

Influences of Trait Negative Affect and Situational Similarity on Correlation and Convergence of Work Attitudes and Job Stress Perceptions Across Two Jobs

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Job attitude and work stressor measures were obtained from members of a large military reserve unit. Respondents worked part-time at the unit and full-time in a different occupation in a separate organization. Correlations of corresponding job attitudes and perceived stressors across the two jobs were significant, but not of high magnitude. For both job stressors and work attitudes, trait negative affectivity did not explain cross-job correlations. Tests of squared differences between attitudes and between job stressors also indicated no influence of trait affect. There was stronger convergence (squared difference) of intrinsic job satisfaction across jobs when differences in physical demands (physical, outdoor work versus sedentary, indoor work) were lower, suggesting that situational similarity affected convergence. Trait negative affect correlated more strongly with full-time job attitudes than with part-time job attitudes. We discuss implications for testing dispositional theories of attitudes and stress and practical attempts to improve job stress.

Within the last decade, much empirical interest has centered upon how traits affect perceptions of job stress and work attitudes (George, 1992). According to the dispositional approach, individuals have enduring traits that predispose them to view different contexts in consistent ways. Moreover, even when confronting new situations individuals are seen to perceive and behave in ways that are strongly affected by these traits. This perspective, therefore, suggests that over

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time one's positive or negative evaluation of the environment will often remain quite stable. Likewise, some correlations between self-reported job stressors and self-reported stress symptoms are reduced by partialling trait negative affectivity (Brief, Burke, George, Robinson, & Webster, 1988; Schaubroeck, Ganster, & Fox, 1992). If stable traits significantly underlie job stressor perceptions, these too will remain somewhat constant for the individual across situations and time. Whether traits significantly underlie job attitudes and perceived job stressors has important implications for how other variables' relationships with these factors can be interpreted. Already, some have suggested that job attitudes may be resistant to change because of worker traits (Staw, Bell, & Clausen, 1986), and that self-report job stressors reflect individual differences to a greater extent than situational exposures (Brief et al., 1988).

From a dispositional perspective, job satisfaction is seen to reflect individual affect (Judge, 1992). Dispositional effects on job attitudes have been examined longitudinally, thus permitting some degree of cross-situational inference. (Dispositional effects on job stress perceptions have not been assessed cross-situationally.) Evidence of attitudinal consistency would lend credence to, but not fully substantiate, the possibility that job satisfaction is significantly explained by traits. High test-retest correlations of job attitudes (Gerhart, 1987; Gutek & Winter, 1992; Newton & Keenan, 1991; Staw & Ross, 1985); correlations of affective disposition with job satisfaction (Agho, Price, & Mueller, 1992; Brief & Roberson, 1989; Judge & Hulin, 1993; Staw et al., 1986; Watson & Slack, 1993) and organizational commitment (Cropanzano, Jones, & Konovsky, 1993), and relations between affective traits and induced affect and task satisfaction in laboratory situations (Brief, Butcher, & Roberson, 1995; Kraiger, Billings, & Isen, 1989; Levin & Stokes, 1989) have been observed.

Whereas there is clear evidence that situational changes exert significant effects on attitudes (Cropanzano et al., 1993; Gerhart, 1987; Newton & Keenan, 1991), the relative levels of job attitudes appear quite stable over time. The studies which found that partialling trait negative affect (NA) significantly reduced relationships between self-reported stressors and self-reported stress outcomes (e.g., Brief et al., 1988; Schaubroeck et al., 1992) suggest that persons high in trait NA "over-report" unpleasant experiences. Persons who over-report stress and its health correlates may also consistently under-report their job satisfaction (Williams, Gavin, & Williams, 1996), such that trait NA explains much of the stability observed in job attitudes. In their classic review, Watson & Clark (1984) included dissatisfaction among the various strains high NAs experience. Indeed, several recent studies have observed positive correlations between trait NA and various facets of job dissatisfaction (Agho et al., 1992; Brief et al., 1988, 1995; Brief & Roberson, 1989; Chen & Spector, 1991; Cropanzano et al., 1993; Levin & Stokes, 1989; Necowitz & Roznowski, 1994; Schaubroeck et al., 1992; Spector & O'Connell, 1994; Watson & Slack, 1993; Williams et al., 1996). As stated by Levin & Stokes (1989: 753), "...high levels of NA are associated with a type of cognitive bias through which people approach and interpret their life experiences. This affective tendency and cognitive style may influence how people experience and evaluate their jobs" (see also Necowitz & Roznowski, 1994). Likewise,

Watson, Pennebaker, & Folger (1987: 154) theorized that higher trait NA will be reflected in more negative job and organizational attitudes: "High NA employees...are particularly likely to remain expressively dissatisfied on self-report measures despite improvements." Brief et al. (1995: 56) proposed two alternative ways in which trait NA may promote dissatisfaction which are not mutually exclusive. One perspective emphasizes how high NAs "...create situations and circumstances that influence their satisfaction," whereas an alternative perspective holds that "...high NA individuals are more sensitive to negative stimuli, reacting with more extreme emotion when experiencing a negative event." Because the trait NA influence on attitudes is expected to persist across situations and time, its common influence on test-retest measures may explain a substantial portion of the significant zero-order correlations observed in previous studies.

Exploring the Role of Trait Affect

Arvey, Carter, and Buerkely (1991) summarized previous research and argued that stability observed in the rank order of individual differences in job attitudes (i.e., high test-retest correlations) might indeed be explained by trait affect constructs. That is, a person's job attitudes may be similar over time chiefly because his or her trait affect has a constant, strong effect across time and situations. Staw et al. (1986) found that a trait affect measure obtained in childhood correlated with job attitudes prospectively for a substantial number of years, but no study has demonstrated that affective disposition explains a significant amount of the stability in job attitudes.

As stated by Judge (1992: 48-49), "Dispositional research [on job attitudes] has not lacked for longitudinal data. However, the longitudinal research has indirectly inferred dispositional effects from stability in nondispositional measures...research that carefully measures disposition and dispositional effects...is needed." One recent study attempted to determine the variance in attitudinal stability that is explained by dispositional affect. Schaubroeck, Ganster, and Kemmerer (1996) partialled measures of trait affectivity (positive and negative) from correlations of job satisfaction facets measured seven years apart. Across six satisfaction facets, trait affect correlated significantly with satisfaction over time. However, controlling for trait affect did not attenuate the satisfaction test-retest correlations. Schaubroeck et al. interpreted these results as evidence that trait affectivity may not significantly underlie job attitude stability.

Distinguishing Rank Order, Change and Absolute Change

Including a measure of trait affect in tests of satisfaction stability not only permits a test of the hypothesis that trait affect is related to constancy in the relative rank order of job attitudes within the sample (i.e., the correlational perspective on stability), but one can also test convergence. Convergence concerns whether trait affect is related to the absolute difference between attitudes over time or across situations. Newton & Keenan (1991) criticized previous "dispositional satisfaction" research that inferred stability entirely from test-retest correlations (e.g., Staw & Ross, 1985) on the grounds that these correlations explain

constancy in rankings while overlooking the degree of absolute similarity (or difference) in attitudes. They observed significant mean differences on job attitudes over time, notwithstanding relatively strong test-retest correlations. There may be a correlation between attitudes over time, indicating that the persons who were more or less satisfied than others at one time (or in one situation) will be more or less satisfied than others at a later time (or different situation). This does not imply, however, that the same individuals' attitudes were significantly unchanged over time (or different across situations). As noted by Watson and Slack (1993: 182), "...consistent individual differences may, of course, be superimposed on overall *level* differences that reflect the fact that some work environments are generally more satisfying than others." By introducing the putative trait predictor of the degree of absolute difference between two measures, multiple regression analysis can be used to test both aspects of stability (correlation and convergence; see Edwards, 1994).

Accounting for Situational Similiarity

A third factor that compromises inferences about traits drawn from test-retest correlations of job attitudes stems from their focus on the same (or similar) situations over time. As noted by Gerhart (1987) and Newton and Keenan (1991), similarity of job content over time may have such an overwhelming influence on job attitudes that any dispositional component cannot be observed. In analyzing subgroup correlations, Gerhart (1987) observed that job attitude stability was lower among workers who changed occupations during the period of the study (five years). Likewise, Newton and Keenan (1991) observed a significant interaction between employer change and time 1 satisfaction predicting time 2 (two years later) satisfaction. A plot of this interaction indicated that job satisfaction measures correlated significantly over time only among stayers.

Schaubroeck et al's (1996) finding that controlling for NA did not attenuate job satisfaction test-retest correlations is less meaningful when the overall level of situational homogeneity over time is considered. Whereas 38% of their sample changed positions between the two job attitude measurements, the test-retest correlation of a job analysis-based measure of substantive job complexity was .56. Nevertheless, they observed significantly weaker job attitude stability among workers who changed position title during a seven year interval compared to those who kept their original positions. These three studies (Gerhart, 1987; Newton & Keenan, 1991; Schaubroeck et al., 1996) suggest that when workers face different stimuli over time, stability in job attitudes is less apparent.

The Present Study

A strong approach for testing dispositional effects is to examine cross-situational consistency in responses during the same period (Weiss & Adler, 1984). When job changes were observed over time, the studies reviewed above observed weaker job attitude stability. The authors then inferred that the lower stability implies that much of the stability in job attitudes stems from stability in job content. However, it is also plausible that individuals who undertake significant

changes in their work content are themselves different from those found in stable job situations. Specifically, individuals prone to job content change (e.g., novelty seekers) may also be prone to attitudinal change, such as may be expected among the young adults studied by Newton & Keenan (1991). By examining individuals' job attitudes across two separate places of employment cross-sectionally, this dispositional variance (as well as other irrelevancies that may change over time) can be effectively controlled.

In sum, research examining trait influences on job attitudes and perceived job stressors is of questionable validity unless (1) the trait itself is measured and related to the the target variables longitudinally or cross-situationally, (2) the analysis examines trait effects on convergence, not just correlation, and (3) the role of situational similarity in cross-situational convergence of the attitudes or perceptions is examined. In the present study, work attitude and perceived job stress measures were obtained from members of a large U.S. military reserve unit. Respondents worked part-time at the unit and full-time in a different occupation in a separate organization. Based on Staw and Ross's (1985) dispositional conceptualization of job attitudes, we hypothesized that job attitudes would be significantly correlated across jobs, and that a significant part of this correlation would be explained by the trait construct of negative affectivity. Moreover, similar levels of corresponding attitudes across jobs are expected to be related to trait negative affect.

- H1: Corresponding work attitude measures for individuals' two separate jobs in two separate organizations will be significantly correlated.
- **H2:** Controlling for trait negative affectivity will significantly reduce the correlations between corresponding job attitudes reported on two jobs.
- H3: Trait NA will relate to absolute differences between corresponding attitudes across jobs. High trait NA will be related to higher levels on the two satisfaction or commitment variables when the latter converge.

If the researchers studying job changes and job attitudes longitudinally are correct in their inferences that job content similarity explains job attitude stability (Newton & Keenan, 1991), convergence of attitudes across the two jobs should increase when independent ("objective") measures of the two jobs' attributes show them to be similar.

H4: There will be significantly stronger convergence of attitudes across jobs as job content similarity increases.

Various job attributes were examined, permitting an exploration of the similarities and differences in job content that may explain similarities and differences in attitudes across situations.

Our examination of perceived job stressors is an extension of the dispositional affect hypotheses described above. The research finding that trait NA partially explains self-report stress-strain associations has led many observers to conclude that self-reported stressors often overstate the magnitude of actual exposures (Brief et al., 1988). However, this research has observed much higher correlations between NA and self-report stress outcomes (e.g., depression, anxiety, somatic complaints) than between NA and self-report stressors (Schaubroeck et al., 1992: 333). If NA has a biasing effect on self-reported stressors, correlations of the same type of stressor across situations should be high, and these may be reduced significantly after partialling trait NA. If trait NA directly influences job stressor perceptions without affecting their relative rank order, it should nevertheless predict squared differences between corresponding job stressors. If neither type of effect is supported, it would seem that the dispositional problem associated with self-reported work stress data lies with the outcomes, not the perceived stressors. A positive trait NA correlation with a perceived job stressor may be indirect, caused chiefly by both variables' common correlation with strain outcomes.

H5: Corresponding perceived job stressor measures pertaining to individuals' two separate jobs in two separate organizations will be significantly correlated.

H6: Controlling for trait negative affectivity will significantly reduce the correlations between corresponding perceived job stressors reported on two jobs.

H7: Trait NA will relate to absolute differences between corresponding perceived job stressors across jobs. High trait NA will be related to higher levels on the two perceived job stressor variables when the latter converge.

Our rather unique sample of persons reporting on two jobs held simultaneously also enabled us to examine the process by which trait affect influences job perceptions. There are a number of theories explaining how NA influences perceptions. High trait NA may lead to the enactment of more stressful situations (Depue & Monroe, 1986; Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984). Alternatively, high NA's may cope less effectively (Bolger, 1990), they may interpret ambiguous stimuli more negatively (Watson & Clark, 1984), or they may simply over-report stressors and strains of all kinds because they selectively focus on negative attributes (Brief et al., 1988). Watson & Pennebaker's (1989) symptom perception hypothesis, however, does not link NA to stressors. Rather, high trait NA's are seen to experience symptoms more acutely. To the extent that perceived stressors play a significant causal role in the development of symptoms, they may be expected to correlate with (but not be explained by) trait NA within the symptom perception hypothesis.

If trait NA's effects are caused by the person's biased interaction with actual job exposures (the etiological perspective depicted in the enactment of stress and

poor coping explanations; Bolger, 1988; Depue & Monroe, 1986; Dohrenwend et al., 1984), the effect of NA should be positively related to the extent and duration of exposures. Alternatively, the biased perception interpretations (i.e., selective perceptions and biased interpretations of ambiguous stimuli; Brief et al., 1988; Watson & Clark, 1984) predict that stressor reports of all kinds, regardless of degree and length of exposure, will be artifactually inflated. This would, in turn, spuriously inflate the correlations among them.

Full-time jobs involve a longer duration of personal contact with the organization, and they provide more opportunities to obtain stress and attitude-relevant information. They are also likely to be more central to the individual's identity. For these reasons, they may be experienced more intensely (with dispositions mediating these experiences) than are part-time jobs. Comparing NA's correlations with job attitudes and perceived Stressors on part-time jobs to those reported by the same persons on full-time jobs will test whether NA's effects on job perceptions are influenced by the extent of actual exposures. A biased interpretation view would predict either no difference in NA-job perception correlations or that part-time job perceptions, because they are based on less information and thus permit freer expression of perceptual and attributional biases, will be higher than full-time correlations. The etiological view would hold that the correlation should vary in magnitude by degree of exposure and, therefore, correlations will be higher for full-time jobs.

H8: Perceptions of stressors on, and attitudes toward, full-time jobs will be more strongly correlated with trait NA than those observed for part-time jobs.

Method

Subjects and Procedure

Questionnaire data were collected from the full- and part-time employees of a large military unit in the midwestern United States. Only the questionnaire response measures of the part-time employees were used, because these workers had other, full-time jobs about which they reported. These part-time workers commuted to the reserve unit for one weekend per month. Employees were also expected to participate in annual active duty periods, which required their attendance for a period of two weeks. Our questionnaire was administered during a regular weekend drill. The Personnel Director estimated that 70% of the 620 part-time employees were present for the drill. With 316 members voluntarily completing our questionnaire, a 73% response rate is estimated.

The questionnaires were structured in such a way that the respondent first reported his or her attitudes and perceptions about the part-time job, and then reported about his or her other, full-time job. The Personnel Director stated that a part-time member's job was based almost entirely on individual preference and position availability, not the type of job he or she holds in civilian life. (Actual similarity of jobs is examined below.) Based on our comparison of position titles, few of the respondents had two jobs which were very similar in content, and most

were very different. For example, an employee might work on a jet maintenance crew in her reserve job, whereas she worked as an accountant in her full-time job.

In the final analysis sample, 84% of the respondents were male, the mean age was 32.17 years, and the average educational attainment was 14.6 years. The subjects averaged 4.92 years of employment in the reserve unit organization and 5.89 years of employment in their full-time jobs.

Measures

Intrinsic job satisfaction was measured by combining the four-item intrinsic (or "growth") satisfaction scale from the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) with the intrinsic reward satisfaction scale from the Michigan Organizational Assessment Questionnaire (Camman, Fichman, Jenkins, & Klesh, 1969). These items were measured on a 1-7 ("extremely dissatisfied" - "extremely satisfied") Likert scale (α = .90 [reserve job], α = .94 [full-time job]). Workload satisfaction was measured on the same format using the three-item scale from Caplan, Cobb, French, Harrison, & Pinneau (1975) (α = .93 [reserve job], α = .95 [full-time job]). Co-worker (α = .88 [reserve job], α = .92 [full-time job]), pay (α = .87 [reserve job], α = .86 [full-time job]), and security satisfaction (α = .82 [reserve job], α = .87 [full-time job]) were measured using their respective instruments from the JDS.

Organizational commitment was measured using the short form of nine positively keyed items from the Organizational Commitment Questionnaire (OCQ; Mowday, Steers, & Porter, 1979), plus one negatively keyed item from the OCQ ($\alpha = .90$ [reserve job], $\alpha = .94$ [full-time job]). We omitted the remaining five OCQ items because they measured intent to remain in the organization, rather than value-based or "affective" commitment.

Lack of co-worker social support was adapted from the four-item Caplan et al. (1975) instrument. The items (α = .79 [reserve job], α = .85 [full-time job]) measure both instrumental and emotional support (e.g., "How much are your coworkers willing to listen to your personal problems?" "How much can your coworkers be relied on when things get tough at work?" [reverse scored]). Additional stressors drawn from Caplan et al. (1975) included quantitative workload (four items; α = .81 [reserve job], α = .85 [full-time job]) (e.g., "How often does your job require you to work very hard?"), and skill underutilization (two items; α = .67 [reserve job], α = .68 [full-time job]), "How often does your job let you use the skills from your previous experience and training? How often are you given a chance to do the things you do best?" [both reverse scored]).

The Rizzo, House, and Lirtzman (1970) instruments were used to measure role conflict (eight items, α = .86 [reserve job], α = .88 [full-time job]) and role ambiguity (six items, α = .86 [reserve job], α = .90 [full-time job]). Lack of job control was measured by seven of the more general items drawn from an instrument developed by Ganster (1989; e.g., "How much control do you have personally over the quality of your work?; How much control do you have over how you do your work?" [both reverse scored]; α = .82 [reserve job], α = .88 [full-time job]).

Dispositional negative affect (NA) was measured using Spielberger, Gorsuch, and Lushene's (1970) 20-item State-Trait Anxiety Inventory (α = .92). This instrument was listed among the more valid measures of NA by Watson, Pennebaker, and Folger (1987) and is used frequently in NA research (e.g., Watson & Pennebaker, 1989). On a five-point continuum ("Rarely or never" to "Very often"), respondents evaluate how often they experienced various psychological conditions indicative of trait anxiety.

Codes assigned to job titles in the Dictionary of Occupational Titles (DOT [4th Ed.], U.S. Department of Labor, 1977) relate to classifications obtained from observations and job descriptions of thousands of American jobs. Miller, Treiman, Cain, and Roos (1980) provided data on twelve job attributes described in Table 1 below. These are composites from among the 46 occupational characteristics coded in the original Department of Labor study. In the present study, job titles of both the part-time and the full-time job were self-reported. Two scorers obtained the matching DOT code for each. Disagreements were resolved by discussion and consensus. The job attribute data was then recorded for each respondent. The consensus discussion was a means of interpreting the words included in the self-reported job title. If there was no clear match between raters or with a DOT title, the case was not coded. Within these constraints, the subsample of respondents for which the raters had full confidence for both jobs was quite large (n = 144). T-tests revealed no difference between this subsample and the rest of the sample on any of the demographic variables we measured. These variables included age, sex, tenure (job and organization), education, marital status, and number of dependent children.

Results

Despite the Personnel Director's belief that there was no organizational selection bias toward assigning part-time military jobs that were similar to the employees' civilian jobs, there were significant correlations across the two jobs on most DOT attributes (see Table 1). Of particular note, the composite substantive complexity measure correlated significantly (r = .28) as did the composite physical demands measure (r = .27). Whereas few correlations between jobs on the DOT attributes were of great magnitude, these correlations suggest there may be systematic attraction and/or attrition preferences (by the organization and/or the employee) leading to job similarity. Recent research indicates that individuals self-select into jobs of complexity commensurate to their abilities (Wilk, Desmarais, & Sackett, 1995), and managers often select new members based on the extent to which their personality and cognitive skills match the job's mental skill requirements (Dunn, Mount, Barrick, & Ones, 1995).

Because of the high correlations among some of the DOT attributes, a principal components analysis of the variables that were not already composites of other variables (the latter included "substantive complexity," "motor skills," and "physical demands"; see Table 1 description) was conducted. For the full-time, civilian jobs, the first principal component had an eigenvalue of 4.19 and explained 52.3% of the variance. The GED, SVP, and DATA variables (see Table 1 descriptions)

Table 1. Correlations Among Dictionary of Occupational Titles Attributes

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8. F-GED	-21	-87	-32	-65	16	-03	20									
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11. P-STRENGTH	10	26	48	-28	-35	-15	-02	-29	16	-19	1					
12. F-STRENGTH	15	55	12	42	-13	-27	-19	-59	-10	-37	24	1				
13. P-PHYSDEM	-15	23	55	32	-74	-17	17	-28	36	17	78	22				
14. F-PHYSDEM	8	33	20	58	-26	-61	-10	-38	05	-14	23	74	32			
15. P-ENVIRON	07	24	42	33	33	-13	01	-29	12	-19	73	21	29	24	1	
16. F-ENVIRON	15	43	13	37	-08	-32	-12	-34	-11	-14	21	19	21	48	21	1
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Table 2. Comparison of Part-time and Full-time Means on Analysis Variables

	Mean (Star	ndard Dev.)		
Variable	Part-time	Full-time	t	df
Role Conflict	2.92 (1.13)	3.35 (1.33)	-4.88***	298
Role Ambiguity	5.16 (0.97)	5.42 (1.09)	-3.31**	304
Lack of Job Control	2.64 (0.68)	2.43 (0.90)	3.66***	304
Skill Underutilization	2.80 (1.02)	2.31 (2.31)	6.29***	304
Quantiti. Workload	2.81 (0.81)	3.61 (0.90)	-12.59***	304
Lack of Co-worker Social Support	2.30 (0.71)	2.47 (0.86)	-2.96*	301
Intrinsic Job Satisfaction	5.12 (1.15)	5.04 (1.41)	0.80	306
Supervisor Satisfaction	5.46 (1.17)	4.88 (1.56)	5.35***	305
Co-worker Satisfaction	5.69 (0.83)	5.42 (1.15)	3.64***	306
Pay Satisfaction	5.36 (1.26)	4.72 (1.60)	6.23***	306
Security Satisfaction	5.07 (1.41)	4.97 (1.58)	0.88	306
Workload Satisfaction	5.27 (1.14)	4.89 (1.48)	3.92***	306
Organizational Commitment	5.30 (0.91)	4.71 (1.29)	6.85***	305

**p < .001
**p < .001
**p < .0001

loaded significantly on this factor, suggesting it represents cognitive demands. The second factor had an eigenvalue of 1.93 and explained an additional 24.1% of the variance. THINGS, STRENGTH, PHYSDEM, and ENVIRON loaded on this factor, suggesting it represents physical demands. The same analysis was conducted for the military jobs and it led to two factors with a pattern of loadings similar to the civilian jobs, except the physical demands variables loaded on the first factor (explaining 42% of the variance; eigenvalue = 3.36), and the cognitive demands variables loaded on the second factor (34.2%; eigenvalue = 2.74). The correlation of a composite variable (averaging the component variables) of cognitive demands across the two jobs was .18 (p < .05) and the correlation of physical demands was .30 (p < .01).

Paired t-tests comparing part-time and full-time means on all self-report variables are shown in Table 2. Overall, subjects were more satisfied with the contex-

Table 3. Correlations Between Full-time and Part-time Attitudes, Perceived Job Stressors- Zero-Order and Controlling for Trait NA

Variable	r	r _{me}	P = Part-time job F = Full-time job
P-Security Satisfaction	.17**	{.18}	
F-Security Satisfaction	(.15**)	` ,	
P-Pay Sat.	.22***	{.26}	
F-Pay Sat.	(.21***)	. ,	
P-Intrinsic job Satisfaction	.12*	{.13}	
F-Intrinsic job Satisfaction	(.09)		
P-Supervision Satisfaction	.05	{.05}	
F-Supervision Satisfaction	(.01)		
P-Coworker Satisfaction	.23***	{.25}	
F-Coworker Satisfaction	(.17**)		
P-Workload Satisfaction	.16**	{.17}	
F-Workload Satisfaction	(.12*)		
P-Org. Commitment	.07	{80.}	
F-Org. Commitment	(.05)		
P-Role Conflict	.24***	{.28}	
F-Role Conflict	(.22***)		
P-Role Ambiguity	.12*	{.14}	
F-Role Ambiguity	(.07)		
P-Lack of Job Control	.24***	{.28}	
F-Lack of Job Control	(.21***)		
P-Skill Underutilization	.15**	{.22}	
F-Skill Underutilization	(.12*)		
P-Quant. Workload	.15**	{.18}	
F-Quant. Workload	(.13**)		
P-Lack of Co-worker Support	.18***	{.22}	
F-Lack of Co-worker Support	(.15**)		
Notes: Ns = 301-319			

Notes: Ns = 301 - 319

() = controlling for trait NA

 r_{me} = correlation corrected for measurement error

*p < .01

**p < .001

***p < .0001

tual factors of their part-time jobs (pay, supervisor, co-workers, workload) in the reserve organization, and they were more committed to the reserve organization than they were to their full-time memberships. There was no difference on security or intrinsic job satisfaction. Interpersonal stressors (role conflict, role ambiguity, lack of co-worker social support) and quantitative workload were of higher magnitude on the full-time jobs, whereas part-time jobs were reported to involve lower control and less utilization of skills. It is interesting that the differences on

skill underutilization and job control were not reflected in a mean difference on intrinsic job satisfaction.

Cross-situational Correlations and NA Influences

Table 3 presents the correlations between part-time and full time jobs on corresponding satisfaction and commitment measures. Five of the seven correlations were significant. The correlations were of similar magnitudes to previously published longitudinal test-retest correlations. (Two year test-retest correlations for overall job satisfaction were .24 for Newton & Keenan (1991), .22 for Gerhart (1987), and .42 for Staw & Ross (1985). The seven year work satisfaction correlation was r = .26 in the Schaubroeck et al. (1996) study. The overall pattern indicates support for H1. However, none of the correlations was more than negligibly reduced in size after partialling trait NA. Thus, H2 is rejected.

Table 3 also presents the cross-situational correlations of the perceived job stressors. All of these correlations are significant and of magnitude comparable to the job attitude measures. As with the attitudes, however, the correlations were not noticeably attenuated after partialling trait NA. Thus, **H5** is supported and **H6** is rejected.

Trait Affect Influences on Convergence

A squared difference model is used to test *H3*, concerning how different levels at which job attitudes converge across job situations is related to trait NA. Low NA was predicted to be related to job attitudes that converge at lower levels (dissatisfaction), whereas high NA may relate to attitudes that converge at higher levels. The squared difference between two variables over time predicting a separate variable is represented in the following regression equation:

$$(Var_a - Var_b)^2 = b0 + \text{trait} + e \tag{1}$$

Rearranging terms and expanding yields:

trait =
$$b0 + b1Var_a^2 - 2b1Var_a *Var_b + b1Var_b^2 + e$$
 (2)

As explained by Edwards (1994: 64), however, a direct test of the parameters of this model may provide misleading results, whereas the following model (Edwards: 64, eq. 10) provides interpretable estimates:

trait =
$$b0 + b1Var_a + b2Var_b + b3Var_a^2 + b4Var_a *Var_b + b5Var_b^2 + e$$
 (3)

"This comparison reveals that a squared difference index imposes the following constraints: (1) the coefficients on $[Var_a^2]$ and $[Var_b^2]$ are equal; (2) the coefficient on Var_a*Var_b is twice as large as the coefficient on either $[Var_a^2]$ or $[Var_b^2]$ and opposite in sign; and (3) the coefficients on $[Var_a]$ and $[Var_b]$ are zero" (Edwards, 1994: 64-65). A squared difference model is used to test the hypotheses because they make no distinction between the part-time attitude score being

higher than the same individual's corresponding full-time attitude score and the reverse situation.

The block of squared terms and the interaction $(b3Var_a^2 + b4Var_a*Var_b + b5Var_b^2)$ was not significantly related to NA after controlling for the component main effects $(b1Var_a + b2Var_b)$ for any of the job attitudes or job stressors, although the block approached significance for role conflict $(\Delta R^2 = .025, F(3, 289) = 2.61, p < .051)$. However, constraints (1) and (2) described by Edwards (1994: 64-65) were not satisfied. Most significantly, the interaction term was not significant for any of the construct measures. Thus, the different levels at which job attitudes and, separately, job stressors converged across job situations was not related to the trait NA levels. H3 and H7 were, therefore, rejected.

Situational Similarity Influences on Convergence of Attitudes

To test *H4*, we essentially examined the relationship between squared differences in attitudes between the two jobs and differences in DOT job attributes. Only intrinsic job satisfaction and organizational commitment were examined in these analyses. Both of these constructs have been related theoretically to the actual content of jobs (Hackman & Oldham, 1975; Steers, 1977), whereas the other facets (pay, security, co-worker, supervisor, and workload) are not clear outcomes of the types of job characteristics encompassed in the DOT.

Edwards (1994) described the procedure for testing an interaction involving a difference between two variables (in this case, the same job attribute measured on two different jobs) and a third variable (in this case, the third variables were intrinsic job satisfaction and organizational commitment on one job) predicting some outcome (in this case, the other intrinsic job satisfaction or commitment measure). Conventionally, the following model would be used to test this interaction:

$$Z = \beta_0 + \beta_1 X_1 - \beta_2 (C_1 - C_2)^2 + \beta_3 (X_1 * (C_1 - C_2)^2) + E$$
 (4)

From the point of view of our study variables, Z is an intrinsic job satisfaction measure on one job (differences on the other satisfaction facets are not expected to vary as a function of "objective" job attributes), X_1 is the same satisfaction measure on the other job, and C_1 and C_2 are scores on the same DOT attribute for the two jobs. As noted by Edwards (1994: 88), however, this is a very constrained model of the hypothesized interaction. An unconstrained version of this model is specified as follows:

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 C_1 + \beta_3 C_2 + \beta_4 C_1^2 + \beta_5 C_1 C_2 + \beta_6 C_2^2 + \beta_7 X_1 C_1 + \beta_8 X_1 C_2 + \beta_9 X_1 C_1^2 + \beta_{10} X_1 C_1 C_2 + \beta_{11} X_1 C_2^2 + E$$
(5)

An incremental test of $\beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = 0$ determines whether any form of interaction exists. If H_0 is rejected on this test, inspection of the coefficients for $\beta_9 < 0$, $\beta_{10} > 0$ and $\beta_{11} < 0$ will reveal whether differences between C_1 and C_2 relate to differences between Z and X_1 (i.e., the hypothesized interaction).

If the hypothesized interaction is supported (i.e., the incremental F-test for $\beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = 0$ is significant) and the product signs are in the expected directions, Equation 5 should be compared to the more constrained Equation 4. (Edwards (1994) demonstrated that Equation 4 is a nested version of Equation 5.) If the unconstrained model (Equation 5) explains significantly more variance than the constrained model (Equation 4), the hypothesis that the interaction is symmetrical (i.e., the effects of job attribute similarity do not vary by whether one job's attribute is higher or lower than the other job's corresponding attribute) is to be rejected in favor of an interaction of less constrained form but which is still consistent with the hypothesis. (The authors are indebted to J. R. Edwards (personal communication, July 7, 1995) for his explanation of these procedures.)

The first analyses examined differences between composites of the cognitive demands factors identified in the principal components analysis. Because there would be too many parameters (relative to available statistical power) in a model that tests both composite job attribute differences simultaneously, the two composites were examined separately. To control for experiment-wise Type 1 error inflation, the Bonferroni correction of the alpha error criterion was utilized (p < .05/2 = .025).

For the cognitive demands factor composite, the interaction specified in Equation 5 did not approach significance for predicting either intrinsic job satisfaction or organizational commitment. The interaction involving the physical demands factor, however, was significant for intrinsic job satisfaction ($\Delta R^2 = .12$, F(5, 125) = 3.96, p < .002), and the pattern of signs indicated the expected relationship between job differences and satisfaction similarity.

The test of the physical demands interaction in Equation 4 was also significant ($\Delta R^2 = .04$, F(1, 133) = 5.89, p < .04); however, the unconstrained model (Equation 5) provided a significant improvement over this model in variance explained (F(8, 125) = 3.75, p < .001). Thus, the symmetrical interaction, wherein the relationship between intrinsic job satisfaction differences and job attribute differences is exactly the same when the part-time attribute is greater than the full-time attribute and vice versa, is rejected. Nonetheless a relationship exists such that any type of difference between jobs on the physical demands composite is related to a greater difference in intrinsic job satisfaction.

In an attempt to obtain a finer-grained understanding of the job attributes that are important for job intrinsic job satisfaction convergence, the same tests were conducted for each of the twelve DOT attributes that composed the two factors used in the above analyses. The Bonferroni correction of the alpha error criterion was again utilized (p < .05/12 = .0042). Using this criterion, only one of the job attributes displayed a significant interaction in tests of $\beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = 0$. This was the STRENGTH variable, which ranged from "sedentary" to "very heavy" work ($\Delta R^2 = .09$, F(5, 125) = 3.55, p < .004). An incremental test of the nested models described in Equations 4 and 5 involving the STRENGTH attribute was significant (F(8, 125) = 3.33, p < .001). Thus, the sedentary - nonsedentary nature of jobs appears to be the most important among

Table 4. Correlations of Trait NA with Part-time and Full-time Perceived Job Stressors and Work Attitudes

Variable	Part-time	Full-time	Z	Z_{me}
Role Conflict	.22** (.25)	.14* (1.33)	1.43	1.62
Role Ambiguity	.09 (.10)	.17** (.19)	-1.38	1.59
Lack of Job Control	.15** (.17)	.25** (.28)	-1.79	-2.00
Skill Underutilization	.06 (.08)	.15** (.19)	-1.55	-1.93
Quantiti. Workload	.08 (.09)	.07 (.08)	-0.17	-0.17
Lack of Co-worker Social Support	.04 (.05)	.17** (.19)	-2.28	-2.41
Intrinsic Job Satisfaction	04 (04)	18** (19)	-2.42	-2.59
Supervisor Satisfaction	08 (09)	11 (12)	-0.52	-0.52
Co-worker Satisfaction	10 (11)	21** (23)	-1.95	-2.07
Pay Satisfaction	02 (02)	18** (20)	-2.79	-3.16
Security Satisfaction	.00	16** (18)	-2.78	-3.14
Workload Satisfaction	10 (11)	21** (23)	-1.95	-2.14
Organizational Commitment	.07	10 (11)	-2.93	-3.31

Notes: () = correlation corrected for measurement error.

 $Z = q/\sigma$

 $Z_{me} = Z$ calculated with correlations corrected for measurement error.

Critical Value of Z (two-tailed): 1.96 (p < .05)

2.58 (p < .01)

3.27 (p < .001)

these more specific job attributes explaining convergence in intrinsic job satisfaction.

Physical demands similarity was not reliably related to organizational commitment using our criterion that adjusts for alpha error inflation ($\Delta R^2 = .08$, F(5, 126) = 2.31, p < .048). In sum, H4 was supported in that similarity between jobs on one of the two main job attribute factors (physical demands but not cognitive demands) was related to intrinsic job satisfaction convergence. Where part-time and full-time physical demands are close to each other at relatively low or relatively high levels, full-time and part-time intrinsic job satisfaction are also close to each other. As expected, however, when both job

characteristics are low or high, the attitudes are similar, but not necessarily high or low. Their level may depend on the worker's preference for high or low physical demands.

Comparison of NA Correlations: Full-Versus Part-Time Jobs

Table 4 presents the correlations between NA and each of the perceived measures (both attitudes and stressor perceptions) for both full-time and part-time jobs. More significant differences between the two types of jobs were observed among the work attitudes than among the perceived job stressors. Among the seven attitudes, only supervision satisfaction correlations with NA did not differ between the two types of jobs. All of these differences were in the direction of higher NA influences on full-time attitudes. Among the stressors, lack of job control, skill underutilization, and lack of co-worker social support also exhibited stronger NA effects for full-time job reports. Role conflict, role ambiguity, and quantitative workload did not exhibit significance differences. The overall pattern provides considerable support for *H8*.

Discussion

Staw et al. (1986) observed significant correlations between affective disposition and job attitudes over substantial periods of time (see also Watson & Slack, 1993). Such data would suggest that traits underlie the stability of job attitudes, but only if controlling for affective disposition is found to significantly attenuate the test-retest correlations of the job attitudes or if affective disposition predicts their absolute differences. Schaubroeck et al. (1996) conducted the correlational analysis of this hypothesis test over a shorter (but still substantial) period. Their finding that NA had no attenuating effect was not conclusive because situational homogeneity was very high. For example, DOT substantive complexity indexes correlated at r = .56 over time (notwithstanding that 38% of the sample changed positions between the observations), whereas the same index correlated at .28 in our sample. The present study is the first, to our knowledge, which tested the extent of cross-situational consistency in job attitudes at a given time, as well as its putative trait and situational determinants. Whereas job attitudes and job stressor perceptions were significantly correlated across two different jobs in different organizational settings, trait negative affect did not explain these correlations. Trait negative affect also had no effect on the convergence (squared differences) of corresponding job stressors or work attitudes. Similarity in physical demands predicted convergence of intrinsic job satisfaction across jobs, indicating that "objective" situational homogeneity may influence consistency of attitudes across time and situations. Thus, similarity of job situations as a source of job attitude consistency is supported by these data, whereas the dispositional perspective is not. Finally, NA correlations with work attitudes and job stressors were stronger for full-time jobs than for part-time jobs. This suggests that degree of exposure affects the extent to which NA influences job perceptions and evaluations.

One limitation of the present study was the part-time status of the reserve unit job. It is possible that attitudes were not as fully formed in the part-time jobs,

or that the part-time employment was inherently different from the full-time work. Studies comparing the attitudes of full-time employees with those of part-timers have not led to consistent findings. Some have found more positive attitudes among full-time employees (Hall & Gordon, 1973; Miller & Terborg, 1979), others found that part-timers were more satisfied generally (Eberhardt & Shani, 1984; Jackofsky & Peters, 1987), whereas other studies observed no differences in job and organizational attitudes between part- and full-time workers (Gallagher, Wetzel, & Ellis, 1989; Logan, O'Reilly, & Roberts, 1973; McGinnis & Morrow, 1990).

Schaubroeck et al. (1992) found that the measure of trait anxiety used in the present study measured the same factor as a well-known neuroticism index (the Eysenck Personality Inventory, Eysenck & Eysenck, 1963), which is also perceived to be a valid measure of trait NA (see Watson et al., 1987). Trait anxiety and neuroticism measures have been criticized as measures of NA because they were developed for the purpose of measuring psychopathology and, thus, they may capture more than just negative affect (Stone-Romero, 1994). Moreover, Stone-Romero (1994) argued that these measures are generally contaminated by social desirability and, in the case of one trait anxiety instrument, even job stress perceptions. Stone-Romero also charged that because traditional trait NA measures represent a general higher-order construct of "strain" (despite their very high stability across the lifespan), their associations with perceived stress variables and job satisfaction may be accountable to overlapping content. If these observations are substantially correct, this would imply that tests of NA influences on job attitudes and stress variables are too liberal. If higher trait anxiety scores indicated pathologically negative dispositions, job "strain," or low social desirability in our sample, this would serve only to bias the results toward positive findings of an NA attenuation or convergence effect. No such effects were found. Nevertheless, it would be helpful if future studies triangulated measures of trait NA.

It is also possible that trait positive affectivity (PA), which was not measured in our study, underlies attitudinal convergence or correlation across situations. In reviewing both NA and PA, Watson et al. (1987: 151) noted that PA is examined as a correlate of social activity levels and behaviors, whereas it "is completely unrelated to stress perceptions and physical complaints." Schaubroeck et al. (1996) found that trait PA did not explain test-retest correlations of satisfaction facets, however. PA's correlations with the job attitudes were also very low. Trait PA correlated significantly only with co-worker satisfaction. Nevertheless, PA has correlated significantly with job attitudes in other field studies and in view of suggestive evidence from laboratory investigations (Kraiger et al., 1989), trait PA warrants inclusion in future studies of trait affect.

This study's tests of the trait NA hypothesis were based on responses obtained from the same questionnaire, leading to response set issues related to possible consistency artifacts and fatigue. The lack of support for H3 and H7 militates against concerns about consistency. The correlations were of low magnitude and partialling NA, which one might suspect to be part of a hypothetical response set involving stressor perceptions (Brief et al., 1988: 197), did not attenuate job

stressor correlations across jobs. In light of the lack of evidence that partialling a relevant third variable measured by the same method (NA) reduces the correlation and the low magnitudes of the correlations, even if a response set operated to inflate correlations slightly, eliminating it would not affect our conclusions.

Research has observed that laboratory-manipulated mood (state affect) may systematically affect task satisfaction reports about experiences in the laboratory (see Kraiger et al., 1989), as well as about one's regular job (Brief et al., 1995). A correlation between state affect and satisfaction may be expected because transient mood states are correlated with trait affect. Whereas the theory relating trait NA to satisfaction suggests how people "approach and interpret their life experiences" (Levin & Stokes, 1989: 753), any state affect influence beyond that explained by the individual's trait affect would most likely be caused by a memory retrieval or reporting bias. Partialling mood from job satisfaction facets' correlations is also in our view less interesting than partialling trait affect, because both mood and satisfaction are states related directly to emotional strain, and thus the significance of relating one to the other is more questionable. Nevertheless, in light of the suggestive evidence of Brief et al. (1995) and Kraiger et al. (1989), further research investigating how state affect influences satisfaction reports is warranted.

When both jobs involved heavy physical work performed primarily outdoors, or when both jobs were sedentary in nature and performed indoors, higher similarity in job attitudes was observed. It seems likely that the preference for outdoor physical work versus indoor mental work could explain attitudes in a person-job interaction. The other job attributes, which related primarily to mental demands, did not explain attitude divergence/convergence. Nevertheless, in light of our limited support for H3, it would appear that the lower stability coefficients observed among persons who change jobs over time (Gerhart, 1987; Newton & Keenan, 1991; Schaubroeck et al., 1996) at least partially reflected the lack of change in job content, rather than just some predisposition to job and attitude change. However, we were unable to obtain "objective" (or independently assessed, such as by DOT ratings) job content data that could be expected to explain organizational commitment, workload, supervisor, co-worker, pay, or security satisfaction's consistency, or any of the job stressors'. Therefore strong generalization of the "situational similarity" hypothesis is not possible. Moreover, the relatively crude, occupation-level nature of the DOT data may have made the test of the effect of similarity in cognitive demands on attitude convergence too conservative.

This study suggests the basis for a ray of optimism about self-report data in stress and attitude research. Although they correlated significantly with trait negative affect, NA did not appear to underlie job attitude and job stressor reports as has been suggested. Further research using similar cross-situational designs should determine whether these findings generalize to different settings, and different job and organizational attitudes. Staw et al. (1986) suggested that there may be little that organizations can do to affect employee attitudes in the long run, because such attitudes are based significantly on the personality of the job incumbent. Our findings, however, suggest that the levels of cross-situational consis-

tency in attitudes are quite low, with the highest agreement across jobs for the same construct explaining less than 7% of the variance. The longitudinal studies have rarely observed much more stability than that, even for short (two-year) intervals (Gerhart, 1987; Newton & Keenan, 1991; Staw & Ross, 1985). Therefore, it seems that there is considerable non-dispositional variance in job attitudes that may be amenable to deliberate change. This study found that job content differences were associated with reduced job attitude differences across jobs.

With the exception of Brief et al. (1995), the dispositional job attitudes literature has been conspicuously silent on the processes mediating the hypothesized NA-job attitude linkage. Staw et al. (1986) speculated that trait affect's theoretical influence on job attitudes is mediated by inaccurate and systematically biased attributions and interpretations of events. This is consistent with the over-reporting perspective, and it would imply that job attitudes will be equally "biased" by NA regardless of the length or intensity of exposure to the work environment. Such a perspective was not supported by these data. Full-time job attitudes were more strongly correlated with NA than were part-time job attitudes, indicating a relationship between degree of physical and psychological experience and trait influence. This is consistent with Brief et al.'s (1995) "temperamental" model. Full-time jobs provide more opportunities to obtain attitude-relevant information. They are also likely more central to the individual's identity and, therefore, experienced more intensely, thus promoting a more active evaluative process. High frequency, multifaceted diagnostic information is required for the rather complex cognitions (e.g., referent comparisons) that invoke satisfaction and commitment appraisals. The somewhat lesser difference between full- and part-time jobs on NA-stressor correlations than NA-attitude correlations may be due to the lower need for information to judge stressor levels. People may find it difficult to evaluate how exposures of limited duration fit with their desires and sense of fairness, and, thus, they may rely more heavily on their predispositions to judge their satisfaction. They can more easily report difficulties they have experienced. Thus, the NA effects on attitudes represent something more than psychological epiphenomena, such as selective perception and biased over-reporting. Exactly how trait affect influences attitudes may be a complex phenomenon that is beyond the scope of these data and extant theory. However, it would appear that movement toward a more complete understanding should focus on the interaction between the individual and his or her environment, not just the individual's cognitive processes. Indeed, cognitions about the environment and one's agency within it may more strongly underlie job attitudes than does individual affect. When the focus is on stable cognitions (or cognitive styles), researchers may be able to identify traits that define persons for whom job attitudes remain stable over time and consistent across situations. It is possible that persons differ on their tendencies to maintain attitudes toward a particular object even in the absence of a predisposition toward high or low job satisfaction. When the situation remains constant, the attitude may change, if the individual is predisposed to change his or her social referents or standards of evaluation. When the attitude object itself changes, as through reassignment or job redesign, however, referent cognitions should change for all persons.

Job stressor perceptions were significantly correlated across jobs, but as with satisfaction and commitment, the correlations were not explained by trait NA. Consistent with Schaubroeck et al. (1992), NA correlations with job stressors were rather low. These findings support the possibility that job stressors correlate with NA because of the common correlation of NA and job stressors with the stress symptoms that are putatively caused by them (Watson & Pennebaker's (1989) symptom perception hypothesis). This view is further supported by the tendency of NA to correlate more strongly with job perceptions of full-time jobs than with corresponding perceptions of part-time jobs. Such a result may follow from the symptom perception view because perceived job stressors may be expected to play a stronger etiological role in the development of physical and psychological symptoms in full-time jobs than in part-time jobs where exposures are more limited in duration. If the NA - stressor correlations were of higher magnitude, we would be tempted to infer that these variables were causally associated and that they represent true etiological effects that stem from poor coping, enactment of stressful conditions, or both. The low magnitude of the correlations, the lack of support for NA as a factor underlying their correlations, and the stronger effects of NA on job stressor perceptions pertaining to full-time jobs provide a pattern indicating that these perceived stressors may not be spuriously or etiologically affected by trait NA.

References

- Agho, A. O., Price, J. L., & Mueller, C. W. 1992. Discriminant validity of measures of job satisfaction, positive affectivity and negative affectivity. *Journal of Occupational and Organizational Psychology*, 65: 185–196.
- Arvey, R. D., Carter, G. W., & Buerkely, D. K. 1991. Job satisfaction: Dispositional and situational influences. In C. L. Cooper & I.T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology*: vol. 6: 359–383. New York: Wiley.
- Bolger, N. 1990. Coping as a personality process: A prospective study. *Journal of Personality and Social Psychology*, 59: 525–537.
- Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. 1988. Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, 73: 193–198.
- Brief, A. P., Butcher, A. H., & Roberson, L. 1995. Cookies, disposition, and job attitudes: The effects of positive mood inducing events and negativity on job satisfaction in a field experiment. Organizational Behavior and Human Decision Processes, 62: 55-62.
- Brief, A. P., & Roberson, L. 1989. Job attitude organization: An exploratory study. *Journal of Applied Social Psychology*, 19: 717–727.
- Camman, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. 1969. Assessing the attitudes and perceptions of organizational members. In P. R. Goodman (Ed.), Assessing organizational change. New York: Wiley.
- Caplan, R. D., Cobb, S., French, J. R. P., Harrison, R., & Pinneau, S. R. 1975. *Job demands and worker health*. Washington, DC: HEW Publication No. (NIOSH) 75-160.
- Chen, P. Y., & Spector, P. E. 1991. Negative affectivity as the underlying cause of correlations between stressors and strains. *Journal of Applied Psychology*, 76: 398–407.
- Cropanzano, R., Jones, K., & Konovsky, M. A. 1993. Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior*, 14: 595-607.
- Depue, R. A., & Monroe, S. M. 1986. Conceptualization and measurement of human disorder in life stress research: The problem of chronic disturbance. *Psychological Bulletin*, 99: 36–51.
- Dohrenwend, B. S., Dohrenwend, B. P., Dodson, M., & Shrout, P. E. 1984. Symptoms, hassles, social supports, and life events: Problem of confounded measures. *Journal of Abnormal Psychology*, 93: 222–230.
- Dunn, W. S., Mount, M. K., Barrick, M. R., & Ones, D. S. 1995. Relative importance of personality and general mental ability in managers' judgments of applicant qualifications. *Journal of Applied Psychology*, 80: 500– 509.

- Eberhardt, B. J., & Shani, A. B. 1984. The effects of full-time versus part-time employment status on attitudes toward specific organizational characteristics and overall job satisfaction. Academy of Management Journal, 27: 893-900.
- Edwards, J. R. 1994. The study of congruence in organizational behavior research: Critique and a proposed alternative. Organizational Behavior and Human Decision Processes, 58: 51-100.
- Eysenck, H. J., & Eysenck, S. B. G. 1963. Eysenck Personality Inventory, Form A. Educational and Industrial Testing Service, San Diego CA.
- Gallagher, D. G., Wetzel, K., & Ellis, R. 1989. Part-time employment in the health-care industry: Consequences for organizational commitment. Paper presented at the annual meeting of the Academy of Management, Washington, DC.
- Ganster, D. C. 1989. Measurement of worker control. (Final Report No. 88-79187). Cincinnati, Ohio: NIOSH.
- George, J. M. 1992. The role of personality in organizational life: Issues and evidence. *Journal of Management*, 18: 185-213.
- 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.
- Gutek, B. A., & Winter, S. J. 1992. Consistency of job satisfaction across situations: Fact or framing artifact? Journal of Vocational Behavior, 41: 61-78.
- Hackman, J. R. & Oldham, G. R. 1975. Development of the job diagnostic survey. *Journal of Applied Psychology*, 60: 159–170.
- Hall, D. T., & Gordon, F. E. 1973. Career choices of married women: Effects on conflict, role behavior, and satisfaction. *Journal of Applied Psychology*, 58: 42–49.
- Jackofsky, E. F., & Peters, L. H. 1987. Part-time versus full-time employment status differences: A replication and extension. *Journal of Occupational Behaviour*, 8: 1–9.
- Judge, T. A. 1992. The dispositional perspective in human resources research. In G. R. Ferris & K. M. Rowland (Eds.), Research in Personnel and Human Resources Management, vol. 10: 31-72. Greenwich, CT: JAI Press.
- Judge, T. A., & Hulin, C. L. 1993. Job satisfaction as a reflection of disposition: A multiple source causal analysis. Organizational Behavior and Human Decision Processes, 56: 388–421.
- Kraiger, K., Billings, R. S., & Isen, A. M. 1989. The influence of positive affective states on task perceptions and satisfaction. Organizational Behavior and Human Decision Processess, 44: 12-25.
- Levin, I., & Stokes, J. P. 1989. Dispositional approach to job satisfaction: Role of negative affectivity. *Journal of Applied Psychology*, 74: 752–758.
- Logan, N., O'Reilly, C. A., & Roberts, K. H. 1973. Job satisfaction among part-time and full-time employees. Journal of Vocational Behavior, 3: 33-41.
- McGinnis, S. K., & Morrow, P. C. 1990. Job attitudes among full- and part-time employees. *Journal of Vocational Behavior*, 36: 82–96.
- Miller, H. E., & Terborg, J. R. 1979. Job attitudes of part-time and full-time employees. *Journal of Applied Psychology*, 64: 380-386.
 Miller, A. R., Treiman, D. J., Cain, P. S., & Roos, P. A. 1980. Work, jobs, and occupations. Washington, DC:
- National Academy Press.

 Mowday, R. T., Steers, R. M., & Porter, L. W. 1979. The measurement of organizational commitment. *Journal of*
- Vocational Behavior, 14: 224–247.

 Necowitz, L. B., & Roznowski, M. 1994. Negative affectivity and job satisfaction: Cognitive processes underly-
- ing the relationship and effects on employee behaviors. *Journal of Vocational Behavior*, 45: 270–294. Newton, T., & Keenan, T. 1991. Further analyses of the dispositional argument in organizational behavior. *Jour-*
- Newton, T., & Keenan, T. 1991. Further analyses of the dispositional argument in organizational behavior. *Journal of Applied Psychology*, 76: 781–787.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. 1970. Role conflict and ambiguity in complex organizations. Administrative Science Quarterly, 15: 150-163.
- Schaubroeck, J., Ganster, D. C., & Fox, M. L. 1992. Dispositional affect and work-related stress. *Journal of Applied Psychology*, 77: 322-335.
- Schaubroeck, J., Ganster, D. C., & Kemmerer, B. 1996. Does trait affect promote job attitude stability? *Journal of Organizational Behavior*, 17: 191–196.
- Spector, P.E., & O'Connell, B.J. 1994). The contribution of personality traits, negative affectivity, locus of control, and Type A to the subsequent reports of job stressors and job strains. *Journal of Occupational and Organizational Psychology*, 67: 1-11.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. 1970. Manual for the state-trait anxiety inventory. Palo Alto, CA: Consulting Psychologists Press.
- Staw, B. M., Bell, N. E., & Clausen, J. A. 1986. The dispositional approach to job attitudes: A lifetime longitudinal test. Administrative Science Quarterly, 31: 56-77.
- Staw, B. M., & Ross, J. 1985. Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology*, 70: 49–480.

- Steers, R.M. 1977. Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 22: 46–56.
- Stone-Romero, E. F. 1994. Construct validity issues in organizational behavior research. In J. Greenberg (Ed.), Organizational behavior: The state of the science: 155-179. Greenwich, CT: JAI Press.
- U.S. Department of Labor. 1977. Dictionary of occupational titles (4th ed.). Washington, DC: U.S. Government Printing Office.
- Watson, D., & Clark, L. A. 1984. Negative affectivity: The disposition to experience aversive emotional states. Psychological Bulletin, 96: 465–490.
- Watson, D., & Pennebaker, J. W., & Folger, R. 1987. Beyond negative affectivity: Measuring stress and satisfaction in the workplace. In J. M. Ivancevich & D. C. Ganster (Eds.), Job stress: From theory to suggestion: 141-157. New York: Haworth Press.
- Watson, D., & Pennebaker, J. W. 1989. Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Psychological Review*, 96: 234–254.
- Watson, D., & Slack, A. K. 1993. General factors of affective temperament and their relation to job satisfaction over time. Organizational Behavior and Human Decision Processes, 54: 181-202.
- Weiss, H. M., & Adler, S. 1984. Personality and organizational behavior. In B. M. Staw & L. L. Cummings (Eds.), Research in organizational behavior, vol. 6: 1-50. Greenwich, CT: JAI Press.
- Wilk, S. L., Desmarais, L. B., & Sackett, P. R. 1995. Gravition to jobs commensurate with ability: Longitudinal and cross-sectional tests. *Journal of Applied Psychology*, 80: 79–85.
- Williams, L. J., Gavin, M. B., & Williams, M. L. 1996. Measurement and nonmeasurement processes with negative affectivity and employee attitudes. *Journal of Applied Psychology*, 81: 88–101.

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