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An Experience-Sampling Measure of Job Satisfaction and its Relationships with Affectivity, Mood at Work, Job Beliefs, and General Job Satisfaction

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Abstract

This paper proposed an experience-sampling method of measuring job satisfaction, assessed the contributions of average levels of mood at work and job beliefs to the prediction of job satisfaction, and examined the role of mood in mediating the relationship between affectivity and job satisfaction. The study involved a three-phase multi-source longitudinal design that included experience-sampling surveys in the second phase of the study. Results suggested that average levels of experience-sampled job satisfaction indicate the general attitudinal construct of job satisfaction. As expected, pleasant mood at work and beliefs about the job made independent contributions to the prediction of job satisfaction (as measured with an overall evaluation and with an experience-sampling measure). In support of our mediation hypotheses, pleasant mood mediated the affectivity-job satisfaction relationship and the mediating effect was much stronger when job satisfaction was assessed with the experience-sampling method.

Keywords: Affectivity, Mood, Job Beliefs, Job Satisfaction, Experience Sampling

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Traditionally, job satisfaction has been defined as an emotional reaction to the work situation (e.g., Cranny, Smith, & Stone, 1992; Locke, 1969, 1976). Perhaps the best-known definition of job satisfaction is Locke's contention: "job satisfaction is a pleasurable or positive emotional state resulting from an appraisal of one's job or job experiences" (p. 1300). Even though job satisfaction is defined as an emotional state, it has been generally treated as a broad job attitude (e.g., Weiss, Nicholas, & Dauss, 1999). Furthermore, job satisfaction has been generally measured with a 'single-shot', survey that assumes the construct to be stable, and its relationships with other constructs have been typically investigated with cross-sectional designs (Ilies & Judge, in press).

We contend here that the traditional conceptual treatment and empirical measurement of job satisfaction has led to inconsistencies between various conceptual definitions of job satisfaction and the typical method of assessing it. These inconsistencies manifest themselves in two distinct yet related areas of job satisfaction research. First, as Weiss (2002; Weiss *et al.*, 1999) points out, the assumed equivalence between job satisfaction as an affective or emotional state and as general attitude about the job needs to be re-evaluated. That is, organizational researchers need to distinguish between overall evaluations about the jobs, and affective experiences or reactions on or to the job (Weiss, 2002).

Second, in the context of the recent explosion of interest in the role of affect and emotions at work (Ashkanasy & Haertel, 2001; Fisher & Ashkanasy, 2000; Fox & Spector, 2002; Lord, Klimoski, & Kanfer, 2002; Weiss, 2001), organizational researchers have started to investigate short term changes in affective states experienced at work (Alliger & Williams, 1993;

Ilies & Judge, in press, Weiss *et al.*, 1999). If job satisfaction has affective antecedents and it is known that employees experience important short-term fluctuations in their affective states at work (e.g., Weiss *et al.*, 1999), then by measuring job satisfaction with 'single-shot' assessment that ignores short-term fluctuations, organizational researchers miss an important part of job satisfaction. Indeed, Ilies and Judge (in press), by measuring job satisfaction with an experience-sampling approach, have shown that more than one-third of the variations in state job satisfaction ratings take place within-individuals and across time (vs. across-individuals).

We are not investigating the processes that lead to short term fluctuations in job satisfaction or the implications of these fluctuations in the present paper. Such investigations are presented elsewhere (Ilies & Judge, in press). Rather, we argue that measuring job satisfaction with a state approach can shed light on the interplay between affective experiences, beliefs about the job, and the general evaluation of the job situation. That is, we contend here that because of the dynamic (i.e., across time) relationship between affective experience and job satisfaction, state measures of job satisfaction are particularly well suited for studying affective correlates of job satisfaction which have been neglected in organizational research until very recently. In short, though not taking the same path to arrive to our conclusions, we converge with Weiss (2002) in contending that researchers need to study both affect and cognitions on and about the job, and their relevance to job satisfaction.

In this paper, not only do we study cognitions and affect about and on the job, but we also make a case for the importance of measuring the evaluative states of the job situation at the time level at which they occur. That is, we propose a method of measuring job satisfaction as discrete evaluative states, and attempt to demonstrate that such a method can facilitate the study of causal relationships between job satisfaction and its affective and cognitive antecedents. Towards that

end, to bring conceptual clarity to the discourse about satisfaction with the job, we first review basic attitude theory, recent developments in job satisfaction research, and conceptual arguments about work-relevant dispositions.

Basic Attitudes and Job Satisfaction

Eagly and Chaiken (1993) define an attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor " (p. 1) and conceptualize an attitudinal evaluative tendency as "an evaluative state that intervenes between certain classes of stimuli and certain classes of responses…and it is assumed to account for covariation between these stimuli and these responses "(p. 3). Translating this basic view to the workplace, one can define job satisfaction as an evaluative tendency toward one's job that is manifested through discrete evaluative states of the job situation during the workday. Like Eagly and Chaiken (1993), we believe that attitudes can be temporary, and we define job satisfaction as a tendency "because the term tendency does not necessarily imply a very long-term state" (Eagly & Chaiken, 1993, p. 2). We should also note that by assuming that job satisfaction – as an evaluative state – can vary over time, our definition allows us to model the stimulus-attitude-response relations at the time level at which they are manifested at work.

The traditional view of attitude structure is based on the influential tripartite model that assumes attitudes to have affective, cognitive, and behavioral components (e.g., Rosenberg & Hovland, 1960). More recently, basic attitude researchers have focused more intensely on disentangling the causal relations among attitudes and their affective and cognitive correlates (Olson & Zanna, 1993). That is, the affective, cognitive, and behavioral "components" of attitudes are now viewed as either determinants or consequences of these attitudes (Eagly & Chaiken, 1993; Olson & Zanna, 1993). For example, it is now believed that attitudes can be

based on affective, cognitive, or behavioral information (e.g., Petty, Wegener, & Fabrigar, 1997) and can lead to affective, cognitive, or behavioral responses (e.g., Olson & Zanna, 1993).

To model the relation between mood and job satisfaction, one first needs to address the issue of mood measurement which is not an issue without controversy. That is, two major frameworks for describing mood exist, and these frameworks differ with respect to the dimensions assumed to best summarize basic mood. From a measurement standpoint, these dimensions are reflected in the axes of the mood circumplex that are used to describe the circumplex plane. The first framework focuses on Pleasantness and Activation as underlying dimensions that describe basic mood (e.g., Russell & Carroll, 1999), whereas the second considers Positive Affect and Negative Affect to be the proper descriptive dimensions (e.g., Watson, Clark, & Tellegen, 1988).

Though we are not favoring one framework over another, for the purpose of the present investigation, we model mood by assessing the degree of pleasantness that characterizes the affective experience at any specific time. Typically, attitudes are assessed using a bipolar evaluation continuum by asking respondents to evaluate the attitudinal object in terms of favor or disfavor, liking or disliking, or similar terms. More generally, evaluative responses can be placed on a continuum ranging from positive to negative evaluations (e.g., Eagly & Chaiken, 1993). We chose to represent mood with pleasantness because this basic dimension describes affective experiences on a similar continuum (ranging from positive to negative mood), and thus it is most promising in terms of predicting job satisfaction as a state.[1]

In the context of assessing the pleasantness of affective experience, Weiss *et al.* (1999) have shown that average levels of momentary pleasant mood at work, and beliefs about the job,

had independent effects in predicting overall job satisfaction (assessed with a typical 'one-shot' survey). Thus, we hypothesize that these findings will replicate in the present sample:

H1: Pleasant mood and beliefs about the job will make independent contributions to the prediction of overall job satisfaction.

Experience-Sampled Job Satisfaction

We defined the job satisfaction attitude as a latent evaluative tendency of one's job that accounts for the covariation between work stimuli and responses and is manifested through discrete evaluative states during the workday. It follows that this latent evaluative tendency construct can be measured either by asking employees to make a global evaluative judgment about their job (e.g., Weiss, 2002), or by assessing employees' discrete evaluative states on multiple occasions during work (Ilies & Judge, in press).

Ilies and Judge (in press), in the first study that measured job satisfaction with an experience-sampling approach, found that job satisfaction measured this way indeed fits the nomological network established by traditional research measuring job satisfaction with general evaluative judgments (it displayed the expected pattern of correlations with neuroticism, extraversion, and positive and negative affect). These authors have concluded that average levels of experience-sampled job satisfaction are a reasonable indicator of the overall job satisfaction construct but, in fact, they did not measure job satisfaction with a general evaluative statement to examine the convergence between overall job satisfaction and the experience-sampling measure. In this paper, we investigate the convergence between overall evaluations of the job (i.e., overall job satisfaction) and an experience-sampling measure of job satisfaction. We expect the two measures to be substantially correlated. Furthermore, to eliminate the alternative explanation that the two measure correlate because of mood (i.e., experience-sampled job satisfaction assesses

nothing more than pleasant mood at work), we expect the two job satisfaction measures to be significantly correlated even when the effects of pleasant mood are partialled out. Therefore:

H2: Average levels of experience-sampled job satisfaction ratings will be correlated with overall job satisfaction and the correlation will remain significant when the effects of average levels of pleasant mood are partialled out.

If the experience-sampling measure of job satisfaction is indeed indicative of the general attitude of job satisfaction (H2), then we expect average pleasant mood, beliefs about the job, and average experience-sampled job satisfaction to display the same pattern of relationships as average pleasant mood and job beliefs display with overall job satisfaction (H1):

H3: Pleasant mood and beliefs about the job will have independent contributions to the prediction of average levels of experience-sampled job satisfaction.

Furthermore, we believe that basic mood states are more proximal predictors of state evaluations of the job (they are manifested at same time level) than they are of general evaluations of job satisfaction. Thus, we expect the independent contribution of pleasant mood (over job beliefs) to be stronger when job satisfaction is measured with the experience-sampling approach, versus when job satisfaction is measured with the general evaluative measure.

Affective Traits, Mood, and Job Satisfaction

Judge and Larsen (2001) start their paper on the dispositional source of job satisfaction with the statement: “One of the best exemplars of the renewed interest in the role of emotions and affective processes in the workplace is the literature on the dispositional source of job satisfaction” (p. 67-68). These authors concluded that one of the areas most in need of future research is “an explication of the underlying theoretical processes that account for the observed relationships among personality, affect, and job satisfaction” (p. 68). We attempt to contribute to

this research area by investigating the mediating effect of mood in explaining the relation between affectivity and job satisfaction.

A substantial amount of empirical evidence points toward a relationship between affective traits and job satisfaction (see Judge & Larsen, 2001) but only scattered evidence of a relationship between job satisfaction and momentary mood exists (e.g., Ilies & Judge, in press; Weiss *et al.*, 1999). Conceptually, because affectivity traits are indicative of people's general tendencies to experience certain affective states (e.g., Judge & Larsen, 2001; Watson, Wiese, Vaidya, & Tellegen, 1999), and given that affective experience is intimately linked to momentary evaluations of the job situation (Ilies & Judge, in press), it follows that a likely psychological process that explains the affectivity-job satisfaction relationship is the experience of affective states during the workday.

Affective traits control peoples' propensities to experience certain affective states and emotions at work, and these affective experiences influence state-evaluations of the job situation which indicate the broader attitude of job satisfaction. With respect to the two distinct methods of measuring job satisfaction (experience-sampling and overall evaluation), because mood is manifested and measured at the same level as is state job satisfaction, we logically expect mood to be a stronger mediator of the affectivity-experience-sampled job satisfaction relation as compared with the affectivity-overall job satisfaction one. Thus:

H4: (a) Pleasant mood will mediate the relationship between affectivity and job satisfaction; (b) the mediation effect will be stronger when job satisfaction is measured with the experience-sampling measure.

Experience-Sampling Ratings of Job Satisfaction in Cross-Sectional Analyses

Finally, some practical considerations about the experience-sampling method of measuring job satisfaction are in order. Obviously, the method is absolutely necessary in investigations that include within-individual analyses of job satisfaction (e.g., Ilies & Judge, in press). We believe that experience-sampled job satisfaction is also useful in cross-sectional analyses, especially in investigations that include trait or state affect because the measure is proximal to affective experiences which we view as mediators of the affectivity-job satisfaction relationship (H4).

When using experience-sampled job satisfaction in cross-sectional analyses, multiple state measures are averaged to form a composite score indicative of the general attitude which is considered to be stable at least over the period of experience-sampled assessments.[2] It then becomes important, especially for designing studies that test cross-sectional models exclusively, to establish approximate guidelines with respect to the minimum number of state job satisfaction measures that form a good indicator of general satisfaction. We attempt to provide such guidelines by examining the relations between a composite score formed by averaging various numbers of state satisfaction scores, a similar pleasant mood composite, and overall job satisfaction. Because they are measured at the same level, we do not expect the relation between the experience-sampled job satisfaction and the pleasantness composites to vary much with the number of individual scores comprising the composites. But we do expect the relation between experience-sampled and overall job satisfaction to become increasingly stronger as more state scores enter into the experience-sampling composite. On an exploratory basis, we seek to determine the minimum number of state job satisfaction assessments that yield the highest utility in measuring general job satisfaction.

Method

Participants

Participants were 33 employees from two state universities. These individuals were selected through an e-mail letter soliciting participation that was sent to a random sample of the employees listed in the e-mail directories of these universities. The sample included administrative personnel with diverse positions such as secretary, office manager, web designer, program coordinator, and associate director. Participation in the study was completely voluntary.

Procedure

The data collection process was conducted in three phases. In the first phase, participants completed a measure of affectivity, and also asked a significant other to rate their affectivity using the same measure. We obtained self and other ratings of affectivity for all participants in the study.

The second phase started, on average, one week after participants completed the affectivity measure. For phase 2, we used interval-contingent experience-sampling methodology (Ilies & Judge, in press; Wheeler & Reiss, 1991), having the employees report their momentary mood and job satisfaction three times a day, for two weeks. These data were collected through an Internet interface. Subjects logged on to a Web page and were first presented with a job satisfaction survey. Upon completion of the job satisfaction survey, participants completed an adjective-based mood survey. The order in which the mood adjectives appeared in the survey was randomized across occasions.

Participants were asked to complete on-line surveys at 9 AM, 12 PM, and 3 PM on each working day of the study, and the electronic interface was programmed to accept the data for each designated time only once within a two-hour window and to record the exact time of data

submission (e.g., the 9 AM data was accepted between 8 AM and 10 AM). We obtained 682 sets of experience-sampled ratings of job satisfaction and mood, which is equivalent to an overall response rate across all individuals and time periods of 77%.[3]

The third phase of the study was conducted two months after the completion of the second phase. In the third phase, participants were asked to respond to an overall job satisfaction questionnaire, and to report their beliefs about their job. All 33 participants completed the surveys included in the final phase of the study.

Measures

Pleasant mood. Mood was assessed with an adjective-based survey. We measured momentary pleasant mood with the adjectives: happy, cheerful, joyful, delighted, sad (reverse coded), blue (reverse coded), and downhearted (reverse coded). Instructions asked respondents to enter a number from 0=not at all to 6=extremely much in the fields adjacent to each adjective to estimate the extent to which the adjective described their momentary mood. The internal consistency of the mean ratings was .83.

Affectivity. In order to be consistent with the way in which we measured mood, we operationalized affectivity as trait pleasantness. Following Watson (2000), who defines affective traits as "stable individual differences in the tendency to experience a corresponding mood state" (Watson, 2000, p. 144), we define trait pleasantness as an affective trait that reflects differences among individuals in the experience of pleasant emotions and moods. We assessed trait pleasantness with a survey containing the same adjectives included in the pleasant mood scale described above. To measure trait pleasantness, respondents were instructed to indicate the extent to which they (or the people they were rating) generally experience the feelings described by these adjectives.[4] Ratings were provided on a 7-point scale ranging from 1=extremely slightly

to 7=extremely strongly. We averaged the self and other-rated item scores before computing the scale scores. The internal consistency of the average item scores was .90.

Experience-sampled job satisfaction. State or experience-sampled job satisfaction was measured with a five-item version of the Brayfield and Rothe (1951) measure. The scale was administered with momentary time instructions (e.g., "at this very moment I am fairly satisfied with my job") and ratings were obtained on a 5-point scale ranging from 1=strongly disagree to 5=strongly agree. Internal consistency, computed on within-individual mean item ratings, was .93.

Overall job satisfaction. We used the five-item measure of overall job satisfaction described by Weiss *et al.* (1999). This measure includes the Faces Scale (Kunin, 1955) and the following four items: "All in all I am satisfied with my job", "In general I don't like my job" (reverse scored), "In general I like working here", and " I frequently think of quitting this job" (reverse scored). The Faces measure was rated on an 11-point scale (participants were asked to circle the number below the face that most accurately expresses how they feel about their job in general). For the remaining four items, participants were asked to indicate the extent to which they agreed to each statement on a 7-point scale (1=strongly disagree, 7=strongly agree). The internal consistency of this scale was .92.

Job beliefs. We followed Weiss *et al.* (1999) and asked participants to rate the extent to which their job is instrumental in obtaining 12 work outcomes (prestige, security, friendship, salary, promotion, recognition, self-esteem, independence, personal growth, self-fulfillment, accomplishment, and feelings of authority) on a 5-point scale ranging from 1=strongly disagree to 5=strongly agree. The internal consistency of the scores was .84.

Analyses

We used correlation and observed-variable regression and path analysis to test the hypotheses. The first three hypotheses were tested with regression (H1 and H3) and correlation (H2) analysis. The final hypothesis (H4) was tested with a series of path models. These analyses were cross-sectional, thus, for the time-sampled variables, we used the average score for each individual who participated in the study.

To test the mediation hypothesis, we estimated two path models: a fully mediated model assuming that pleasant mood completely mediates the relationship between affectivity and job satisfaction, and a partially mediated model – which included a direct effect from trait pleasantness to job satisfaction, in addition to the indirect effect through pleasant mood. To assess model fit, we present two indices that perform relatively well in testing models estimated on modest sample sizes like ours: the normed fit index (NFI) and the comparative fit index (CFI) (e.g., Pugh, 2001). In addition, we present the standardized root mean square residual (SRMR).

Finally, to estimate the minimum number of momentary ratings of job satisfaction that has satisfactory validity in indicating overall job satisfaction, we computed composites of experience-sampled job satisfaction and pleasant mood scores that reflected an increasing number of consecutive momentary ratings. Then we computed the average correlations between experience-sampled job satisfaction and pleasant mood composites, and between the experience-sampled job satisfaction composites and the overall satisfaction scores. For example, we obtained 26 sets of composites formed by two state ratings (2-ratings composites): we first average individuals' responses over the first two ratings, then over the second and third ratings, and so on. We then obtained 26 zero-order correlation coefficients by correlating each set of 2-ratings experienced-sampled job satisfaction composites with the corresponding set of 2-ratings

composites of pleasant mood. Averaging these 26 coefficients gave the average correlation between experienced-sampled job satisfaction and pleasant mood 2-ratings composites. Similarly, to obtain the average correlation between 2-ratings composite experienced-sampled job satisfaction and overall satisfaction, we first computed 26 zero-order correlation coefficients by correlating each 2-ratings composite score sets with the overall job satisfaction scores, and then we averaged these 26 coefficients. This way we obtained the average correlations between the n-ratings experience-sampling job satisfaction composite and (a) the n-ratings pleasant mood composite, and (b) the overall job satisfaction score, with n varying from 1 to 26.[5]

Results

Table 1 presents the means, standard deviations, and inter-correlations for all study variables. The overall job satisfaction measure was strongly and significantly correlated with both beliefs about the job ($r=.72$, $p < .01$) and average pleasant mood ($r=.59$, $p < .01$). The first hypothesis (H1) specifies that beliefs about the job and average pleasant mood have independent contributions to the prediction of overall job satisfaction. As it can be seen in Table 2, which presents the regression results for predicting overall job satisfaction with these two variables, the standardized regression coefficients for average pleasant mood ($\beta=.31$, $p < .05$) and job beliefs ($\beta=.57$, $p < .01$) were both significant. Thus, H1 was supported.

The second hypothesis (H2) conveyed our expectation that the experience-sampling measure of job satisfaction is related to overall job satisfaction and this association remains significant when pleasant mood is partialled out. Indeed, the average level of experience-sampled job satisfaction was strongly correlated with overall job satisfaction ($r=.59$, $p < .01$). When the effects of pleasant mood were partialled out, the correlation between the two job satisfaction

measures was reduced by almost 40%, but remained significant (r=.36, $\underline{p} < .05$) Thus, H2 was supported.

Hypothesis H3 tests whether the independent effects of pleasant mood and beliefs about the job in predicting job satisfaction replicate when job satisfaction is measured with the new experience-sampling measure. Table 3 shows the regression results for predicting average experience-sampled job satisfaction with average pleasant mood and job beliefs. The standardized regression coefficients were significant for both predictors (β=.41, $\underline{p} < .01$, and β=.42, $\underline{p} < .01$, for pleasant mood and job beliefs, respectively), which supports the third hypothesis (H3).

The last hypothesis (H4) predicted that average pleasant mood would mediate the relationships between affectivity, operationalized as trait pleasantness, and job satisfaction, and that the mediation effect will be stronger when job satisfaction is measured with the experience-sampling measure. To test such mediation effect, we estimated two distinct path models: a fully mediated model and a partially mediated model. Each of these models was estimated on covariance matrices that included (a) the overall job satisfaction scores, or (b) the average levels of experience-sampled job satisfaction scores, in addition to the trait pleasantness and the average pleasant mood scores.

The fully mediated model fit the data rather poorly when job satisfaction was measured with the overall measure (SRMR = .14, NFI = .72, CFI = .73), thus we do not present the parameters estimated by this model. Next, we estimated the partially mediated model, which also allows a direct relationship between trait pleasantness and job satisfaction in addition to the indirect effect mediated by pleasant mood, on the same covariance matrix. Figure 1 shows the standardized values and significance levels of the path coefficients estimated by the partially

mediated model, using overall job satisfaction. Of course, because the partially mediated model is saturated, no fit tests are provided. Pleasant mood mediated almost one third (30%) of the total effect of trait pleasantness on overall job satisfaction, and the mediation effect was significant.

When individuals' average score on the experience-sampling measure was used as the observed job satisfaction score, the fit of the fully mediated model was rather good (SRMR = .05, NFI = .95, CFI = 1.00). This model is shown in Figure 2. For point of comparison, we also estimated a partially mediated model, which is presented in Figure 3. The parameter estimates for this second model show that direct effects of trait pleasantness on the experience-sampling measure of job satisfaction was weak and not significant, as one could have predicted from the good fit of the fully mediated model. Thus, these results suggest that most of the variance trait pleasantness share with the experience-sampling measure of job satisfaction is mediated by pleasant mood. In sum, the general pattern of results was supportive of the final hypothesis (H4). These data suggest that pleasant mood mediates the effect of trait pleasantness on job satisfaction (H4a) and the mediation effect is much stronger when job satisfaction is measured with the experience-sampling measure (H4b).

Our final analysis attempted to estimate the minimum number of experience-sampled ratings of job satisfaction needed to satisfactorily predict overall job satisfaction. In Figure 4 we plotted the average correlation coefficient between the experience-sampled job satisfaction composite score with increasing number of momentary ratings entering the composite and (a) the same type of pleasant mood composite score, and (b) the general job satisfaction score, as a function of the number of momentary ratings entering the composite scores.

As Figure 4 shows, the correlation between the experience-sampled job satisfaction and pleasant mood composites hovers between .55 and .60 and its pattern of variation does not seem

to depend on the number of momentary ratings used. In contrast, the correlation among experience-sampled job satisfaction and overall job satisfaction is generally increasing with the number of ratings used, from .40 for a single momentary job satisfaction rating to between .55 and .60 when the number of ratings exceeds 10. Thus, it seems that most gains in terms of validity occur when aggregating between 2 and 10 ratings of state job satisfaction, with little to be gained when the number of ratings further increases. Based on these data, we suggest that a minimum of 10 experience-sampled ratings of job satisfaction should be used when forming experience-sampled satisfaction composite scores to be used in cross-sectional analyses.

Discussion

We have found that the experience-sampled job satisfaction measure is a valid predictor of general job satisfaction. Furthermore, like the overall measure, experience-sampled job satisfaction was independently predicted by average pleasant mood and job beliefs but pleasant mood was a stronger predictor of experience-sampled job satisfaction than it was of the overall measure. Pleasant mood mediated the relationship between trait pleasantness and job satisfaction and it did so more strongly when job satisfaction was assessed with the experience-sampling measure. This pattern of results led us to conclude that the experience-sampling measure is more proximal to affective experience, or, in attitude theory terms, is more affect-based (as compared to the overall measure).

Contribution

We believe this paper makes two main contributions to the applied literature on attitudes in general and to the job satisfaction literature in particular. First, following basic attitude theory and recent conceptual developments in job satisfaction research, we have proposed an experience-sampling measure of job satisfaction and have provided initial evidence for its

validity and usefulness. Given the recent interest in investigations of affective and emotional experiences at work across time, we believe that the new method of measuring job satisfaction will prove to be a useful tool for those who engage in such research. Furthermore, the new method should appeal to those investigating cross-sectional relationships between job satisfaction and its correlates, especially when these correlates include affective constructs, due to the proximity of state evaluations of the job to emotional and affective experience.

Second, we have advanced job satisfaction theory and provided supportive evidence for the view of affect and cognition as antecedents of job satisfaction, and for the contention that the experience of affect and emotion throughout the workday is an important mediating process that explains the affectivity-job satisfaction relation documented in previous research.

With respect to the independent effects of pleasant mood and job beliefs in predicting job satisfaction, we have replicated Weiss *et al.*'s (1999) finding (a) in a different sample, and (b) with a different measurement approach. Given that Weiss et al's results were based on a sample comprising 24 people, such replication was needed. Furthermore, by showing that pleasant mood predicts the experience-sampling measure of job satisfaction more strongly than it predicts the traditional overall measure, we offer initial evidence for the proximity of experience-sampled job satisfaction and affective experience at work. The path analysis results showing pleasant mood to be a stronger mediator of the affectivity-job satisfaction relationship when job satisfaction is assessed with the experience-sampling approach (as compared with the overall evaluation) further consolidate our belief in the proximity of experience-sampled job satisfaction and affective experience.

We defined job satisfaction as an evaluative state that should explain the covariation between work input variables (situations) and outputs (behaviors). Then, what can the

experience-sampling measuring approach add in terms of predicting behavior? Recent basic attitude research suggests that the strength of the attitude-behavior relationships depends on the match between the type of the informational base of the specific attitude and the type of behavior which is linked to it (Millar & Tesser, 1986, 1989). That is, affect-based attitudes should better predict consummatory (emotion-driven) behaviors, whereas cognition-based attitudes should better predict instrumental (cognition-driven) behaviors. It follows that experience-sampled job satisfaction should predict consummatory behaviors better than overall satisfaction would, whereas overall job satisfaction should better predict instrumental behaviors.

In terms of work performance, Rotundo and Sackett (2002) provide evidence of three major domains of job performance – task, citizenship and counterproductive behavior. Citizenship and counterproductive behaviors are likely driven by emotional impulses (Spector & Fox, 2002), whereas traditional task behaviors are more likely to be influenced by cognition. It follows that experience-sampled job satisfaction, due to its affective base, is better suited for predicting voluntary behaviors, while the more traditional overall measures are most useful in predicting task behaviors. Furthermore, if attitudinal tendencies mediate the impact of dispositional (personality) characteristics on behavior, experience-sampled job satisfaction should be a stronger mediator of the relations between affective personality traits (e.g., neuroticism and extraversion, Pytlik Zillig, Hemenover, & Dienstbier, 2002) and citizenship and counterproductive behaviors, whereas overall job satisfaction should more strongly mediate the relation between established personality predictors of task performance (i.e., conscientiousness; Barrick & Mount, 1991) and task behaviors.

Some Conceptual Considerations

As noted, our position with respect to the necessary distinction between affective experiences at work, beliefs about the job, and evaluations of the job situation converges with Weiss's (2002). However, we diverge with respect to the definition and measurement of job satisfaction. Weiss suggests that new measurement systems of job satisfaction that include basic affect, beliefs about the job, and global evaluations of the job should be developed, in order to gain maximum utility. While we do believe that basic affective experiences at work, and possibly beliefs about the job can predict work outcomes independently of overall job satisfaction, in our view, mood – which can have many causes outside the work domain (e.g., Watson, 2000) – is simply not job satisfaction and thus it should not be included in job satisfaction measures.

Directions for Future Research

Basic attitude theory offers several suggestions that merit investigation in organizational settings. For example, the role of attitude strength (typically conceptualized as accessibility; Kraus, 1995; Petty *et al.*, 1997) in moderating attitude-behavior consistency has been an area of intense investigation in basic attitude research (e.g., Petty & Krosnick, 1995; Petty *et al.*, 1997). These findings suggest that the accessibility of the job satisfaction attitude – which can be measured with response latencies – may moderate the relations between job satisfaction and work behaviors. Measuring job satisfaction with the experience-sampling approach over the Internet, as we did in the present study, makes such investigations possible in the field, with experience-sampling surveys that track response latencies.[6]

One other variable that has been found to moderate the relations between attitudes and behaviors in basic settings may be worth investigating at work: attitude stability (Kraus, 1995; Petty *et al.*, 1997). The moderating effect of attitude stability on the job satisfaction-work

behaviors relations can be investigated with experience-sampled assessments of job satisfaction and by operationalizing attitude stability as the variability in job satisfaction state scores across time. Ilies and Judge (in press) have shown that the within-individual standard deviation of experience-sampled job satisfaction scores was strongly predicted by neuroticism ($r=.72$, $p < .01$). It may be the case that the stability of experience-sampled job satisfaction both mediates the relationship between neuroticism and consummatory behaviors and moderates job satisfaction-job behaviors relations. In our view, these are certainly issues that merit investigation.

Limitations

Several limitations of this study deserve mention. First, like other studies that involved experience-sampling assessments (Ilies & Judge [in press]: N=27; Weiss *et al.* [1999]: N=24), our sample size was rather small, which limited the statistical power of our analyses. Furthermore, the small sample size potentially limits the generalizability of our results. Second, though we conceptualize job satisfaction as an evaluative tendency of the job situation, no situational variables were included in this study. Clearly, comprehensive investigations assessing variables included in situational models of job satisfaction (e.g., job characteristics model; Hackman & Oldham, 1980), in addition to person variables (affectivity, mood, and beliefs) can make additional contributions to the literature on job attitudes. Lastly, one methodological limitation must be acknowledged. Most data collected for this study consist of self-report responses to surveys or adjective-based checklists, which raises the possibility that mono-method bias inflated the correlations among study variables. We attempted to address this potential concern when designing the study by (a) including significant other reports of affectivity, and (b) measuring affectivity, the experience-sampled variables, and the overall evaluations at different points in time.

Conclusion

This study adds to our understanding of the psychological mechanisms that blend affective and cognitive antecedents in forming job satisfaction evaluations, and proposes a method of assessing job satisfaction – the experience-sampling method – that should facilitate future research on the relations of job satisfaction with its affective and cognitive antecedents and behavioral consequences. The true test of the new experience-sampled job satisfaction measure will come from assessing its contribution to predicting work-related outcomes reflecting consummatory behaviors such as organizational citizenship or workplace deviance behaviors. Until then, the results described in this paper attest to the usefulness of the experience-sampled job satisfaction measure in cross-sectional research. This evidence, coupled with the necessity and utility of assessing job satisfaction as a state for within-individual analyses (Ilies & Judge, in press), speaks to the versatility of the experience-sampling method.

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Footnotes

[1] We did not include the Activation-Deactivation dimension in this investigation because it is not considered relevant to the study of job satisfaction (Weiss *et al.*, 1999).

[2] In cross-sectional analyses, within-individual variations across time are treated as transient errors and aggregation of state measures is used in order to control for the attenuating effects of this type of measurement error.

[3] On one weekday of the study the respondents did not work because it was a national holiday. Thus, there were a maximum of 9 (days) x 3 (daily surveys) x 33 (participants) = 891 experience sampling surveys.

[4] This measurement approach is similar to the use of the Positive and Negative Affect Schedule (Watson *et al.*, 1988) to measure either mood or trait affect, depending on the instructions given to respondents (e.g., Watson, 2000).

[5] This analysis is similar to, and was inspired by, Watson's (2000) analysis of the stability of mood composite scores as a function of the number of adjacent daily mood scores entering the composite (Table 5.1, p. 147).

[6]Measuring experience-sampled job satisfaction at multiple times would give multiple response latency measurements, which would lead to more reliable assessments of attitude accessibility.

Table 1

Means (M), Standard Deviations (SD), and Intercorrelations for All Study Variables

	M	SD	1	2	3	4	5
1. Trait Pleasantness	32.12	6.03	1.00				
3. Pleasant Mood	25.84	5.44	.42*	1.00			
3. Experience-Sampled Job Satisfaction	17.81	3.11	.39*	.61**	1.00		
4. Overall Job Satisfaction	26.88	8.09	.59**	.59**	.59**	1.00	
5. Beliefs about the Job	3.37	.61	.57**	.48**	.62**	.72**	1.00

Notes: N = 33. * p < .05 (two-tailed). ** p < .01(two-tailed).

Table 2

Regression of Overall Job Satisfaction on Average Pleasant Mood and Job Beliefs

Predictor	Beta	t	Significance	R^2
Pleasant Mood	.31	2.35	$p < .05$	
Job Beliefs	.57	4.34	$p < .01$	
				.60

Notes: N = 33. Tests are two tailed.

Table 3

Regression of Experience-Sampled Job Satisfaction on Average Pleasant Mood and Job Beliefs

Predictor	Beta	t	Significance	R^2
Pleasant Mood	.41	2.81	$p < .01$	
Job Beliefs	.42	2.86	$p < .01$	
				.51

Notes: N = 33. Tests are two tailed.

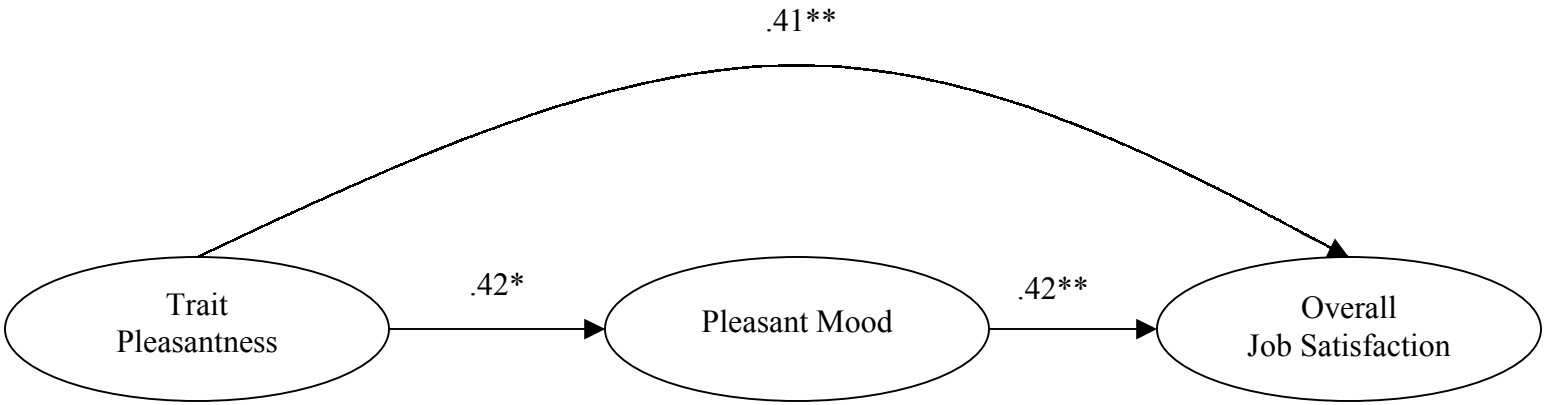
Figure Captions

Figure 1. Path model testing the mediating effect of pleasant mood on the relationship between trait pleasantness and overall job satisfaction with the partially mediated model

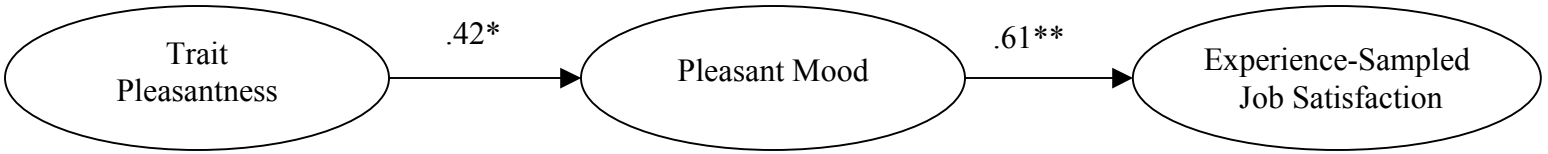
Figure 2. Path model testing the mediating effect of pleasant mood on the relationship between trait pleasantness and experience-sampled job satisfaction with the fully mediated model

Figure 3. Path model testing the mediating effect of pleasant mood on the relationship between trait pleasantness and experience-sampled job satisfaction with the partially mediated model

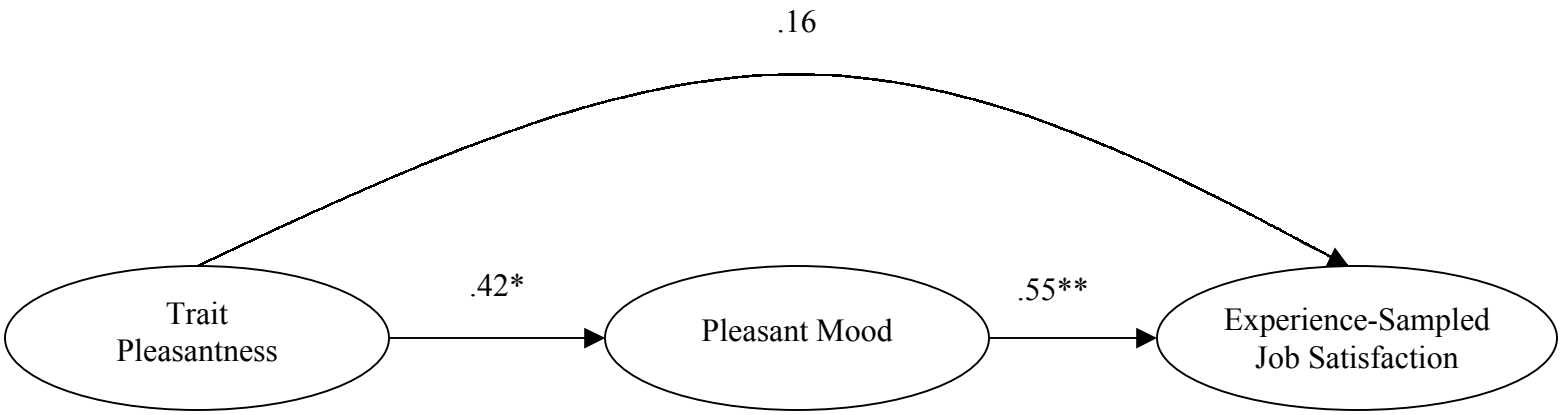
Figure 4. Plot of the average correlation between the experience-sampled job satisfaction composite and (a) the pleasant mood composite, and (b) overall job satisfaction, as a function of the number of experience-sampled ratings entering the composite



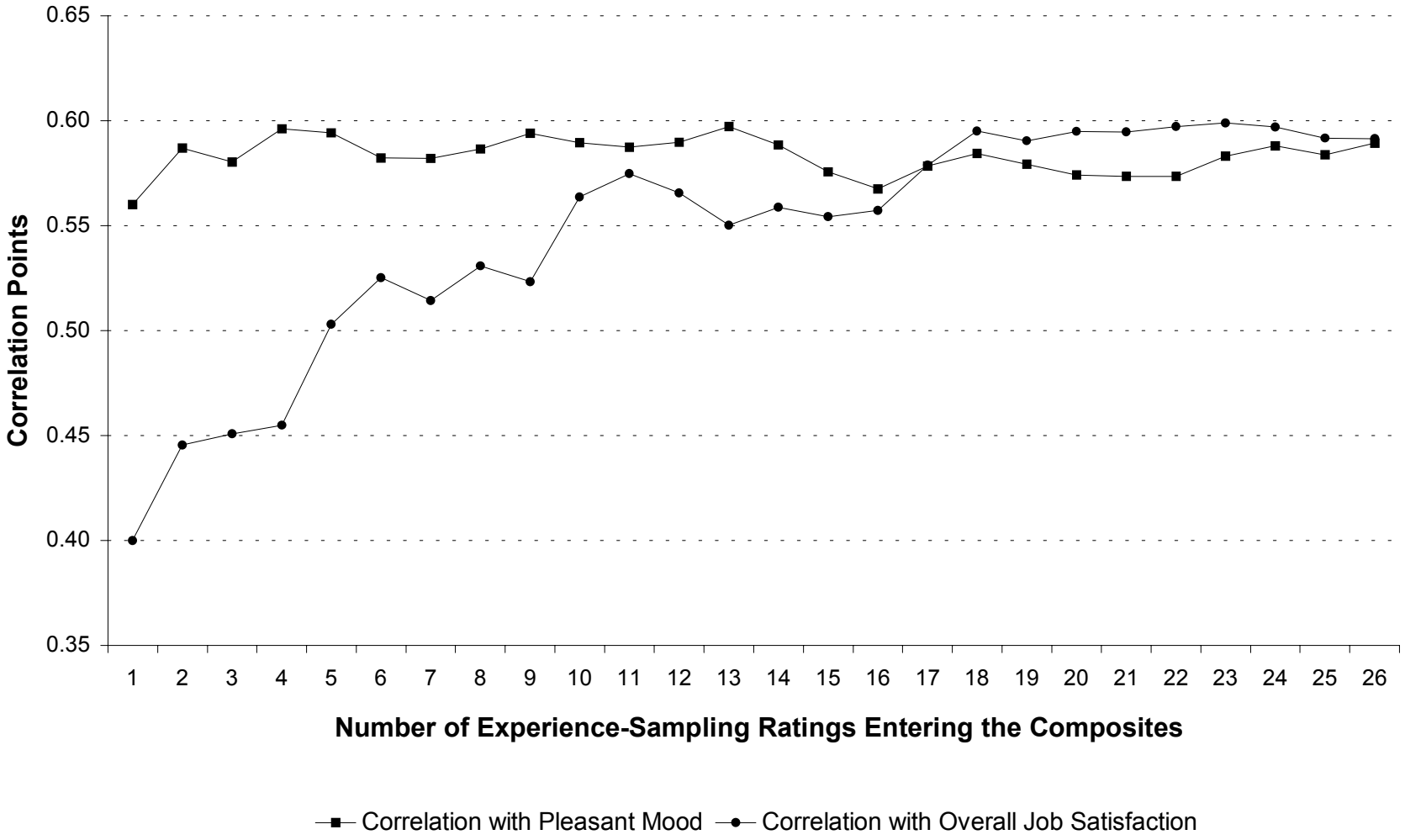
Notes: N = 33. * p < .05. ** p < .01. All tests are two-tailed.



Notes: N = 33. * p < .05. ** p < .01. All tests are two-tailed.



Notes: N = 33. * p < .05. ** p < .01. All tests are two-tailed.


0.65
0.60
0.55
0.50
0.45
0.40
0.35
Correlation Points
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Number of Experience-Sampling Ratings Entering the Composites
Correlation with Pleasant Mood
Correlation with Overall Job Satisfaction