

Doc  
FAA  
AM  
94  
02

T/FAA/AM-94/2

Office of Aviation Medicine  
Washington, D.C. 20591

# Perceptions of Organizational Support and Affectivity as Predictors of Job Satisfaction



L. Alan Witt

Civil Aeromedical Institute  
Federal Aviation Administration  
Oklahoma City, Oklahoma 73125

February 1994

Final Report

This document is available to the public  
through the National Technical Information  
Service, Springfield, Virginia 22161.

Doc  
FAA  
AM  
94/02



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

1. Report No. DOT/FAA/AM-94/2		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle PERCEPTIONS OF ORGANIZATIONAL SUPPORT AND AFFECTIVITY AS PREDICTORS OF JOB SATISFACTION				5. Report Date February 1994	
				6. Performing Organization Code	
7. Author L. Alan Witt, Ph.D.				8. Performing Organization Report No.	
9. Performing Organization Name and Address FAA Civil Aeromedical Institute P.O. Box 25082 Oklahoma City, OK 73125				10. Work Unit No. (if RAIS)	
				11. Contract or Grant No.	
12. Sponsoring Agency name and Address Office of Aviation Medicine Federal Aviation Administration 800 Independence Avenue, S.W. Washington, D.C. 20591				13. Type of Report and Period Covered	
				14. Sponsoring Agency Code	
15. Supplemental Notes This work was performed under Task AM-B-93-HRR-122					
16. Abstract Staw, Bell, and Clausen (1986) have suggested that employees "bring a positive or negative disposition to the work setting, process information about the job in a way that is consistent with that disposition, and then experience job satisfaction or dissatisfaction as a result." Although this is not a universally held viewpoint, given such endeavors as the FAA Job Satisfaction Survey and managerial efforts to improve overall job satisfaction, the issue of employee disposition is important. Agency attempts to alter the work situation for the purposes of increasing job satisfaction could have limited potential for success to the extent that job satisfaction is a function of disposition. The present study tested several hypotheses examining both the main and interactive effects on job satisfaction of variables assessing the person (disposition) and situation (organizational climate) across several organizations. Disposition in this study refers to employee descriptions of how they generally feel in response to the PANAS Affectivity scale developed by Watson and Clark. The PANAS is comprised of 20 adjectives that describe both positive (PA) and negative (NA) affect. Data were accumulated by meta-analysis from 1,491 employees in 35 different organizational systems. This included survey data from employees at the FAA Aeronautical Center (N=1,029) in Oklahoma City, Air Traffic Control Specialist trainees from the FAA Academy Nonradar Screen Program (N= 397) in Oklahoma City, and teachers from a rural public school system (N=65) in Illinois. Employees in each of those groups were participants in larger surveys of job satisfaction and other attitudinal factors that influence job satisfaction. Results indicated that perceptions of organizational support were more strongly related to job satisfaction than was disposition [positive affectivity (PA) or negative affectivity (NA)]. NA had a larger moderating effect than PA on the perceived support-job satisfaction relationship. These results suggest that NA may have influenced the extent to which perceptions of organizational support impact employee job satisfaction. Considered together with longitudinal studies in this area, these findings suggest that dispositional differences in affectivity should be considered in interventions designed to have an impact on the attitudes of agency employees. Organizational development specialists and managers should give some consideration to how individual differences in affectivity can influence responses to the existing organizational climate and culture as attempts are made to promote organizational change and improve overall job satisfaction.					
17. Key Words Organizational Support Organizational Affectivity Job Satisfaction			18. Distribution Statement Document is available to the public through the National Technical Information Service, Springfield, Virginia, 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 14	
				22. Price	

## PERCEPTIONS OF ORGANIZATIONAL SUPPORT AND AFFECTIVITY AS PREDICTORS OF JOB SATISFACTION

Staw, Bell, and Clausen (1986, p. 61) suggested that employees "bring a positive or negative disposition to the work setting, process information about the job in a way that is consistent with that disposition, and then experience job satisfaction or dissatisfaction as a result." Similarly, Schmitt and Pulakos (1985) speculated that job satisfaction might be a stable aspect of an individual's behavior. This issue is important. Attempts to alter the work situation for the purposes of increasing job satisfaction may have limited potential for success to the extent that job satisfaction is a function of disposition.

Several findings support the basic notion of the dispositional approach that the formulation of task attitudes is a function of the individual in addition to the situation. First, task perceptions vary among persons with identical job descriptions (O'Reilly, Parlette, & Bloom, 1980). Second, job satisfaction and life satisfaction are positively related (Weaver, 1978), as are job attitudes and mental health (Kahn, 1981). Third, field experiments have generally failed to yield long-term changes in job attitudes (Oldham & Hackman, 1980). Fourth, Staw et al. (1986) reported that adolescent affect was correlated with adult job affect. Fifth, Pulakos and Schmitt (1983) found that the needs of high school students for job-related outcomes measured prior to taking a job were predictive of subsequent job satisfaction. Sixth, Arvey et al.'s (1989) study of monozygotic twins reared apart indicated that about 30% of the observed variance in job satisfaction could be attributed to common genes. Seventh, Staw and Ross (1985) found that the strongest predictor of a single, global item of job satisfaction in 1971 was job satisfaction in 1966. They also noted that changes in pay and job status were considerably weaker predictors. In contrast, Gerhart (1987) failed to replicate Staw and Ross' (1985) findings on a younger sample, reporting that pay, occupational status, and job complexity added explanatory power to an equation predicting job satisfaction.

Much of this work has focused on the issue of whether or not job attitudes are stable over time. This issue — essentially the debate over whether or not personality is important — was addressed sufficiently during the interactionist debates of the 1970's (Bowers, 1973; Endler & Magnusson, 1976; Magnusson, 1981; Price & Boufford, 1974) and re-examined for relevance in the workplace during the 1980's (e.g., Staw & Ross, 1985). Personality is important. The problem is resolving what dimensions of personality influence a person's reaction to a situation. Most managers are probably aware, at least implicitly, that individual differences influence how their subordinates respond to a given work situation.

In studies of self-reported mood, negative and positive affect consistently have emerged as two separate and relatively independent dimensions (Diener & Emmons, 1985; Watson & Tellegen, 1985). Watson and Clark (1984) argued that the tendencies to experience negative or positive affect reflect stable dispositions. Studies on twins reared apart suggest that both positive and negative affectivity are inherited (Tellegen et al., 1988). Evidence suggests that positive and negative affectivity are key determinants of the degree to which individuals experience positive and negative moods (Costa & McCrae, 1980; Tellegen, 1985; Watson & Clark, 1984). Watson and Clark (1984, p. 483) noted that individuals high in negative affectivity (NA) "are more likely to report distress, discomfort, and dissatisfaction over time and regardless of the situation, even in the absence of any overt or objective source of stress." Overall, these individuals focus on their disappointments, shortcomings, and mistakes, adopting a more negative view of life experiences. Low-NA persons, on the other hand, tend to be more self-secure, satisfied, and calm, focusing less on daily frustrations and adopting a more resilient approach to setbacks. In contrast, persons high in positive affectivity (PA) are characterized by high energy, full concentration, and active engagement, whereas low-PA individuals typically experience sadness and lethargy.

Studies have demonstrated relationships of job satisfaction with both NA (e.g., Levin & Stokes, 1989) and PA (e.g., Bross & Witt, 1989), with NA and PA being less strongly related to job satisfaction than contextual perceptions (e.g., task characteristics).

The generally weak relationships between dispositions and outcomes related to situational variables suggest that there may be interactions between dispositions and situations influencing outcomes. Researchers have suggested that future research might find that certain settings arouse hostility in negatively predisposed individuals but have little effect on positively predisposed people (Schaubroeck, & Ganster, 1991; Staw & Ross, 1985). The notion that there is likely an interaction between affectivity and the context in producing job attitudes is congruent with Lewin's (1936) formula that behavior is a function of both the person and environment. Schneider (1987) argued that most organizational scientists have only emphasized the environment half of the equation. However, advocates of the interactional psychology perspective (e.g., Endler & Magnusson, 1976; James, Hater, Gent, & Bruni, 1978) have emphasized the interaction between individual characteristics and the psychological meaning of the situation for the individual.

Studies have provided evidence of interactions between disposition and perceptions predicting attitudes. For example, Parkes (1990) reported that perceived work demand scores were more strongly related to overall scores on a health questionnaire among persons who were high rather than low in NA. Newton and Keenan (1991, p. 784) suggested that "it is inappropriate to analyze the relative influence of dispositional and situational effects because much of the explained variance may derive (at least with certain variables) from interactive rather than additive effects." Furthermore, they reported the instability of both job attitudes and disposition (e.g., anxiety) over time and concluded (p. 786) that "individuals may have a moderate predisposition to respond to a given environment with greater or lesser affect" — a predisposition that may be influenced by the environment and interactive effects. Although they measured job satisfaction and a number of person-focused, job-related attitudes — job alienation, anxiety strain, anger strain, frustration strain, and hostility strain — a

limitation of their study was that they operationalized the situational effects as change in employment ("Have you changed firms since you completed the last questionnaire?").

The present study examined both the main and interactive effects on job satisfaction of variables assessing the person (affectivity) and situation across a variety of organizations. This approach has two advantages. First, concurrent measurement provides an assessment of affectivity and situational perceptions at the same time. Interventions are designed to change current attitudes and behaviors, not the effects of past attitudes on present ones. Second, examining the hypotheses across multiple organizations reduces the threats of both Type I and II errors by reducing the likelihood of sampling error and increasing the power to detect differences, respectively.

Recent reports have suggested that employees form global beliefs about the extent to which organizations are supportive and, in turn, that these perceptions are related to increased commitment, innovation, and reduced absenteeism (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger, Fasolo & Davis-LaMastro, 1990; Shore & Tetrick, 1991). For the purposes of the present study, we assessed the psychological meaning for the individual of the situation in terms of perceptions of organizational support.

*Hypothesis 1.* Congruent with previous findings (e.g., Bross & Witt, 1989; Levin & Stokes, 1989), we hypothesized that perceptions of organizational support would be more strongly related to job satisfaction than would be PA or NA. Based on the assumption implicit in much of the organizational science literature, the psychological meaning of the situation for the individual should have greater influence on the person's job satisfaction than the individual's predisposed affectivity.

*Hypothesis 2.* We hypothesized an interaction effect between NA and perceptions of organizational support on job satisfaction. Levin and Stokes (1989) noted that NA may influence how the information about the work context is translated and stored. Specifically, they suggested that high-NA people may be able to make more realistic appraisals of their job

experiences, while those low in NA may rationalize their dissatisfaction. This notion is inconsistent with the finding that the greater the emotional stress, the lesser the individual will attend to cues in the environment (Easterbrook, 1959) but congruent with results (Jex, Roberts, & Gudanowski, 1992; Parkes, 1990; Schaubroeck, Ganster, & Fox, 1992) indicating that persons high in NA may be more sensitive to various aspects of the work context. Because individuals high in NA may tend to be more sensitive to the environment than persons low in NA, perceptions of organizational support should be most salient to the job satisfaction of high-NA personnel.

*Hypothesis 3.* We also hypothesized an interaction between PA and perceptions of organizational support on job satisfaction. Individuals high in PA tend to be more energetic and alert than those low in PA. Thus, it is likely that high-PA individuals would pay more attention to the environment. For them, then, the situation should be more salient in the development of their job satisfaction. Thus, we expected perceptions of organizational support to be more strongly related to job satisfaction among high-PA compared with low-PA individuals.

## METHOD

### *Subjects and Procedure*

A total of 1,491 individuals in 35 organizational units participated. All participants voluntarily responded to requests to complete organizational surveys. One thousand twenty-nine were employed in 14 functional organizations at the FAA's Aeronautical Center. Employees represented hierarchical levels from low wage grades to executives and were working in a variety of functions, including warehousing, technical training, personnel, budgeting, and acquisition. These participants were sampled as part of another study (Nye & Witt, 1993). Three hundred ninety-seven were full-time employees in 20 different classes of a 9-week resident selection screening program for Air Traffic Controllers at the FAA Academy. These participants were sampled as part of another study (Witt & Broach, in press). Sixty-five were school

teachers employed in a rural school district. These participants were also sampled as part of another study (Witt & Nye, 1992).

### *Measures*

Affectivity was measured by the Watson, Clark, and Tellegen (1988) 10-item PA ( $\alpha = .85$ ;  $M = 35.89$ ;  $SD = 6.91$ ) and 10-item NA scales ( $\alpha = .85$ ;  $M = 18.34$ ;  $SD = 6.33$ ). An impressive research program (Clark & Watson, 1986, 1988; Watson & Clark, 1984; Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985) led to the development of these scales. Results reported by Watson, et al. (1988) suggest that these measures assess dispositional affect that may be independent of the situational influences at the time of measurement of affect. Organ and Konovsky's (1989) operationalization of this scale asked subjects to indicate how they felt at work, which may have confounded PA and NA with work-related affect and cognitions. In this study, however, all subjects were instructed to indicate how they felt generally. In this way, the influence of effects specific to the workplace on PA and NA may have been reduced. Job satisfaction was assessed by the validated (McNichols, Stahl, & Manley, 1978) Hoppock (1935) 4-item scale presented on a 5-point rather than 7-point scale ( $\alpha = .80$ ;  $M = 14.2$ ;  $SD = 2.71$ ). Perceptions of organizational support were assessed by the Eisenberger, et al. (1986) 16-item short form of the Survey of Perceived Organizational Support ( $\alpha = .90$ ;  $M = 49.67$ ;  $SD = 12.24$ ). This scale taps the extent to which employees see the organization as valuing their contributions and providing them with help.

### *Analyses*

Four analytic approaches were taken: (a) we conducted confirmatory factor analyses to determine whether the measures represented distinct constructs in this study; (b) correlations were accumulated across organizations, and then the *t* statistic (Cohen & Cohen, 1983) was computed to determine the significance of the differences between the mean-weighted correlations of support with job satisfaction vs. PA and NA with job satisfaction; (c) regression analyses were run on the mean-weighted correlations; and (d) the effect size of each interaction was assessed not only in terms of the

increment in  $R^2$  ( $\Delta R^2$ ) but also in terms of the effect of the moderator on the criterion at different levels of the predictor.

Common method variance is a concern in cross-sectional studies. McFarlin and Sweeney (1992) used confirmatory factor analyses (CFA) to assess whether or not the measures in their study represented distinct constructs. Following their approach, we evaluated five models: (a) a 1-factor model, (b) a 2-factor model with PA and NA as one factor and job satisfaction and support comprising the other, (c) a 3-factor model treating PA and NA as one factor and job satisfaction and support as separate factors, (d) a 3-factor model with job satisfaction and support as one factor and PA and NA considered as separate factors, and (e) a 4-factor model with PA, NA, job satisfaction, and support as separate factors.

Consistent with Hunter and Schmidt's (1990) suggestion that regression analyses follow cumulation of correlations across studies, we took a meta-analytic approach to determine both the magnitude and generalizability of correlations across the organizational units. The meta-analysis consisted of two steps. First, the observed correlations were weighted by sample size and then averaged. Second, the observed variances of the correlations were calculated and then corrected for the variance expected due to both sampling error and measurement error. A 90% lower credibility value (LCV), the point above which 90% of correlations were found, was computed using the corrected standard deviation. Whitener (1990) has interpreted an interval formed by the LCV that does not include zero as evidence that an effect was generalizable across studies.

The coefficients corrected for measurement error were used to examine Hypothesis 1, but not to examine Hypotheses 2 and 3. Cohen and Cohen (1983) warned that extreme caution should be used in interpreting attenuation-corrected coefficients. Congruent with their concerns, use of the population estimates resulted in collinearity problems in the moderated regression analyses. Therefore, the reported regression analyses employed the mean-weighted correlation coefficients before adjustment for measurement error.

In hierarchical moderated multiple regression analysis, the statistical significance of the increment in  $R^2$  with the addition of the cross-product term has typically been used as the indicator of the effect size of the interaction. Researchers (e.g., Champoux, & Peters, 1987; Cohen & Cohen, 1983) have expressed concerns that  $\Delta R^2$  is not a satisfactory expression of the nature of the impact of the moderator variable in hierarchical moderated multiple regression analysis. Even alternative measures of the effect size of the interaction, such as the semi-partial correlation of the interaction term (Cohen, 1978) and the standardized impact of the moderator on the regression slope (Champoux, & Peters, 1987) provide conservative estimates of the effect size of the interaction term, because they represent the effect across the entire range of values of the predictor variable. We pursued an alternative approach for assessing the effect of a moderator variable in terms of the differential impact of the moderator on the criterion at different levels of the predictor. Additionally, to examine the form of the relationships, we followed Stone and Hollenbeck's (1989) advice; i.e., plotting three slopes for each equation, one at the value one standard deviation below the mean of the moderator, the second at the value of the mean, and the third at the value one standard deviation above the mean.

## RESULTS AND DISCUSSION

Results of the CFA indicated that the four-factor model provided the best fit of the data (Goodness-of-Fit Index = .93; Normed-Fit Index = .94; Bentler & Bonnet, 1980). Thus, the four variables (support, PA, NA, and job satisfaction) were interpreted as reflecting separate constructs, and relationships between them did not excessively reflect artifact due to a common method. By contrast, neither the one-factor model (NFI = .55) nor the two-factor model (NFI = .73) — of support with job satisfaction and PA with NA — fit the interrelationships among the variables. The three-factor model, which combined support with job satisfaction, represented a marginally satisfactory solution (NFI = .91), a result consistent with work by

Shore and Tetrick (1991) suggesting that perceptions of organizational support are somewhat redundant with expressions of overall job satisfaction.

The intercorrelation matrix is presented in Table 1. As shown there, job satisfaction and perceptions of organizational support scores were negatively related to NA scores but positively related to PA scores. These findings are consistent with previous reports (Bross & Witt, 1989; Levin & Stokes, 1989). As shown in Table 1 and consistent with Hypothesis 1, perceptions of organizational support were more strongly related to job satisfaction than were PA ( $t = 11.95, p < .01$ ) and NA ( $t = 11.88, p < .01$ ).

Of the correlations presented in Table 1, only three met a 60% criterion rule suggested by Schmidt and Hunter (1977) and applied by Damanpour (1991). This criterion advises that in studies in which correction is made only for sampling error, the introduction of moderator variables in the meta-analysis is unnecessary when the sampling error explains 60% or more of the observed variance. Because this criterion was intended as a heuristic for introducing moderators (e.g., gender) into meta-analyses and its empirical utility has not been examined, we used the zero-order correlations in hierarchical moderated multiple regression analyses. Because not all of the mean-weighted correlations met this criterion of homogeneity, unknown moderators as well as statistical artifacts could have accounted for some of the unexplained variance in the

observed correlations. However, by contrast, the accumulation of correlations across organizational groups was justified, based on the 90% LCV criterion.

Regression analyses were used to test Hypotheses 2 and 3. Results of the hierarchical moderated multiple regression analyses (Cohen & Cohen, 1983) indicated that the interaction (cross-product) term accounted for a significant amount of variance (total adjusted  $R^2 = .49, \Delta R^2 = .06, F = 208.7, p < .01$ ) over and above the variance contributed by support and NA. In other words, the impact of perceptions of organizational support on expressions of job satisfaction varied significantly as a function of the level of NA across the range of values of organizational support. Similarly, results indicated a significant, but smaller moderating effect of PA on the support-job satisfaction relationship (total adjusted  $R^2 = .48, \Delta R^2 = .01, F = 30.1, p < .01$ ).

Figures 1 and 2 illustrate the form of the interaction effects. As shown in Figure 1, the slopes indicated that the support-job satisfaction relationship was stronger (i.e., the slope was greater) among individuals high in NA compared to those low in NA. The effect of NA in terms of differential impact on job satisfaction increased as perceptions of organizational support decreased. The differences (at one standard deviation above the mean of NA compared to one standard deviation below the mean of NA) in predicted values of job satisfaction divided by the standard deviation of

**TABLE 1**  
**Matrix of Correlation Coefficients Accumulated Across Samples**

Variable	1	2	3	4	5
1. SPOS					
2. PA	.37 (.41)*				
3. NA-	.36 (-.41)*	-.27 (-.31)			
4. Job Satisfaction	.67 (.78)*	.42 (.50)	-.42 (-.50)		
5. SPOS*PA	.86 (.95)	.75 (.83)	-.40 (-.49)	.68 (.74)	
6. SPOS*NA	.38 (.42)	-.03 (-.04)	.68 (.76)	.16 (.18)	.23 (.25)

Note: SPOS = Survey of Perceived Organizational Support.

PA = Positive affectivity.

NA = Negative affectivity. Coefficients adjusted for measurement error appear in parentheses.

\* = Ratio of sampling error to total variance within the set of  $r$  coefficients was  $\geq 60\%$ .

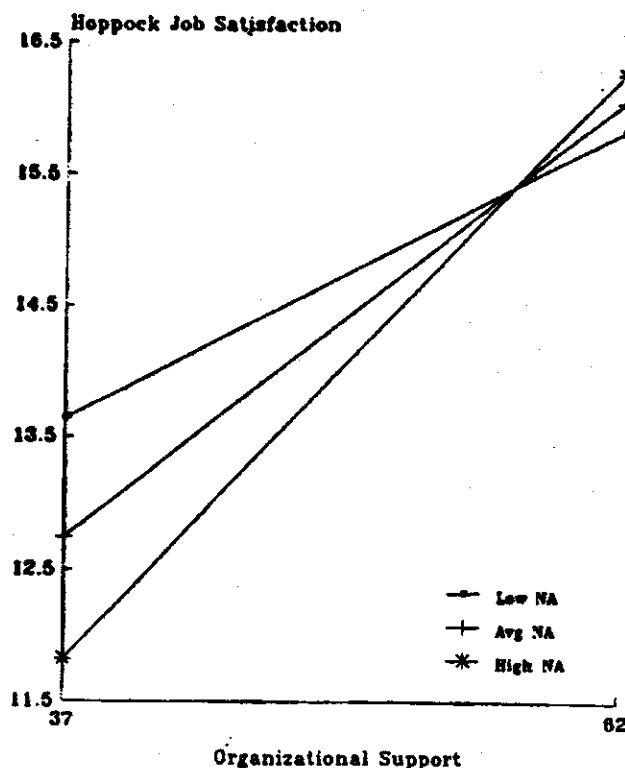
job satisfaction (i.e., standardized group differences) are as follows: (a) among subjects with scores at one standard deviation below the mean of organizational support, the moderator (NA) yielded a difference of .67 standard units of job satisfaction; (b) for those with scores at the mean of organizational support, the moderator yielded a difference of .33 standard units of job satisfaction; and (c) for subjects with scores at one standard deviation above the mean of organizational support, the moderator yielded a difference of .16 standard units of job satisfaction. Considering Cohen's (1988) categories of effect sizes — .20 = small, .50 = medium, and .80 = large, the effect of the NA on job satisfaction was medium when perceptions of organizational support were at one standard deviation below the mean, "small" at the average organizational support level, but trivial when at one standard deviation above the mean.

Another approach is to identify the points on the continuum of support scores at which the impact of NA on job satisfaction would be "important". The formulae for deriving this information given the "high" moderator value to be one standard deviation above the mean and the "low" moderator value to be one standard deviation below the mean are as follows:

$$\text{Step 1: } X = \frac{ES (SD_y)}{(2 * SD_z) - b_2} - b_3$$

$$\text{Step 2: } SX = \frac{X}{SD_x}$$

where ES is one of Cohen's (1988) effect sizes (.20,



Note:  $Y = (.0014 + .0073f)X + (-.418f + 15.32)$ , where  $f$  = one standard deviation below the mean of NA (or the mean of NA or one standard deviation above the mean of NA),  $Y$  = the job satisfaction score, and  $X$  = the organizational support score. Only scores within  $\pm$  one standard deviation of organizational support scores are plotted.

Figure 1. Hoppock Job Satisfaction Scores Regressed On Perceptions of Organizational Support Scores: Low, Average, and High NA Scores.

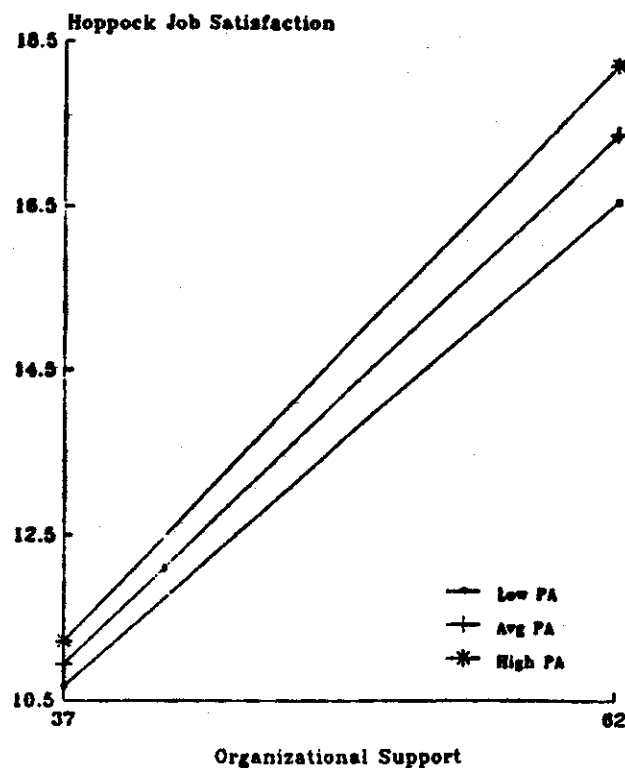


.50, or .80),  $SD_y$  = the standard deviation of the criterion variable,  $SD_z$  = the standard deviation of the moderator variable,  $b_2$  = the regression coefficient of the moderator variable,  $b_3$  = the regression coefficient of the cross-product term,  $X$  = the raw score of the predictor variable at which the impact of the moderator variable on the criterion variable would be important,  $SD_x$  = the standard deviation of the predictor variable, and  $SX$  = the score of the predictor variable in standard units at which the impact of the moderator variable on the criterion variable would be important. These formulae were solved for both  $X$  and  $-X$  because of the possibility that the interactions could be disordinal.

Applying these formulae, support scores below 51.67 (below a z-score of .16) and above 63.4 (above a z-score of 1.11) yielded a "small" differential impact on job satisfaction. In situations where perceived organiza-

tional support scores were below a z-score of .16, individuals lower in NA experienced greater job satisfaction than those high in NA. However, in situations where perceived organizational support was comparatively high (above a z-score of 1.11), individuals lower in NA experienced less job satisfaction than those high in NA. In other words, when things were perceived as near "average" or worse, high-NA personnel were less satisfied, but when things were very "good", they were more satisfied. These results provide some support for the notion that high-NA people are more sensitive to their environment than low-NA people (Levin & Stokes, 1989; Watson & Clark, 1984).

As shown in Figure 2, the slopes indicate that the effect of PA on job satisfaction scores was primarily additive rather than interactive. Applying the formulae mentioned above, a "small" effect of PA in terms of the differential impact of the PA on job satisfaction



Note:  $Y = (.072 + .00016f)X + (-.0029f + 7.73)$ , where  $f$  = one standard deviation below the mean of PA (or the mean of PA or one standard deviation above the mean of PA),  $Y$  = the job satisfaction score, and  $X$  = the organizational support score. Only scores within +/- one standard deviation of organizational support scores are plotted.

Figure 2. Hoppock Job Satisfaction Scores Regressed On Perceptions of Organizational Support Scores: Low, Average, and High PA Scores.

would begin at a support score of 25.34 (below a z-score of -1.99), which is well outside the range of the support scores. Thus, the impact of PA scores on job satisfaction was at least "small" across the full range of organizational support.

## CONCLUSION

The results presented here suggest that job satisfaction was more highly related to perceptions of organizational support than to affectivity when measured concurrently. The influence of organizational support on job satisfaction appears to have been greater among persons high in NA than among those low in NA. These individuals might be dispositionally more sensitive to their work environment. However, the moderating effect of NA on the support-satisfaction relationship was dependent on the level of perceived support. These results support the interactional psychology paradigm (Endler & Magnusson, 1976).

The effect of PA on job satisfaction, however, helps to explain Arvey et al.'s (1989) assertion that while the overall level of job satisfaction in an organization may change, the individual's relative position will (might) remain the same. While individuals receiving high levels of support from the organization may be more satisfied than those receiving comparatively low levels of support, those who are predisposed toward sadness and lethargy (i.e., individuals dispositionally low in PA) are less likely to express satisfaction than predispositionally energetic and actively engaged (i.e., high-PA) people.

The findings presented here have some implications for organization development. Attempts to change job satisfaction via organizational support are likely to be more successful when taking into account dispositional differences. Personnel at different points on the NA continua may respond differently to the intervention, and efforts to address these individual differences may increase the intervention's probability of success. For example, managers might "accentuate the positive" to personnel high in NA. The results suggest, however, that NA has the strongest effect on job satisfaction when the situation was unfavorable (i.e., low perceived organizational support).

Three weaknesses of the present study should be noted. First, although the results of the CFA suggest otherwise, it is possible that the results may reflect some uncontrolled artificial variance due to method bias. The total variance of job satisfaction that can be accounted for by situational perceptions and affectivity when measured concurrently is greater than would be expected using a longitudinal design. However, this impact could result from several factors, including not only common method bias but also different work environments (e.g., changes in supervisor, co-workers, jobs, tasks, or employers) that change due to variability in any of the myriad of elements that can affect job satisfaction. Moreover, it is unlikely that common method variance could be responsible for the interaction, because common method variance is likely to influence variable relationships in the same direction. Second, as mentioned earlier, not all of the correlations were homogeneous according to the 60% rule. Third, in terms of the  $\Delta R^2$  effect size criterion, the variance explained by the interactions beyond that already explained by the main effects of support and affectivity was low, especially for PA.

On the other hand, this study has some strengths. First, building on the longitudinal studies (e.g., Newton & Keenan, 1991) that have provided some support for the dispositional and interactional approaches, the concurrent measurement of the variables permitted assessment of the dispositional and situational influences at the time of measurement. Second, the data reflect the attitudes and dispositions of employees at various stages in their careers in a variety of different jobs and organizations. Third, this is the first time of which we are aware that, following Hunter and Schmidt (1990), meta-analytically derived correlations from several organizations were used in moderated regression analyses and reported. As noted earlier, this approach has the advantage of examining the hypotheses across multiple organizations thereby reducing the threats of Type I and II errors. Current results likely provide a more potent examination of these issues than studies done on single organizations. For example, this study contradicts the findings of Schaubroeck et al. (1992) that PA and NA are uncorrelated with job satisfaction. One comparative distinction is that we used the PANAS and not neuroticism and trait anxiety

as the measures of NA and extraversion as the PA measure. This suggests the possibility that the PANAS is a more salient and/or comprehensive measure of affectivity. We found affectivity to have a complex relationship with job satisfaction exhibiting both additive and interactive components. Fourth, the effect size of the interaction was assessed in terms of both the increment in  $R^2$  and the size of the effect of the moderator on the criterion at different levels of the predictor. In contrast to the conservative estimate of the effect size provided by  $\Delta R^2$ , we suggest that the identification of the impact of affectivity on job satisfaction at specified levels of perceptions of organizational support better illustrates the nature and magnitude of the interaction effects.

In summary, the present study was not designed to look at the stability of job attitudes over time. Rather, it examined concurrent reports of perceived organizational support and affectivity as predictors of job satisfaction. The results suggest that NA may have influenced the extent to which perceptions of organizational support had an impact on job satisfaction. Considered together with longitudinal studies in this area (e.g., Gerhart, 1987; Newton & Keenan, 1991; Staw et al., 1986), these findings suggest that individual differences should be considered in organizational interventions. What is needed now is to clarify the effects of dispositions so that we can help managers identify and work with these differences as they seek to improve the work environment. For example, while most managers may be aware that certain employees are generally anxious while others might usually be calm, what they probably do not know is how to use this awareness to help employees take advantage of efforts to improve the workplace. However, we urge caution in over-emphasizing individual differences, as they may be most salient in unfavorable conditions. In general, we suggest that researchers interested in the dispositional approach to job attitudes should move away from focusing solely on the stability of job attitudes and toward identifying personality dimensions that interact with situational influences to yield job attitudes and behaviors.

## REFERENCES

- Arvey, R. D., Bouchard, T. J., Jr., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology, 74*, 187-192.
- Bentler, P. M., & Bonnet, D. G. (1980). Significance test and goodness of fit in the analysis of covariance structure. *Psychological Bulletin, 88*, 588-606.
- Bowers, K. S. (1973). Situationism in psychology: An analysis and critique. *Psychological Review, 80*, 302-309.
- Bross, S. L., & Witt, L. A. (1989). Perceived equity of benefits and pay among state university employees. In D. L. Stone and E. F. Stone (Eds.), *Proceedings of the Midwest of the Academy of Management* (pp. 139-143). Bowling Green, Ohio.
- Champoux, J. E., & Peters, W. S. (1987). Form, effect size, and power in moderated regression analysis. *Journal of Occupational Psychology, 60*, 243-255.
- Clark, L. A., & Watson, D. (1986, August). *Diurnal variation in mood: Interaction with daily events and personality*. Paper presented at the meeting of the American Psychological Association, Washington, D. C.
- Clark, L. A., & Watson, D. (1988). Mood and the mundane: Relations between daily life events and self-reported mood. *Journal of Personality and Social Psychology, 54*, 296-308.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Earlbaum.
- Cohen, J. (1978). Partialled products are interactions; Partialled powers are curve components. *Psychological Bulletin, 85*, 858-866.
- Cohen, J. & Cohen, P. (1983). *Applied multiple regression for the behavioral sciences*. Hillsdale, NJ: Earlbaum.
- Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology, 38*, 36-51.
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal, 34*, 555-590.

- Diener, E., & Emmons, R. A. (1985). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, *47*, 1105-1117.
- Easterbrook, J. A. (1959). The effect of motion on cue utilization and the organization of behavior. *Psychological Review*, *66*, 183-201.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, *75*, 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500-507.
- Endler, N. S. & Magnusson, D. (1976). Toward an interactional psychology of personality. *Psychological Bulletin*, *83*, 956-974.
- Gerhart, B. (1987). How important are dispositional factors as determinants of job satisfaction? Implications for job design and other personnel programs. *Journal of Applied Psychology*, *72*, 366-373.
- Hoppock, R. (1935). *Job satisfaction*. New York: Harper & Row.
- Hunter, E. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- James, L. R., Hater, J. J., Gent, M. J., and Bruni, J. R. (1978). Psychological climate: Implications for cognitive social learning theory and interactional psychology. *Personnel Psychology*, *31*, 781-813.
- Jex, S. M., Roberts, C. K., & Gudanowski, D. M. (1992, May). *Negative affectivity as a moderator of job stressors and job conditions*. Paper presented at the 7th annual mid-year conference of the Society of Industrial and Organizational Psychology, Montreal.
- Kahn, R. L. (1981). *Work and health*. New York: Wiley.
- Levin, I., & Stokes, J. P. (1989). Dispositional approach to job satisfaction: Role of negative affectivity. *Journal of Applied Psychology*, *74*, 752-758.
- Lewin, K. (1936). *Principles of topological psychology*. New York: McGraw-Hill.
- Magnusson, D. (1981). *Toward a psychology of situations: An interactional perspective*. Hillsdale, NJ: Lawrence Erlbaum.
- McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Review*, *35*, 626-637.
- McNichols, C. W., Stahl, M. J., & Manley, T. R. (1978). A validation of Hoppock's job satisfaction measure. *Academy of Management Journal*, *21*, 737-742.
- Newton, T., & Keenan, T. (1991). Further analyses of the dispositional argument in organizational behavior. *Journal of Applied Psychology*, *76*, 781-787.
- Nye, L. G., & Witt, L. A. (1993). Dimensionality and construct validity of the perceptions of organizational politics scale (POPS). *Educational and Psychological Measurement*, *53*, 821-829.
- Oldham, G. R., & Hackman, J. R. (1980). Work design in the organizational context. In B. M. Staw and L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 2, pp. 247-278). Greenwich, CT: JAI Press.
- O'Reilly, C. A. Parlette, N., & Bloom, J. R. (1980). Perceptual measures of task characteristics: The biasing effects of differing frames of reference and job attitudes. *Academy of Management Journal*, *23*, 118-137.
- Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, *74*, 157-164.
- Parkes, K. R. (1990). Coping, negative affectivity, and the work environment: Additive and interactive predictors of mental health. *Journal of Applied Psychology*, *75*, 399-409.
- Price, R. H., & Boufford, A. L. (1974). Behavioral appropriateness and situational constraint as dimensions of social behavior. *Journal of Applied Social Psychology*, *30*, 519-586.
- Pulakos, E. D., & Schmitt, N. (1983). A longitudinal study of a valence model approach for the prediction of job satisfaction. *Journal of Applied Psychology*, *68*, 307-312.
- Schaubroeck, J., & Ganster, D. C. (1991). The role of negative affectivity in work-related stress. *Journal of Social Behavior and Personality*, *6*, 319-330.

- Schaubroeck, J., Ganster, D. C., & Fox, M. L. (1992). Dispositional affect and work-related stress. *Journal of Applied Psychology*, *77*, 322-335.
- Schmidt, F. L., & Hunter, J. F. (1977). Development of a general solution to the problem of validity generalization. *Journal of Applied Psychology*, *62*, 529-540.
- Schmitt, N., & Pulakos, E. D. (1985). Predicting job satisfaction: Is there a general satisfaction factor? *International Journal of Psychology*, *20*, 155-167.
- Schneider, B. (1987). People make the place. *Personnel Psychology*, *40*, 437-453.
- Shore, M. L., & Tetrick, L. E. (1991). A construct validity study of the Survey of Perceived Organizational Support. *Journal of Applied Psychology*, *76*, 637-643.
- 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.
- Staw, B. M., Bell, N. E. & Clausen, J. A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Sciences Quarterly*, *31*, 56-77.
- Stone, E. F., & Hollenbeck, J. R. (1989). Clarifying some controversial issues surrounding statistical procedures for detecting moderating variables: Empirical evidence and related matters. *Journal of Applied Psychology*, *74*, 3-10.
- Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and the anxiety disorders* (pp. 681-706). Hillsdale, NJ: Earlbaum.
- Tellegen, A., Lykken, D. T., Bouchard, T. J., Jr., Wilcox, K. J., Segal, N. L., & Rich, S. (1988). Personality similarity in twins reared apart and together. *Journal of Personality and Social Psychology*, *54*, 1031-1039.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, *96*, 465-490.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, *98*, 219-235.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.
- Weaver, C. N. (1978). Job satisfaction as a component of happiness among males and females. *Personnel Psychology*, *31*, 831-840.
- Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in meta-analysis. *Journal of Applied Psychology*, *75*, 315-321.
- Witt, L. A., & Broach, D. M. (In press). Exchange ideology as a moderator of the procedural justice-satisfaction relationship. *Journal of Social Psychology*.
- Witt, L. A., & Nye, L. G. (1992). Gender and the relationship between pay/promotion fairness and job satisfaction. *Journal of Applied Psychology*, *77*, 910-917.