

Job Satisfaction

Subjective Well-Being at Work

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Work is central to most people's identities. When asked a general question, "What do you do?", most people respond with their job title. Moreover, across many languages, a significant number of people's surnames are based on occupations (e.g., in English, just to name a few: *abbot, archer, baker, barber, barker, brewer, carpenter, carter, clark, collier, cook, cooper, farmer, fisher, fowler, goldsmith, hooper, mason, miller, porter, roper, sawyer, smith, taylor, thatcher, turner, weaver, wright*). Furthermore, more than half of the nonretired adult population spends most of its waking hours at work. Thus, no research on subjective well-being can be complete without considering subjective well-being at work.

Beyond their centrality to identities, job attitudes are important to consider for other reasons. First, the most widely investigated job attitude—job satisfaction—may be the most extensively researched topic in the history of industrial/organizational psychology (Judge & Church, 2000). Second, in the organizational sciences, job satisfaction occupies a central role in many theories and models of individual attitudes and behaviors. Finally, as we note later, job satisfaction research has practical applications for the enhancement of individual lives as well as organizational effectiveness.

In this chapter we provide a review of significant theoretical and empirical contributions to the job satisfaction literature, emphasizing several current con-

ceptual and methodological issues. We begin with a discussion of the definition of job satisfaction, noting several features of the definition that make job satisfaction an inherently complex social attitude. Next we discuss the measurement of job satisfaction, bridging definitional/conceptual issues and practical considerations. Then we discuss several prominent theories of the antecedents of job satisfaction followed by an overview of empirical support for various significant outcomes of job satisfaction. Finally, we mention some areas of research that we believe are particularly deserving of future exploration.

Definitional Issues

The concept of job satisfaction has been defined in many ways. However, the most-used definition of job satisfaction in organizational research is that of Locke (1976), who described job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304). Building on this conceptualization, Hulin and Judge (2003) noted that job satisfaction includes multidimensional psychological responses to one's job, and that such responses have cognitive (evaluative), affective (or emotional), and behavioral components. This tripartite conceptualization of job satisfaction fits well with typical conceptualizations of social attitudes (Eagley & Chaiken, 1993). However, there are two apparent difficulties with this viewpoint.

First, as noted by Hulin and Judge (2003), social attitudes are generally weak predictors of specific behaviors (Eagley & Chaiken, 1993; Fishbein, 1980; Wicker, 1969), yet job attitudes are generally reliably and moderately strongly related to relevant job behaviors. If job satisfaction is a social attitude, then how might we resolve this apparent inconsistency? Although we have more to say about this issue when discussing the outcomes of job satisfaction, one possible reason for the apparent contradiction is that job attitudes may be more salient and accessible for workers than the social attitudes typically assessed in social attitude research. For instance, cognitive and affective outcomes of job dissatisfaction are likely to permeate and influence an individual's thoughts from the moment he or she wakes to the moment the individual returns home from work (and possibly spill over into nonwork domains as well). Attitudes toward a political party or a marketing campaign are likely considerably less salient for the average individual.

Second, although most researchers include affect in their definitions of job satisfaction, such as provided by measures of life satisfaction, instruments used to evaluate job satisfaction tend to assess cognitive more than affective aspects. This bias has led some to conclude that the missing affective component sufficiently impairs extant measures, and thus to recommend entirely new measures of job satisfaction (Brief & Weiss, 2002; Weiss, 2002). We consider this topic further in our discussion of measurement issues.

Measurement of Job Satisfaction

Most researchers recognize that job satisfaction is a global concept that is comprised of, or indicated by, various facets. The most typical categorization (Smith, Kendall, & Hulin, 1969) considers five facets of job satisfaction: pay, promotions, coworkers, supervision, and the work itself. Locke (1976) adds a few other facets: recognition, working conditions, and company and management. Furthermore, it is common for researchers to separate job satisfaction into intrinsic and extrinsic elements whereby pay and promotions are considered extrinsic factors and coworkers, supervision, and the work itself are considered intrinsic factors.

The astute reader will notice a rather casual use of measurement terms (“comprised of,” “indicated by”) that, in the measurement literature, generally indicates very different conceptualizations of a concept. This looseness is intentional. Particularly, use of the term *comprised of* generally denotes treatment of a concept as a manifest or aggregate or formative variable, wherein specific facets or items cause the concept. Conversely, use of the term *indicated by* generally connotes a latent or reflective concept, where the subscales or items indicate a higher-order concept. Although clarity in thinking about concepts is often recommended in this literature (Law, Wong, & Mobley, 1998), we think considerable confusion can be created by making false choices. Specifically, in this case, concepts can be either manifest or latent, depending on how the researcher wishes to treat them. Clearly, when considering the facets of job satisfaction, it is a manifest variable in that overall job satisfaction is comprised of more specific satisfactions in different domains. Just as clearly, though, job satisfaction is also a latent variable in that it is likely that people’s overall attitude toward their job or work causes specific satisfactions to be positively correlated. Thus, we do not think that conceptualizations or measures of job satisfaction are advanced by forcing false dichotomies into the literature.

With that caveat in mind, two further issues warrant discussion. First, we wish to reprise our earlier discussion of the (missing) role of affect in job satisfaction measures, and its implications for research on, and measurement of, job satisfaction. Second, there is the practical issue of how to measure job satisfaction for research purposes. We address each in turn.

As we noted earlier, affect is central to any definition of job satisfaction, or job attitudes more generally. However, this acknowledgment of the role of affect creates problems for researchers. As noted by Brief and Weiss (2002) and Hulin and Judge (2003) in the job satisfaction literature, and Diener and Larson (1984) in the subjective well-being literature, affective reactions are likely to be fleeting and episodic—state variables rather than consistent chronic, trait-like variables. Measurement of affect should reflect its state-like, episodic nature. Otherwise we become enmeshed in a methodological stalemate (Larson & Csikszentmihalyi, 1983) in which 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.

To some degree, we are discussing a research design issue. This problem has been addressed, and partially solved, by event signal methods (ESM), or momentary ecological assessments, and multilevel statistical analyses that combine within- and between-person effects (Bryk & Raudenbush, 1992). ESM designs show that when job satisfaction is measured on an experience-sampled basis, roughly one-third to one-half of the variation in job satisfaction is within-individual. Thus, typical "one-shot" between-person research designs miss a considerable portion of the variance in job satisfaction by treating within-individual variation as transient error.

However, another, perhaps more, controversial issue is whether extant measures of job satisfaction are poorly suited to assess the affective nature of job satisfaction. This is a complex issue, and space allows only a few cursory thoughts here. First, it is very difficult, perhaps insurmountably so, to separate measures of cognition and affect. Isen and colleagues (e.g., Ashby, Isen, & Turken, 1999; Isen, 2002, 2003) have made this point repeatedly in reference to positive affect. Indeed, there is some discussion that even neuroimaging techniques such as magnetic resonance imaging (MRI), functional magnetic resonance imaging (fMRI), and positron emission tomography (PET) scans are not sufficiently sensitive to separate cognitive and affective processes. If we cannot make such separations in neuroimaging, it seems inconceivable that survey measures will be *more* sensitive. A second and related point is to express dubious regard toward efforts to develop measures of "job affects" as distinct from measures of "job cognitions." For example, Brief (1998) and Brief and Roberson (1989) have argued that job affect should be assessed separately from job satisfaction, owing to the overly cognitive focus of the latter measures. However, the Brief and Roberson's measure of job cognitions correlated as strongly with affect as did their measure of job satisfaction. Another study showed that cognition and affect each contributes (roughly equally) to job satisfaction (Weiss, Nicholas, & Daus, 1999). Perhaps the best advice that can be offered here is that research on discrete moods and emotions should continue, alongside research on job satisfaction. Including separate measures of moods (such as positive and negative affect) or specific emotions with job satisfaction certainly seems advisable without posing any potentially false dualities between cognition and affect.

To be clear, we are not suggesting that the dual roles of affect and cognition should *not* be studied in the context of job satisfaction. What we are objecting to is (1) the characterization of measures of job satisfaction as either cognitive or affective; and (2) the need to develop new, affectively laden measures of job satisfaction or to replace measures of job satisfaction with "work affect" measures. Cognition and affect concepts can help us better understand the nature of job satisfaction, but they are not substitutes for job satisfaction any more than the accumulated body parts of a cadaver substitute for a living human.

Turning to practical issues in measuring job satisfaction, in the literature the two most extensively validated employee attitude survey measures are the Job Descriptive Index (JDI; Smith et al., 1969) and the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967). The JDI assesses satisfaction with five different job areas: pay, promotion, coworkers, supervision, and the work itself. This index is reliable and has an impressive array of validation evidence. The MSQ has the advantage of versatility—long and short forms are available, as well as faceted and overall measures.

As for overall measures of job satisfaction, Brayfield and Rothe's (1951) job satisfaction scale is commonly used. In some of our research (e.g., Judge, Bono, & Locke, 2000) we have used a reliable (i.e., internal consistencies [α] at .80 or above) five-item version of this scale. The five items are:

1. I feel fairly satisfied with my present job.
2. Most days I am enthusiastic about my work.
3. Each day at work seems like it will never end.
4. I find real enjoyment in my work.
5. I consider my job to be rather unpleasant.

Two additional issues concerning the measurement of job satisfaction are worth consideration. First, some measures, such as the JDI, are faceted, whereas others are global. If a measure is facet-based, overall job satisfaction is typically defined as a sum of the facets. Scarpello and Campbell (1983) found that individual questions about various aspects of the job did not correlate well with a global measure of overall job satisfaction. Based on these results, the authors argued that faceted and global measures do not measure the same construct. In other words, the whole is not the same as the sum of the parts. Scarpello and Campbell concluded, "The results of the present study argue against the common practice of using the sum of facet satisfaction as the measure of overall job satisfaction" (p. 595). This conclusion is probably premature. Individual items generally do not correlate highly with independent measures of the same construct. If one uses job satisfaction *facets* (as opposed to individual job satisfaction *items*) to predict an independent measure of overall job satisfaction, the correlation is considerably higher. For example, using data I (T.A.J.) collected, and using the JDI facets to predict a measure of overall job satisfaction, the combined multiple correlation is $r = .87$. If this correlation were corrected for unreliability, it would be very close to unity. As has been noted elsewhere (e.g., Judge & Hulin, 1993), the job satisfaction facets are correlated highly enough to suggest that they indicate a common construct. Thus, there may be little difference between measuring general job satisfaction with an overall measure and measuring it by summing facet scores.

Second, although most job satisfaction researchers have assumed that single-item measures are unreliable and therefore should not be used, this view has not gone unchallenged. Wanous, Reichers, and Hudy (1997) found that the reliabil-

ity of single-item measures of job satisfaction is .67. In addition, for the G. M. Faces scale, another single item measure of job satisfaction that asks individuals to check one of five facets that best describes their overall satisfaction (Kunin, 1955), the reliability was estimated to be .66. Though these are respectable levels of reliability, it is important to keep in mind that these levels are lower than most multiple-item measures of job satisfaction. For example, Judge, Boudreau, and Bretz (1994) used a three-item measure of job satisfaction with an interitem reliability of $\alpha = .85$. The items in this measure were:

1. All things considered, are you satisfied with your present job (circle one)? YES NO
2. How satisfied are you with your job in general (circle one)?

1	2	3	4	5
Very Dissatisfied	Somewhat Dissatisfied	Neutral	Somewhat Satisfied	Very Satisfied
3. Below, please write down your best estimates on the percent of time you feel satisfied, dissatisfied, and neutral about your present job on average. The three figures should add up to equal 100%. ON THE AVERAGE:

The percent of time I feel satisfied with my present job	_____%	
	(note: only this response is scored)	
The percent of time I feel dissatisfied with my present job	_____%	
The percent of time I feel neutral about my present job	. . .%	
TOTAL	. . .%	

When used in practice, these items need to be standardized before summing. Although this measure is no substitute for the richness of detail provided in a faceted measure of job satisfaction, we do believe it is a reasonably valid measure of overall job satisfaction and more reliable than a single-item measure.

Theories of Antecedents of Job Satisfaction

Several theories concerning causes of job satisfaction have been proposed in the organizational literature. These theories can be loosely classified into one of three categories:

1. Situational theories, which hypothesize that job satisfaction results from the nature of one's job or other aspects of the environment.
2. Dispositional approaches, which assume that job satisfaction is rooted in the personological makeup of the individual.

3. Interactive theories, which propose that job satisfaction results from the interplay of situational and personological factors.

As with all areas of psychology, some theories are never really seriously investigated (e.g., Salancik & Pfeffer's [1977, 1978] social information processing approach), some take off and then are either discredited (e.g., Herzberg's [1967] two-factor theory) or broadly supported (though we have difficulty finding any job satisfaction theory to fit in this category), and still others lie dormant for years, only to be investigated at a later time (e.g., Landy's [1978] opponent process theory, which recently was reappraised [Bowling, Beehr, Wagner, & Libkuman, 2005]). We now turn our focus to several theories that have garnered a considerable portion of the attention and/or support of job satisfaction researchers.

Job Characteristics Model

The job characteristics model (JCM) argues that jobs that contain intrinsically motivating characteristics will lead to higher levels of job satisfaction (Hackman & Oldham, 1976). Five core job characteristics define an intrinsically motivating job: (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 one to do different tasks; (4) *autonomy*—degree to which one has control and discretion over how to conduct one's job; and (5) *feedback*—degree to which the work itself provides feedback for how one is performing the job. According to the theory, jobs that are enriched to provide these core characteristics are likely to be more satisfying and motivating than jobs that do not provide these characteristics. More specifically, it is proposed that the core job characteristics lead to three critical psychological states—experienced meaningfulness of the work, responsibility for outcomes, and knowledge of results—which, in turn, lead to outcomes such as job satisfaction.

There is both indirect and direct support for the validity of the model's basic proposition that core job characteristics lead to more satisfying work. In terms of indirect evidence, research studies across many years, organizations, and types of jobs show that when employees are asked to evaluate different facets of their job, such as supervision, pay, promotion opportunities, coworkers, and so forth, the nature of the work itself generally emerges as the most important job facet (Judge & Church, 2000; Jurgensen, 1978). In addition, of the major job satisfaction facets—pay, promotion opportunities, coworkers, supervision, and the work itself—satisfaction with the work itself is almost always the facet most strongly correlated with overall job satisfaction, as well as with important outcomes such as employee retention (e.g., Frye, 1996; Parisi & Weiner, 1999; Rentsch & Steel, 1992; Weiner, 2000). Research directly testing the relationship between work-

ers' reports of job characteristics and job satisfaction has produced consistently positive results. For instance, Frye (1996) reported a true score correlation of .50 between job characteristics and job satisfaction.

Initially a purely situational model, the JCM was modified by Hackman and Oldham (1976) to account for the fact that two employees may have the same job, experience the same job characteristics, and yet have different levels of job satisfaction. The concept of growth need strength (GNS)—an employee's desire for personal development—was added as a moderator of the relationship between intrinsic job characteristics and job satisfaction. According to this interactional form of the model, intrinsic job characteristics are especially satisfying for individuals who score high on GNS. Empirical evidence supports this position: 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, it should be noted that task characteristics are related to job satisfaction even for those who score low on GNS.

Value-Percept Theory

Locke (1976) argued that individuals' values would determine what satisfied them on the job. Only the unfulfilled job values that were important to the individual would be dissatisfying. According to Locke's value-percept model, job satisfaction can be modeled by the formula

$$S = (V_c - P) \times V_i$$

or

$$\text{Satisfaction} = (\text{want} - \text{have}) \times \text{importance}$$

where S is satisfaction, V_c is value content (amount wanted), P is the perceived amount of the value provided by the job, and V_i is the importance of the value to the individual. Thus, value-percept theory predicts that discrepancies between what is desired and what is received are dissatisfying only if the job facet is important to the individual. 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.

The value-percept model expresses job satisfaction in terms of employees' values and job outcomes. A particular strength of the model is that it highlights the role of individual differences in values and job outcomes. However, one potential problem with the value-percept theory is that what one desires (V_c or want) and what one considers important (V_i or importance) are likely to be highly correlated. In addition, the use of weighting may be inappropriate unless weighting variables are measured with very high reliability. The model also ignores influences from exogenous factors, such as costs of holding a job, or cur-

rent and past social, economic, or organizational conditions external to the individual/job nexus.

Dispositional Approaches

Over the past 20 years, research on job satisfaction antecedents has been dominated by dispositional approaches. As reviewed by Judge and Larsen (2001), these studies have been both indirect—inferring a dispositional source of job satisfaction without measuring personality—and direct. We provide a brief review each of these types of studies.

Indirect Studies

Staw and Ross (1985) exploited the National Longitudinal Surveys (NLS) database and found that measures of job satisfaction were reasonably stable over time (over 2 years, $r = .42$; over 3 years, $r = .32$; over 5 years, $r = .29$). They also found that job satisfaction showed modest stability even when individuals changed both employers and occupations over a 5-year period of time ($r = .19$, $p < .01$). Finally, the authors found that prior job satisfaction was a stronger predictor of current satisfaction ($b = .27$, $t = 14.07$, $p < .01$) than changes in pay ($b = .01$, $t = 2.56$, $p < .01$) or changes in status ($b = .00$). In a separate line of research, Arvey, Bouchard, Segal, and Abraham (1989) found significant consistency in job satisfaction levels between 34 pairs of monozygotic twins reared apart from early childhood. The intraclass correlation (ICC) of the general job satisfaction scores of the twin pairs was $.31$ ($p < .05$). As Judge and Larsen (2001) and others (Gerhart, 2005) have noted, the problem with indirect studies is that alternative explanations are obvious. For example, correlations of satisfaction levels across time and jobs may reflect relative consistency in jobs as much as it does stable individual dispositions; those who are able to secure a good, high-quality job at one time are likely to secure an equivalent job at a later time, and thus situational explanations for job satisfaction consistency are not ruled out, even if individuals change jobs (Hulin & Judge, 2003).

Direct Studies

More recent studies have linked direct measures of personality traits to job satisfaction. Most of the studies in this area have focused on one of four typologies: (1) positive and negative affectivity; (2) the five-factor model of personality; (3) core self-evaluations; (4) other measures of affective disposition. Probably the heir to the throne of indirect studies were studies that related positive affectivity and negative affectivity (trait PA and trait NA) to job satisfaction. Counter to the theory that PA is more strongly related to positive outcomes than NA, Thoresen et al.'s (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003) meta-analysis

revealed that trait NA was somewhat more strongly related to job satisfaction than was trait PA ($\rho = -.37$ and $\rho = .33$, respectively). As for the five-factor model, Judge, Heller, and Mount (2002) found that three Big Five traits—neuroticism, extraversion, and conscientiousness—each displayed moderate, nonzero relationships with job satisfaction: neuroticism, $\rho = -.29$; extraversion, $\rho = .25$; conscientiousness, $\rho = .26$.

Judge, Locke, and Durham (1997) introduced the construct of core self-evaluations. According to these authors, core self-evaluations are fundamental premises that individuals hold about themselves and their functioning in the world. Judge et al. argued that core self-evaluation is a broad personality construct comprised of several more specific traits: (1) self-esteem; (2) generalized self-efficacy; (3) locus of control; and (4) neuroticism or emotional stability. 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. Judge, Locke, Durham, and Kluger (1998) found that one of the primary causal mechanisms was through the perception of intrinsic job characteristics, a finding that has also generalized to objective measures of job complexity (Judge, Bono, & Locke, 2000).

Finally, in terms of other measures of affective disposition, in order to gauge relative job satisfaction more accurately, Weitz (1952) developed a “gripe index” that takes into account individuals’ tendencies to feel negatively or positively about many aspects of their lives. Judge and Hulin (1993) found that employees’ responses to neutral objects were correlated with job satisfaction, a finding replicated by Judge and Locke (1993). However, Judge et al. (1998) and Piccolo, Judge, Takahashi, Watanabe, and Locke (2005) found that, compared to core self-evaluations, affective disposition explained less variance in job satisfaction.

Cornell Model

Hulin, Roznowski, and Hachiya (1985) and Hulin (1991) provide a model of job satisfaction that attempts to integrate previous theories of attitude formation. The model proposes that job satisfaction is a function of the balance between role inputs—what the individual puts into the work role (e.g., training, experience, time, and effort)—and role outcomes—what is received by the individual (pay, status, working conditions, and intrinsic factors). All else equal, the more outcomes received relative to inputs invested, the higher work role satisfaction will be. Furthermore, according to the Cornell model, an individual’s opportunity costs affect the value the individual places on inputs. In periods of labor oversupply (i.e., high unemployment), individuals will perceive their inputs as less valuable due to the high competition for few alternative positions, and the opportu-

nity cost of their work role declines (i.e., work role membership is less costly relative to other opportunities). Therefore, as unemployment (particularly in one's local or occupational labor market) rises, the subjective utility of inputs falls—making perceived value of inputs less, relative to outcomes—thus increasing satisfaction. Finally, the model proposes that an individual's frames of reference, which represent past experiences with outcomes, influence how he or she perceives current outcomes received. This concept of frames of reference, as generated and modified by individuals' experience, accounts, in part, for differences in job satisfactions of individuals with objectively identical jobs. However, direct tests of the model are lacking.

Summary

Of the job satisfaction theories that have been put forth, it appears that three have garnered the most research support: Locke's value-percept theory, the job characteristics model, and the dispositional approach. It is interesting to note that one of these theories is, essentially, a situational theory (job characteristics model), another is a person theory (dispositional approach), and another is a person-situation interactional theory (value-percept model). Although this outcome may lead one to assume that these theories are competing or incompatible explanations of job satisfaction, this is not necessarily the case. Judge et al. (1997), in seeking to explain how core self-evaluations would be related to job satisfaction, proposed that intrinsic job characteristics would mediate this relationship. Indeed, Judge et al. (1998) showed that individuals with positive core self-evaluations perceived more intrinsic value in their work, and Judge, Bono, and Locke (2000) showed that the link between core self-evaluations and intrinsic job characteristics was not solely a perceptual process—core self-evaluations was related to the actual attainment of complex jobs. Because job complexity is synonymous with intrinsic job characteristics, this result shows that part of the reason individuals with positive core self-evaluations perceived more challenging jobs and reported higher levels of job satisfaction is that they actually have obtained more complex (and thus challenging and intrinsically enriching) jobs. The work of Judge and colleagues thus shows that dispositional approaches and the job characteristics model are quite compatible with one another.

Outcomes of Job Satisfaction

Evidence indicates that job satisfaction is strongly and consistently related to subjective well-being. All studies that we reviewed found significant relationships between job satisfaction and life satisfaction (reported correlations ranged from .19 to .49). Researchers have speculated that there are three possible forms of this

relationship: (1) *spillover*, wherein job experiences spill over onto life experiences, and vice versa; (2) *segmentation*, wherein job and life experiences are Balkanized and have little to do with one another; and (3) *compensation*, wherein an individual seeks to compensate for a dissatisfying job by seeking fulfillment and happiness in his or her nonwork life, and vice versa. Judge and Watanabe (1994) argued that these different models may exist for different individuals and that individuals can be classified into the three groups. On the basis of a national stratified random sample of workers, they found that 68% of workers could be classified as falling into the spillover group, 20% fell into the segmentation group, and 12% fell into the compensation group. Thus, the spillover model, whereby job satisfaction spills into life satisfaction, and vice versa, appears to characterize most U.S. employees. Consistent with the spillover model, a quantitative review of the literature indicated that job and life satisfaction are moderately strongly correlated—a meta-analysis revealed the average “true score” correlation of +.44 (Tait, Padgett, & Baldwin, 1989).

Given that a job is a significant part of one’s life, the correlation between job and life satisfaction makes sense—one’s job experiences spill over into nonwork life. However, it also seems possible that the causality could go the other way—a happy nonwork life spills over into job experiences and evaluations. In fact, research suggests that the relationship between job and life satisfaction is reciprocal—job satisfaction does affect life satisfaction, but life satisfaction also affects job satisfaction (Judge & Watanabe, 1993).

Job satisfaction is also related to an impressive array of workplace behaviors. These include (1) attendance at work (Smith, 1977; Scott & Taylor, 1985); (2) turnover decisions (Carsten & Spector, 1987; Hom, Katerberg, & Hulin, 1979; Hom, 2001; Hulin, 1966, 1968; Mobley, Horner, & Hollingsworth, 1978; Miller, Katerberg, & Hulin, 1979); (3) decisions to retire (Hanisch & Hulin, 1990, 1991; Schmitt & McCune, 1981); (4) psychological withdrawal behaviors (Roznowski, Miller, & Rosse, 1992); (5) prosocial and organizational citizenship behaviors (Bateman & Organ, 1983; Farrell, 1983; Roznowski et al., 1992); (6) pro-union representation votes (Getman, Goldberg, & Herman, 1976; Schriesheim, 1978; Zalesny, 1985); (7) prevote unionization activity (Hamner & Smith, 1978); (8) job performance (Judge, Thoresen, Bono, & Patton, 2001); and (9) workplace incivility (Mount, Ilies, & Johnson, 2006).

Although job satisfaction is related to an impressive array of behaviors, the correlations are not large, typically in the .15–.35 range. As Fishbein and Ajzen (1974) have noted, much mischief has been created in the attitude–behavior literature by failing to achieve correspondence between attitudes and behaviors. One means of achieving attitude–behavior correspondence is to use specific attitudes to predict specific behaviors, as has been the course of action pursued in Fishbein and Ajzen’s research. For example, we might use a specific behavioral intention (e.g., intent to quit smoking) to predict a specific behavior (e.g., quit-

ting smoking) within a relatively delimited time period. However, another approach is to use a general attitude to predict a general behavior. Because job attitudes are general concepts, we may expect the relationship between job satisfaction and behavior to increase if we broaden the conceptualization of the relevant behavioral set. For instance, Harrison, Newman, and Roth (2006) found that the relationship between general job attitude (comprised of job satisfaction and organizational commitment) and individual effectiveness (a construct comprised of a broad set of workplace behaviors, including focal performance, contextual performance, lateness, absenteeism, and turnover) was much stronger ($r = .59$) than those typically reported in the job attitude literature.

Future of Job Satisfaction Research

Based on our review of the job satisfaction literature, we now suggest several fruitful directions for future job satisfaction research. First, as might be gathered from this review, and has been noted in the subjective well-being literature more broadly (Diener, 1984), there is no consensus on the roles of cognition and affect in job satisfaction research. Although we have made our position known in the section on measurement, we do not mean to imply that this is “settled law”—there is more to be learned about how cognition and affect are intertwined in job satisfaction research. Rather than focusing on measurement properties, our preference is for future research to look at more substantive issues in cognitive processing and to focus on moods and emotions. For example, despite the considerable impact of affective events theory (Weiss & Cropanzano, 1996) on job attitudes research, we still have a very poor idea of what affective events are most salient to individuals, how individuals process this information, and what the cognitive, affective, and behavioral implications of these events might be.

Another area for future research is the role of goals in job satisfaction. As Diener (1984) noted in his review, the telic perspective has been an important one in conceptualizations of subjective well-being. However, the role of goals in well-being is not perfectly clear. Some have argued that the explicit goal of happiness is likely to make the realization of this goal elusive (Gilbert, 2006). Research by Mento, Locke, and Klein (1992) suggests that goals, although improving performance, are likely to breed dissatisfaction because they involve holding oneself to a high standard. On the other hand, the self-concordance model suggests that the type of goal matters—goals pursued for intrinsic reasons are more likely to bring happiness than those pursued for extrinsic reasons; there is support for this position in both the subjective well-being (Sheldon & Elliot, 1999) and job satisfaction (Judge, Bono, Erez, & Locke, 2005) literatures. Thus, more work on goals and job satisfaction is needed, conceptually and empirically.

A third area for research concerns the issue of stability and change. In the personality literature we have come to understand that stability and change coexist (Roberts, Walton, & Viechtbauer, 2006). There is considerable rank-order consistency in personality, though, naturally, consistency declines over time (Srivastava, John, & Gosling, 2003). However, there are also forces of change—personality does change over time, and time does not do the same thing to each trait. For example, there is evidence that individuals become more conscientious but less open over time (Srivastava et al., 2003). Within the subjective well-being literature, there are similar dialogues and debates. Clearly, there is a genetic basis to life satisfaction, no doubt operating through genetic effects on personality traits, abilities, physical characteristics, and so forth. The genetic basis is so strong that some have argued that life satisfaction is defined by a “setpoint” from which individuals rarely deviate (Headey & Wearing, 1989; Lykken & Tellegen, 1996). However, other research suggests that whereas some events do little to change one’s characteristic level of life satisfaction, other events can have profound effects on happiness. For example, although it appears that there is adaptation to marriage such that, over time, individuals return to their setpoint before courtship began (see Lucas & Dyrenforth, 2005), adaptation is partial but less complete in the other direction—when marriage results in divorce (Lucas, 2005b). Our point here is that this debate on the dominance of a setpoint and the importance of events in changing life satisfaction has seemingly been lost on job satisfaction research. Many of the concepts, arguments, and methods could be incorporated into studies on job satisfaction, and we can see no reason why this should not take place.

Fourth and related, Brickman and Campbell’s (1971) “hedonic treadmill” concept suggests that although individuals do react rather strongly to good and bad events, over time they then tend to adapt to these events and return to their original level of happiness. As noted by Diener (2000), one of the explanations for this adaptation effect is that individuals constantly change their expectancies and goals in response to new information. If an individual receives a pay raise at work, he or she quickly adjusts aspirations and mentally “spends” the reward. However, whereas adaptation effects are not uncommon, it is clear that people do not completely habituate to all conditions. As reported in Diener, Lucas, and Scollon (2006), using data from two large longitudinal studies, Lucas (2005a) found that individuals whose well-being was measured, on average, 7 years before and 7 years after onset of a disability reported substantial drops in life satisfaction and little evidence of adaptation (returning to predisability life satisfaction levels) over time. As Diener et al. (2006) conclude in examining the evidence on adaptation to positive and negative events, “Adaptation may proceed slowly over a period of years, and in some cases the process is never complete” (p. 311). Although some subjective well-being research has considered work events such as job loss, very little of this line of research has made its way into organizational psychology. Clearly, it is not a long bridge to build.

Fifth, as Judge and Church (2000) noted, the extent to which organizations have adopted the term *job satisfaction* and institutionalized interventions based on job-satisfaction-related theory and research is mixed, at best. Job satisfaction, for example, is rarely included as part of an organization's key values, basic beliefs, core competencies, or guiding principles, nor is the topic given much direct exposure in popular business books. Judge and Church (2000) conducted a survey of practitioners (most of whom were employed in the human resource area) regarding their organization's general perception of job satisfaction, its relative importance, and the use of the term in their organizations. Roughly half of the practitioners indicated that job satisfaction as a term and singular construct was rarely, if ever, mentioned or considered in their organizations. When asked next about the utilization of current theory and research on job satisfaction, the results were even less optimistic. Most practitioners indicated that research was rarely, if ever, consulted or valued in their organizations. There is a real gap between how job satisfaction is viewed by researchers and organizations, and given the centrality of work to individual's well-being, we think most researchers are hampered by a somewhat Panglossian belief that because we believe organizations *should* value job satisfaction and the well-being of their employees, they *do* so. But the values of organizational managers and subjective well-being researchers are not necessarily the same.

Finally, increasingly we see the chasm between psychology and economics being bridged. Some economists, for example, are using neuroscience to determine how brain activity is related to economic decision making (Camerer, Loewenstein, & Prelec, 2005). Kahneman and Krueger (2006) have applied economic concepts to the study of well-being. Outside of work on how labor market conditions can affect the degree to which individuals will leave dissatisfying jobs (Iverson & Currivan, 2003), however, little job satisfaction research has made use of economic concepts. Although the Cornell model (reviewed earlier) is an interesting blend of economic and psychological concepts, we are not aware of any direct tests of the model, in whole or in part. Such tests would prove worthwhile.

Conclusion

In summary, job satisfaction is a salient and perhaps inveterate attitude, permeating cognitive, affective, and behavioral aspects of peoples' work and nonwork lives. These features accentuate the importance of job satisfaction as a construct worthy of attention in the organizational sciences as well as subjective well-being research more generally. The reciprocal nature of job attitudes and subjective well-being highlights the fact that a sound understanding of one domain is incomplete without due consideration of the other.

References

- Arvey, R. D., Bouchard, T. J., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology, 74*, 187–192.
- Ashby, F. G., Isen, A. M., & Turken, U. (1999). A neuropsychological theory of positive affect and its influence on cognition. *Psychological Review, 106*, 529–550.
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee “citizenship.” *Academy of Management Journal, 26*, 587–595.
- Bowling, N. A., Beehr, T. A., Wagner, S. H., & Libkuman, T. M. (2005). Adaptation level theory, opponent process theory, and dispositions: An integrated approach to the stability of job satisfaction. *Journal of Applied Psychology, 90*, 1044–1053.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*, 307–311.
- Brickman, P., & Campbell, D. T. (1971). Hedonic relativism and planning the good society. In M. H. Appley (Ed.), *Adaptation level theory: A symposium* (pp. 287–302). New York: Academic Press.
- Brief, A. P. (1998). *Attitudes in and around organizations*. Thousand Oaks, CA: Sage.
- Brief, A. P., & Roberson, L. (1989). Job attitude organization: An exploratory study. *Journal of Applied Social Psychology, 19*, 717–727.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect at work. *Annual Review of Psychology, 53*, 279–307.
- Byrk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Camerer, C. F., Loewenstein, G. F., & Prelec, D. (2005). Neuroeconomics: How neuroscience can inform economics. *Journal of Economic Literature, 43*, 9–64.
- Carsten, J. M., & Spector, P. W. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology, 72*, 374–381.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542–575.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34–43.
- Diener, E., & Larsen, R. (1984). Temporal stability and cross-situational consistency of affective, behavioral, and cognitive responses. *Journal of Personality and Social Psychology, 47*, 871–883.
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist, 61*, 305–314.
- Eagley, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. New York: Harcourt.
- Farrell, D. (1983). Exit, voice, loyalty, and neglect as responses to job dissatisfaction: A multidimensional scaling study. *Academy of Management Journal, 26*, 596–607.
- Fishbein, M. (1980). A theory of reasoned action: Some applications and implications. In H. Howe & M. M. Page (Eds.), *Nebraska symposium on motivation: Beliefs, attitudes, and values* (pp. 65–116). Lincoln: University of Nebraska Press.
- Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review, 81*, 59–74.

- Frye, C. M. (1996). *New evidence for the job characteristics model: A meta-analysis of the job characteristics–job satisfaction relationship using composite correlations*. Paper presented at the 11th annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Gerhart, B. (2005). The (affective) dispositional approach to job satisfaction: Sorting out the policy implications. *Journal of Organizational Behavior*, *26*, 79–97.
- Getman, J. G., Goldberg, S. B., & Herman, J. B. (1976). *Union representation elections: Law and reality*. New York: Sage.
- Gilbert, D. (2006). *Stumbling on happiness*. New York: Knopf.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16*, 250–279.
- Hamner, W., & Smith, F. J. (1978). Work attitudes as predictors of unionization activity. *Journal of Applied Psychology*, *63*, 415–421.
- Hanisch, K. A., & Hulin, C. L. (1990). Retirement as a voluntary organizational withdrawal behavior. *Journal of Vocational Behavior*, *37*, 60–78.
- Hanisch, K. A., & Hulin, C. L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior*, *39*, 110–128.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, *49*, 305–325.
- Headey, B., & Wearing, A. (1989). Personality, life events, and subjective well-being: Toward a dynamic equilibrium model. *Journal of Personality and Social Psychology*, *57*, 731–739.
- Herzberg, F. (1967). *Work and the nature of man*. Cleveland, OH: World Book.
- Hom, P. W. (2001). The legacy of Hulin's work on turnover thinking and research. In F. D. Dragow & J. M. Brett (Eds.), *Psychology of work: Theoretically based empirical research* (pp. 169–187). Mahwah, NJ: Erlbaum.
- Hom, P. W., Katerberg, R., & Hulin, C. L. (1979). A comparative examination of three approaches to the prediction of turnover. *Journal of Applied Psychology*, *64*, 280–290.
- Hulin, C. L. (1966). Job satisfaction and turnover in a female clerical population. *Journal of Applied Psychology*, *50*, 280–285.
- Hulin, C. L. (1968). The effects of changes in job satisfaction levels on turnover. *Journal of Applied Psychology*, *52*, 122–126.
- Hulin, C. L. (1991). Adaptation, persistence, commitment in organizations. In M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., pp. 445–507). Palo Alto, CA: Consulting Psychologists Press.
- Hulin, C. L., & Judge, T. A. (2003). Job attitudes. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (pp. 255–276). Hoboken, NJ: Wiley.
- Hulin, C. L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychological Bulletin*, *97*, 233–250.
- Isen, A. M. (2002). Missing in action in the AIM: Positive affect's facilitation of cognitive flexibility, innovation, and problem solving. *Psychological Inquiry*, *13*, 57–65.
- Isen, A. M. (2003). Positive affect as a source of human strength. In L. G. Aspinwall & U.

- M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 179–195). Washington, DC: American Psychological Association.
- Iverson, R. D., & Currivan, D. B. (2003). Union participation, job satisfaction, and employee turnover: An event-history analysis of the exit-voice hypothesis. *Industrial Relations, 42*, 101–105.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*, 80–92.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*, 257–268.
- Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85*, 237–249.
- Judge, T. A., Boudreau, J. W., & Bretz, R. D. (1994). Job and life attitudes of male executives. *Journal of Applied Psychology, 79*, 767–782.
- Judge, T. A., & Church, A. H. (2000). Job satisfaction: Research and practice. In C. L. Cooper & E. A. Locke (Eds.), *Industrial and organizational psychology: Linking theory with practice* (pp. 166–198). Oxford, UK: Blackwell.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology, 87*, 530–541.
- Judge, T. A., & Hulin, C. L. (1993). Job satisfaction as a reflection of disposition: A multiple-source causal analysis. *Organizational Behavior and Human Decision Processes, 56*, 388–421.
- Judge, T. A., & Larsen, R. J. (2001). Dispositional affect and job satisfaction: A review and theoretical extension. *Organizational Behavior and Human Decision Processes, 86*, 67–98.
- Judge, T. A., & Locke, E. A. (1993). Effect of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology, 78*, 475–490.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior, 19*, 151–188.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*, 17–34.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2000). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*, 376–407.
- Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction–life satisfaction relationship. *Journal of Applied Psychology, 78*, 939–948.
- Judge, T. A., & Watanabe, S. (1994). Individual differences in the nature of the relationship between job and life satisfaction. *Journal of Occupational and Organizational Psychology, 67*, 101–107.
- Jurgensen, C. E. (1978). Job preferences (What makes a job good or bad?). *Journal of Applied Psychology, 50*, 479–487.

- Kahneman, D., & Krueger, A. (2006). Developments in the measurement of subjective well-being. *Journal of Economic Perspectives*, 20, 3–24.
- Kunin, T. (1955). The construction of a new type of attitude measure. *Personnel Psychology*, 8, 65–77.
- Landy, F. J. (1978). An opponent process theory of job satisfaction. *Journal of Applied Psychology*, 63, 533–547.
- Larson, R., & Csikszentmihalyi, M. (1983). The experience sampling method. In H. T. Reis (Ed.), *Naturalistic approaches to studying social interaction* (pp. 41–56). San Francisco: Jossey-Bass.
- Law, K. S., Wong, C. S., & Mobley, W. H. (1998). Towards a taxonomy of multidimensional constructs. *Academy of Management Review*, 23, 741–755.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1343). Chicago: Rand McNally.
- Lucas, R. E. (2005a). *Happiness can change: A longitudinal study of adaptation to disability*. Manuscript submitted for publication.
- Lucas, R. E. (2005b). Time does not heal all wounds: A longitudinal study of reaction and adaptation to divorce. *Psychological Science*, 16, 945–950.
- Lucas, R. E., & Dyrenforth, P. S. (2005). The myth of marital bliss? *Psychological Inquiry*, 16, 111–115.
- Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science*, 7, 186–189.
- Mento, A. J., Locke, E. A., & Klein, H. J. (1992). Relationship of goal level to valence and instrumentality. *Journal of Applied Psychology*, 77, 395–405.
- Miller, H. E., Katerberg, R., & Hulin, C. L. (1979). Evaluation of the Mobley, Horner, and Hollingsworth model of employee turnover. *Journal of Applied Psychology*, 64, 509–517.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology*, 63, 408–414.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59, 591–622.
- Parisi, A. G., & Weiner, S. P. (1999, April). *Retention of employees: Country-specific analyses in a multinational organization*. Poster presented at the 14th annual conference of the Society for Industrial and Organizational Psychology, Atlanta, GA.
- Piccolo, R. F., Judge, T. A., Takahashi, K., Watanabe, N., & Locke, E. A. (2005). Core self-evaluations in Japan: Relative effects on job satisfaction, life satisfaction and happiness. *Journal of Organizational Behavior*, 26, 965–984.
- Rentsch, J. R., & Steel, R. P. (1992). Construct and concurrent validation of the Andrews and Withey Job Satisfaction Questionnaire. *Educational and Psychological Measurement*, 52, 357–367.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132, 1–25.
- Roznowski, M., Miller, H. E., & Rosse, J. G. (1992, August). *On the utility of broad-band*

- measures of employee behavior: The case for employee adaptation and citizenship.* Paper presented at the annual meeting of the Academy of Management, Las Vegas.
- Salancik, G. R., & Pfeffer, J. (1977). An examination of need-satisfaction models of job attitudes. *Administrative Science Quarterly*, 22, 427-456.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology*, 36, 577-600.
- Schmitt, N., & McCune, J. T. (1981). The relationship between job attitudes and the decision to retire. *Academy of Management Journal*, 24, 795-802.
- Schriesheim, C. (1978). Job satisfaction, attitudes toward unions, and voting in a union representation election. *Journal of Applied Psychology*, 63, 548-552.
- Scott, K. D., & Taylor, G. S. (1985). An examination of conflicting findings on the relationship between job satisfaction and absenteeism: A meta-analysis. *Academy of Management Journal*, 28, 599-612.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76, 482-497.
- Smith, F. J. (1977). Work attitudes as predictors of attendance on a specific day. *Journal of Applied Psychology*, 62, 16-19.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.
- Srivastava, S., John, O. P., & Gosling, S. D. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*, 84, 1041-1053.
- Staw, B. M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology*, 70, 469-480.
- Tait, M., Padgett, M. Y., & Baldwin, T. T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology*, 74, 502-507.
- Thoresen, C. J., Kaplan, S. A., Barsky, A. P., Warren, C. R., & de Chermont, K. (2003). The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252.
- Weiner, S. P. (2000, April). Worldwide technical recruiting in IBM: Research and action. In P. D. Bachiochi (Chair), *Attracting and keeping top talent in the high-tech industry*. Practitioner forum at the 15th annual conference of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis: Industrial Relations Center, University of Minnesota.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12, 173-194.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discus-

- sion of the structure, causes, and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1-74.
- Weiss, H. M., Nicholas, J. P., & Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behavior and Human Decision Processes*, 78, 1-24.
- Weitz, J. (1952). A neglected concept in the study of job satisfaction. *Personnel Psychology*, 5, 201-205.
- Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues*, 25, 41-78.
- Zalesny, M. D. (1985). Comparison of economic and noneconomic factors in predicting faculty vote preference in a union representation election. *Journal of Applied Psychology*, 70, 243-256.