set of scales, including relations with behavioral variables, and may account for its wide use.

For researchers and practitioners interested in a single score representing overall job satisfaction, one option is to use measures like the JDI and simply calculate the mean (or sum) of scores on various facets. However, this approach could suffer from errors of omission (i.e., omitting facets important to the employee) and errors of commission (i.e., including facets unimportant to the employee). A preferable approach is to directly measure employees' perceptions of the job as a whole. Several such "global" job satisfaction measures exist. The Job in General scale (JIG; Ironson, Smith, Brannick, Gibson, & Paul, 1989), for example, is the global equivalent of the JDI.

Job Affect, Mood, and Emotions

Job affect or emotions experienced on the job present a different set of conceptual and assessment problems. Job affect and emotions are influenced by events that occur on the job. Individual job events are likely to be infrequent and difficult to predict. Praise from a supervisor, an overheard conversation in the hallway about a coworker's evaluation, a just-in-time delivery that was not-quite-in-time, a pilot being given an extensive holding instruction to await departing traffic, or a surly customer are all job events and are generally unpredictable. Yet they occur, and their occurrences often trigger job emotions. Assessments of emotions on the job, carried out in near real-time several times during a work day, are necessary to tap into event-affect-behavior cycles and capitalize on the dynamic state nature of affect.

The dynamic nature of job affect makes it difficult to use research practices that rely on one-shot, paper-and-pencil assessments of employees' attitudes. Computerized assessments – where research participants complete measures several times during a day or daily over a week or several weeks – facilitate the collection of such data. In many cases, ESM studies have been carried out where individuals are required to complete an online survey during a certain period of time, either several times a day or each day of the week for several weeks.

Other studies have used hand-held devices (often with an interval contingent method), where such devices signal the participants, present items with clickable response formats, store the data, and maintain an acceptable degree of data security. These devices can control the timing of the response within temporal intervals desired by the researcher as opposed to a signal and diary method in which researchers have no such control (diaries can be completed by the participants any time during the observation period). Items can be sampled randomly at each signal from the pool of items defining the content of the scales (see Dalal et al., in press). Such

sampling may reduce tendencies of respondents to focus on specific emotions that have been assessed at previous signals. It moreover allows for the assessment of a broader construct space without an increase in items on any given survey. However, such sampling also has the potential to artifactually increase the within person variance in affect and decrease the obtained correlation between a construct assessed at time t and the same construct assessed at time $t+1$.

Several studies of affect and mood that have used ESM or signal contingent methods at work (Alliger & Williams, 1993; Dalal et al., in press; Fisher, 2000; Ilies & Judge, 2002; Judge & Ilies, 2004; Judge, Scott, & Ilies, 2006; Totterdell, 1999, 2000; Weiss, Nicholas, & Daus, 1999; Zohar, 1999) generally support the hypothesized importance of affect and mood at work and document the promise of ESM to generate assessments of emotions and affect at work. It is not premature to conclude that ESM has become an expected element of the research. Beal and Weiss (2003) provide a thorough overview of ESM, and discuss how such methods can be used effectively in organizational research.

Another issue that must be resolved is the specification of the content of affect and emotion assessments. Should on-the-job affect be assessed as two orthogonal unipolar dimensions of positive affect (PA) and negative affect (NA), or as two orthogonal bipolar dimensions of hedonic tone and arousal/activation? These different rotations of the mood/emotion circumplex (Tellegen, Watson, & Clark, 1999a) are shown in Figure 5. Either the PA/NA rotation, indicated by dotted axes, or the hedonic tone/arousal rotation, indicated by solid axes, adequately accounts for the correlations among affective or emotional terms and responses.

The potential contributions of affect to understanding variance in job satisfactions (or anything else, for that matter) may not be realized until the rotation of axes in the mood

circumplex is resolved. Although the two rotations may be mathematically equivalent, the use of one rather than the other has significant implications for the study of job affect.

At a conceptual level, it is difficult to comprehend a person who exhibits high scores on both PA and NA. Although this pattern of scores is theoretically possible if PA and NA are independent dimensions, it seems especially problematic with regard to *state* affect, because then such a person would have to exhibit high scores on both PA and NA *simultaneously* or at least within a very short time interval. Moreover, researchers have found it difficult to distinguish empirically—that is, based on the actual responses of subjects—between the descriptors of low-PA states (e.g., “sluggish”) and those of low-NA states (e.g., “at ease”); therefore, though PA and NA seem to be relatively orthogonal at their high poles, they do not seem to be orthogonal at their low poles (Weiss & Cropanzano, 1996). Both these lines of argument favor the rotation that yields the hedonic tone and arousal factors. However, there is some evidence to indicate that PA and NA are the affective manifestations of two relatively independent bio-behavioral systems (i.e., an approach system and an avoidance/withdrawal system; Watson, Wiese, Vaidya, & Tellegen, 1999). Moreover, with regard to the alternative conceptualization of affect, the arousal dimension may explain relatively little variance in relevant criteria (Ilies & Judge, 2002; Miner et al., 2005). Both these lines of argument favor the rotation that yields the PA and NA factors. A possible resolution was proposed by Tellegen, Watson, and Clark (1999b), who argued that, at a higher level of abstraction, the PA and NA factors (and, in all likelihood, the hedonic tone and activation factors) are subsumed by a single, bipolar factor that Tellegen et al. (1999b) referred to as “global happiness-versus-unhappiness.” Although this proposed resolution seems reasonable, it has not yet been widely accepted.

There is also the issue of whether one should favor the measurement of discrete (specific) emotions as opposed to the broad mood dimensions. One of the challenges in measuring discrete emotions is deciding which emotions should be studied. Individuals experience myriad emotions in a work day, which range in their stimulus, generality, duration, and intensity. Emotion researchers have struggled in vain to delineate an accepted taxonomy of “core” emotions (see Izard, 1992; Ortony & Turner, 1990; Power, 2006). Another challenge is that discrete emotions, while theoretically separable, are empirically less so. This is especially true with respect to positive emotions (Watson, 2000).

Repeated event signaled assessments of employees’ affect at work should extend our data base of job attitudes and add to our knowledge of affect, mood, emotion and social attitudes in general. The use of event signal methods in populations of working individuals will correct problems of reliance on relatively uncontrolled static assessments of ongoing organizational and psychological processes at arbitrarily chosen times and will permit generalizations to broader populations of constructs. Both developments should contribute to information about job and social attitudes.

Conclusion

Regardless of whether a person considers his or her job a source of unremitting drudgery, acute frustration, or deep (even spiritual) fulfillment, it seems that job satisfaction is among the most important attitudes a person holds. In the present chapter, we defined job satisfaction in the context of the term “attitude,” described the relationship between job attitudes and job performance while contrasting job attitudes and social attitudes, summarized the more important theoretical models of job attitudes, and discussed several new theoretical developments. These developments include the new job attitude of employee engagement (which we contrasted

somewhat unfavorably with job satisfaction), state affect (and within-person approaches more generally) as an important frontier in job attitude research, and the between-unit level as another important frontier. Finally, we discussed issues related to the measurement of job attitudes and job affect. Overall, our review demonstrates that job satisfaction is alive and well, although it is increasingly to be found at different levels of analysis (e.g., within-person or between-unit) and in different forms (e.g., mood or discrete emotions).

We therefore continue to maintain that, if one wishes to understand human functioning in the workplace, job satisfaction represents as logical a starting place as any. In this context, perhaps the most unfortunate consequence of the Human Relations movement was the spawning of the “business case” for job satisfaction, which holds that job satisfaction is important because it is a major cause of job performance (and other important job-related behavior, such as turnover). As we have illustrated, research on this contention continues vigorously at multiple levels of analysis. Nonetheless, considering the importance of a person’s job in his or her life, viewing job satisfaction *solely*, or even primarily, as a means to the end of job performance loses sight of the fact that job satisfaction is also a means to another end, overall life satisfaction (e.g., Judge & Watanabe, 1993), as well as an important end in and of itself. We did not sufficiently emphasize this idea in the body of the current chapter. However, in an effort to capitalize on the recency effect (Robinson & Brown, 1926), this is the idea with which we conclude.

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Footnotes

¹ Although the classic definition of attitudes includes cognition, affect, and behavior, we might be well advised to consider behavior a consequence, rather than a component, of attitudes (including job attitudes). In discussing this issue, Chaiken and Stangor (1987, p. 577) comment: “The tripartite model ... assumes that attitudes have an affective, cognitive, and behavioral component... Criticisms that this model obscures the attitude-behavior relation ... have led some researchers to delete the behavioral component and to regard attitude as a two-dimensional construct.” Though we consider behaviors to be essential to the complete conceptualization of attitudes, it may be more productive for future research to define attitudes without an inherent behavioral component.

² We do not review every theory on the formation of job satisfaction. For example, Herzberg’s (1967) Two-Factor Theory is one of the best-known job satisfaction theories, but we do not review it here. Numerous reviews have effectively laid the theory to rest (e.g., Hulin & Smith, 1967; Korman 1971; Locke, 1969; Wernimont, 1966) and we see little reason to toil further in what is essentially barren ground. We also do not review the social information approach to job attitudes. This approach to attitude formation accounts for attitudes in information-impoverished laboratory conditions. It has not been applied extensively to account for attitudes on organizational employees in normal working situations.

³ Macey and Schneider (2008) conceptualize employee engagement (or rather what they refer to as “state engagement”) as a composite construct that contains aspects of several other job attitude constructs, including job satisfaction. However, the predominant position in the literature is to conceptualize employee engagement as a distinct (albeit not orthogonal) attitudinal construct—and it is the predominant position that is adopted here.

⁴ However, we do note that in spite of the covariance among the dimensions of job satisfaction, research has shown that employees' scores on different dimensions of job attitudes appear to be reliably related to "appropriate" behaviors. For example, Getman, Goldberg, and Herman (1976) reported that satisfaction with pay and supervision, two job characteristics that could be changed by union representation, were the dimensions most strongly related to votes for union representation. However, Zalesny (1985) found that satisfaction with the work itself was most strongly related to voting in favor of union representation in a sample of teachers. In this latter sample, working conditions in the form of class sizes could be affected by union representation. Employees make distinctions among job characteristics and act appropriately on the basis of their evaluations with these characteristics.

Table 1

Summary of Meta-Analyses on Relationship of Job Satisfaction to Work Outcomes

Study	Criterion	\bar{r}	\bar{r}_c
Judge, Bono, Thoreson, & Patton (2001) [†]	Job performance	.19	.30/.24
Fassina, Jones, & Uggerslev (2008) [*]	Citizenship behavior	.22	.27
Dalal (2005)	Citizenship behavior	.12	.16
LePine, Erez, & Johnson (2002)	Citizenship behavior	.20	.24
Kinicki, McKee-Ryan, Schriesheim, & Carson (2002)	Motivation	.22	.27
Cass, Siu, Faragher, & Cooper (2003)	Employee health	.27	.32
Dalal (2005)	Counterproductive/ deviant behavior	-.29	-.37
Scott & Taylor (1985)	Absenteeism	-.15	-.29
Hackett & Guion (1985)	Absenteeism	-.10	-.14
Hackett (1989)	Absence frequency	-.09	-.15
Hackett (1989)	Absence duration	-.15	-.23
Koslowsky, Sagie, Krausz, & Singer (1997) [*]	Lateness	-.12	-.15
Kinicki, McKee-Ryan, Schriesheim, & Carson (2002)	Days of sick leave	-.10	-.12
Hershcovis et al. (2007)	Coworker aggression	-.14	-.18
Tett & Meyer (1993)	Turnover	-.14	-.25
Griffeth, Hom, & Gaertner (2000)	Turnover	-.17	-.22
Mean		 .16 	 .22
Standard deviation		.05	.06

Notes. \bar{r} =average uncorrected correlation. \bar{r}_c =average correlation corrected for unreliability.

† \bar{r}_c =.30 when correcting correlation based on inter-rater reliability; \bar{r}_c =.24 when correcting based on intra-rater (internal consistency) reliability.

* Application of composite formula needed for exact estimate.

Table 2

Relations between CL, CL_{ALT}, Satisfaction, and Behavior

	CL	CL _{ALT}	Satisfaction	Behavior
<i>Current role outcomes</i>				
Situation A	>	>	Satisfied	Stay
Situation B	>	<	Satisfied	Leave
Situation C	<	>	Dissatisfied	Stay
Situation D	<	<	Dissatisfied	Leave

Notes. CL=Comparison Level. CL_{ALT}=Comparison Level for Alternatives. The “>” and “<” entries denote comparisons between an individual’s appraisal of work role outcomes currently received with CL and CL_{ALT}.

Figure Captions

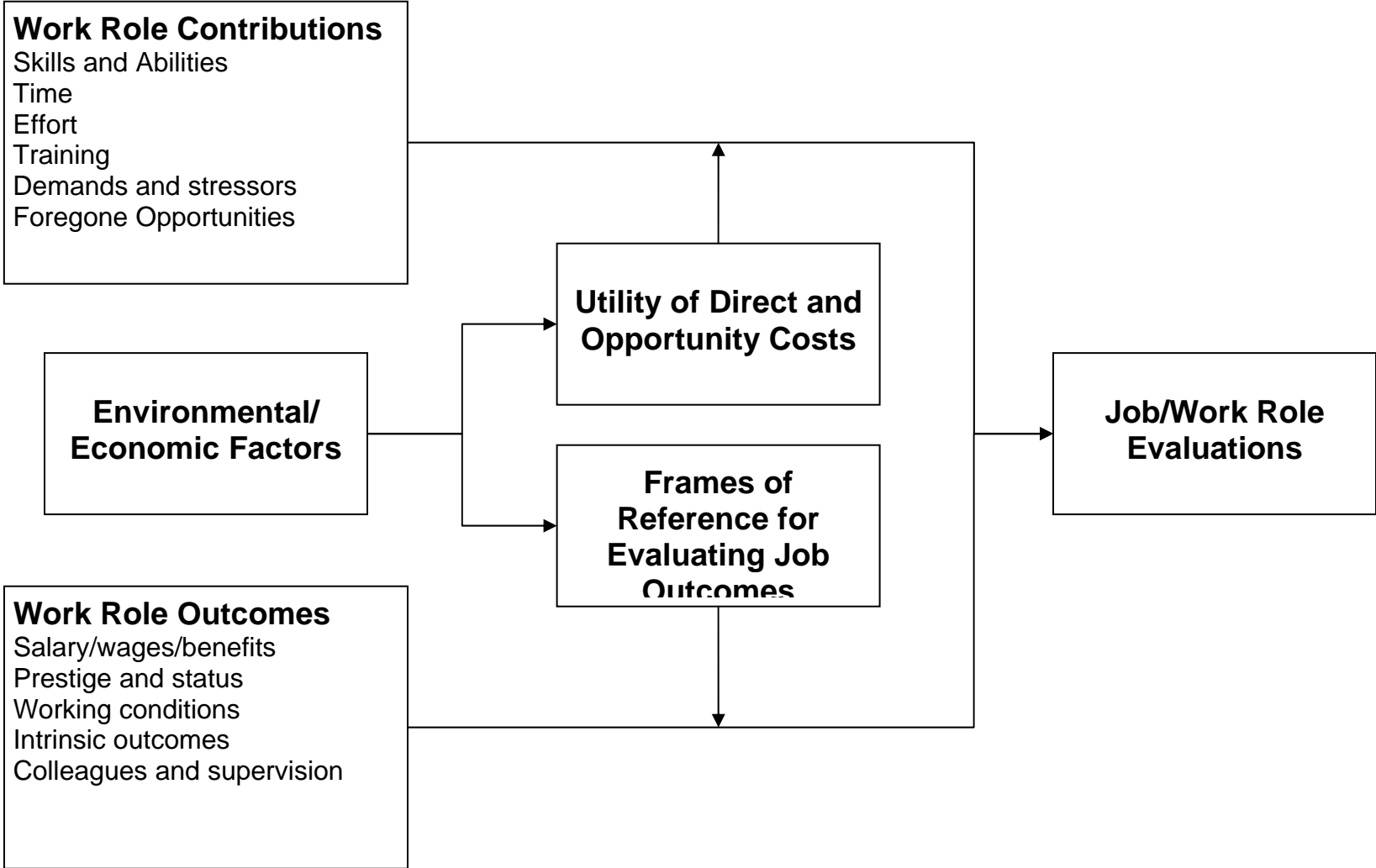
Figure 1. Modified Cornell Model of job attitudes.

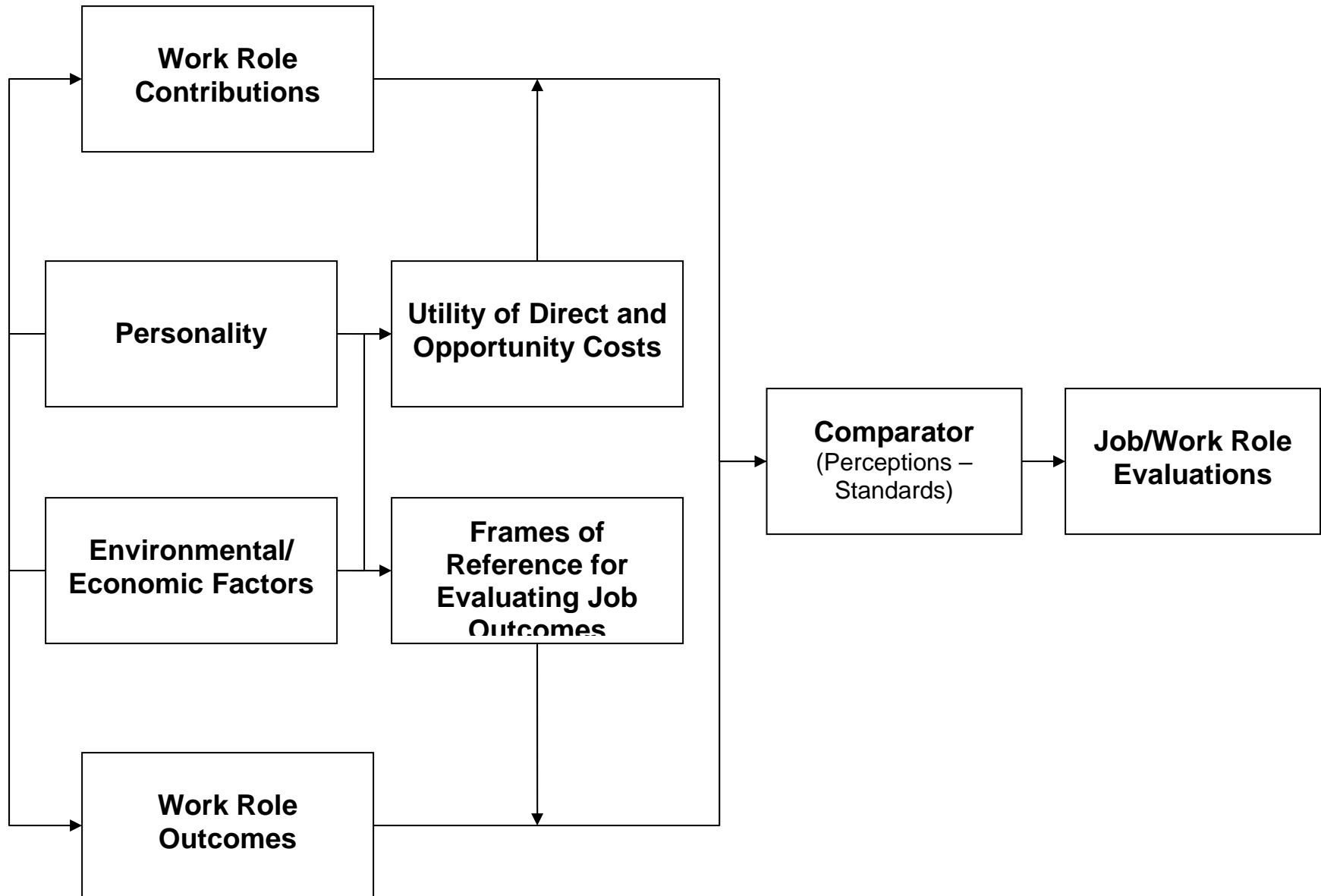
Figure 2. Integrative model of job attitudes.

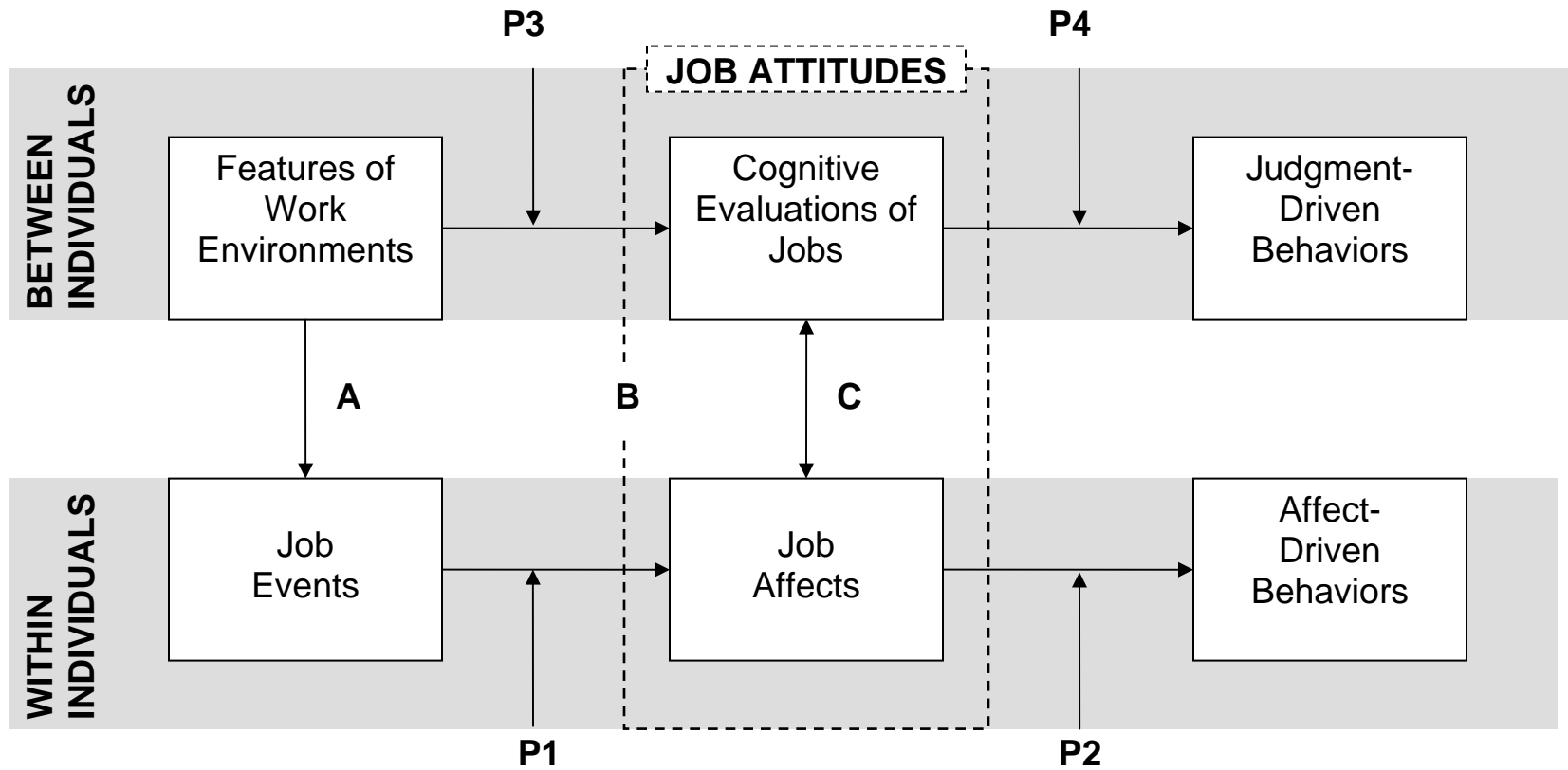
Figure 3. Modified version of Affective Events Theory.

Figure 4. Core Self-Evaluations – Job Affect Multilevel (CSEJAM) model.

Figure 5. Mood circumplex.







- A:** Influence on distribution of events
- B:** Fuzzy boundaries between events and features of work environments
- C:** Reciprocal relationship between cognition and affect
- P:** Personality variables as moderators of between- and within-individual relationships

