

2

DOT/FAA/AM-91/11

Office of Aviation Medicine  
Washington, D.C. 20591

# Exchange Ideology as a Moderator of the Procedural Justice-Satisfaction Relationship

L. Alan Witt  
Dana Broach

Civil Aeromedical Institute  
Federal Aviation Administration  
Oklahoma City, OK 73125

July 1991

Final Report

DTIC  
ELECTE  
AUG 29 1991  
S B D

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



U.S. Department  
of Transportation  
Federal Aviation  
Administration

**DISTRIBUTION STATEMENT A**

Approved for public release;  
Distribution Unlimited



## **NOTICE**

This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for the contents or use thereof.

1. Report No. DOT/FAA/AM-91/11	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle EXCHANGE IDEOLOGY AS A MODERATOR OF THE PROCEDURAL JUSTICE-SATISFACTION RELATIONSHIP		5. Report Date July 1991	
		6. Performing Organization Code	
7. Author(s) Lawrence A. Witt, Ph.D. and Dana Broach, 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. (TRIS)	
		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. Supplementary Notes  This work was performed under task AM-C-91-HRR-123.			
16. Abstract  The present study of 92 civilian Federal Government employees in a 2-month, full-time training program tested the hypothesis that exchange ideology would moderate the relationship between procedural justice perceptions and satisfaction with the training experience. Exchange ideology refers to the relationship between what the individual receives and gives in an exchange relationship. At one end of its dispositional continuum, employee effort is based on organization reinforcements -- a strong exchange ideology. At the other end of the continuum, employees put forth effort without regard to what they receive from the organization -- a weak exchange ideology. The data indicated that perceptions of procedural justice accounted for greater variance in satisfaction among trainees with a strong exchange ideology than among those with a weak exchange ideology. These results suggest that the effect of fairness on satisfaction with a training experience appears to be dependent on the individual's exchange ideology.			
17. Key Words Satisfaction Exchange ideology Procedural justice Equity		18. Distribution Statement Document is available to 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  9	22. Price

## EXCHANGE IDEOLOGY AS A MODERATOR OF THE PROCEDURAL JUSTICE-SATISFACTION RELATIONSHIP

Recent research on equity theory (Adams, 1963) has extended traditional emphases on monetary outcomes (i.e., fairness of pay outcomes) to nonmonetary outcomes (Greenberg, 1988), such as performance appraisal and to procedural justice (Thibaut & Walker, 1975). The present study examined procedural justice aspects of training performance.

Greenberg (1986) suggested that the processes by which performance information is collected and by which performance ratings are made involve matters of procedural, rather than distributive justice. For example, Landy (Landy, Barnes, & Murphy, 1978; Landy, Barnes-Farrell, & Cleveland, 1980) found that a "fair" evaluation was one that contains fair procedures independent of the outcome.

The notion of procedural justice is particularly important with regard to performance appraisal. Procedural justice refers to the individual's belief that "fairness exists when allocative procedures satisfy certain criteria" (Leventhal, Karuza, & Fry, 1980, p. 195-196). Employees who perceive their supervisor or instructor as being unfair in assessing their performance may experience negative affect. Indeed, a not uncommon response to performance feedback is the expression, "It just is not fair." Whether the employee receives a favorable or unfavorable rating, he/she is likely not to have a satisfactory training experience if the criteria used for making the evaluation were not fair. For example, when instructors use different criteria for different employees, the instructor will probably be perceived as being unfair, and students aware of the differences will experience little satisfaction with the experience.

With few exceptions (Joy & Witt, 1991; Sweeny, McFarlin, & Cotton, 1991; Tyler, 1986), organizational justice theories (Adams, 1963; Greenberg, 1987; Leventhal, 1980; Leventhal, et al., 1980) have failed to consider such individual differences as cognitive style that may account for a significant amount of the variance in job satisfaction (Spector, 1982). One such

cognitive style that may affect the salience of procedural justice on the development of satisfaction with a training experience is exchange ideology.

Exchange ideology refers to the relationship between what the individual receives and gives in an exchange relationship. Most of us know some people who will do almost anything for us, regardless of what we do for them. Others, however, are careful to do no more for us than we do for them. Discussing this notion in the context of work organizations, Eisenberger, Hutchison, Huntington, and Sowa (1986) described exchange ideology as a continuum. At one end of the continuum, individuals will perform congruent with organization reinforcements. In other words, when they are treated well, they will work hard; if not, they won't. At the other end of the continuum, individuals put forth effort without regard to what they receive from the organization. These individuals will work hard even if they perceive themselves as being treated poorly. Thus, exchange ideology reflects the individual's expectation for the person-organization exchange. Citing previous research (Etzioni, 1961; Gould, 1979; Levinson, 1965; March & Simon, 1958), Eisenberger, et al. (1986, p. 501) suggested that an individual's increase in work effort and positive job attitudes that comes from a greater effort-outcome expectancy "depends on an exchange ideology favoring the trade of work effort for material and symbolic benefits."

In support of this idea, Eisenberger, et al. (1986) found that the relationships between perceived organizational support and absenteeism were greater for a sample of American teachers with a "strong" exchange ideology than those with a "weak" ideology. In other words, for individuals whose ideology was to perform congruent with reinforcement (strong), perceptions of organizational support may have been more salient in the decision to be absent from work than for those whose ideology was to perform independent of reinforcement (weak).

Similarly, Witt found that the following relationships were higher among employees with strong exchange ideologies than among those with weak ones: (a) sufficiency of monthly income with both job satisfaction and organizational commitment among American teachers (Witt & Wilson, 1990), (b) perceptions of equal opportunity with both job satisfaction and procedural justice among U.S. military personnel (Witt, 1991), (c) perceptions of organizational support with supervisor ratings of organizational citizenship behaviors among American tool factory workers (Witt, in press-a), and (d) perceptions of the importance of participation in decision-making with perceptions of organizational goal norms, organizational support, and satisfaction with promotional opportunities among Yugoslav tool factory workers (Witt, in press-b). These studies have indicated that exchange ideology may affect the perceptions of, and reactions to, various aspects of the organization on the development of other job attitudes.

The present study examined the moderating effect of exchange ideology on the relationship between procedural justice perceptions and satisfaction with a training experience. We hypothesized that procedural justice would be positively related to training satisfaction. Employees perceiving unfairness would likely feel dissatisfaction with the training experience. In addition, we hypothesized that procedural justice would account for greater variance in training satisfaction among individuals whose effort is determined by what the organization gives them (strong exchange ideology) than those whose effort is independent of organizational reinforcement (weak exchange ideology).

## METHOD

Ninety-two civilian federal government employees (68 males, 24 females;  $M$  age = 26) out of 185 (49.73%) who began a two-month, full-time government training: (a) completed their training, and (b) voluntarily completed surveys at different times throughout their 8-week training. On day one, employees completed the 5-item (e.g., "An employee's work effort should depend partly on how well the organization deals with his or her desires and concerns.") Eisenberger, et

al. (1986) exchange ideology questionnaire ( $M = 15.53$ ,  $SD = 3.29$ ). On the final day of testing, they completed a 2-item measure (e.g., "Do you think that the training program is fair?") of procedural justice ( $M = 8.63$ ,  $SD = .81$ ) presented on a 5-point Likert-type scale (1 = definitely disagree; 5 = definitely agree). On the next and final day of the program, after receiving their grades, they completed a 1-item measure (cf. Scarpello & Campbell, 1983;  $M = 3.17$ ,  $SD = 1.15$ ) of their satisfaction with the training experience: "To what extent did you enjoy your experiences here at (the training program)?" with five response options: (a) "Not at all; I hated it here at (this training program);" (b) "Not much; I disliked it here at (this training program);" (c) "I'm not sure whether I liked it or disliked it here at (this training program);" (d) "Somewhat; I liked it here at (this training program);" (e) "A great deal; I think that it was great here at (this training program)." High scores on the exchange ideology measure reflect the orientation to perform congruently with reinforcement; low scores reflect the orientation to perform independently of reinforcement. High scores on the procedural justice and satisfaction scales indicated perceptions of fairness and greater satisfaction, respectively.

## RESULTS

Contrary to our hypothesis, procedural justice and training satisfaction were not related ( $r = .19$ , ns). To test for the moderating effect of exchange ideology, hierarchical moderated multiple regression analyses were performed with the cross-product term of procedural-justice and exchange ideology entered as a third variable in the equation (Zedeck, 1971). The change in  $R^2$  indicated a moderating effect of exchange ideology ( $R^2 = .16$ ,  $F = 5.8$ ,  $p < .001$ ;  $\Delta R^2 = .053$ ,  $F = 5.5$ ,  $p < .05$ ).

In order to identify the form of the moderator effect, we graphically plotted three slopes (Cohen & Cohen, 1975; Stone & Hollenbeck, 1989), one for a "high" exchange ideology score (one standard deviation above the mean,  $f = 18.82$ ), one for an "average" exchange ideology score (at the mean,  $f = 15.53$ ), and one for a "low" exchange ideology score (one standard

deviation below the mean,  $f = 12.24$ ). As hypothesized and shown in Figure 1, the form of the relationship was strong and positive among individuals at the high and average exchange ideology levels but virtually nonexistent at the low level.

## DISCUSSION

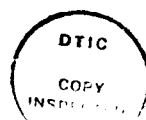
We emphasize several caveats before discussing the results. First, data were collected from employee students in a two-month, full-time federal government training program, which may not be representative. Second, the relationships may be bidirectional; in other words, procedural justice may be the moderator of the relationship between exchange ideology and training satisfaction. Third, as all measures were taken from surveys, the data may be subject to common method variance. However, the measurements being taken at three different times may have reduced its possible confounding effects.

These data suggest that exchange ideology moderated the procedural justice-satisfaction relationship: For employees whose attitudes and behaviors were more congruent with organizational reinforcement, procedural justice perceptions were strongly related to satisfaction with training performance. However, for those whose attitudes and behaviors were more independent of organizational reinforcement, procedural justice and satisfaction were essentially unrelated. Thus, these data suggest that in the development of training satisfaction, procedural justice was important among employees with strong exchange ideology but comparatively unimportant among employees with a weak exchange ideology.

These results have implications for both organizational social exchange theory and instructor techniques. Consistent with previous research (e.g., Bateman & Organ, 1983), these findings indicate the heuristic value of viewing satisfaction as a consequence of social exchange processes. Future research examining the relationships between organizational contributions and outcome behaviors should examine exchange ideology as a possible moderating influence. Indeed, it is possible that lack of attention to moderators such as exchange ideology may have reduced the

utility of equity theory and led to arguments (Mitchell, 1979; Mowday, 1979) that there is little promise for the future of equity theory as a model of organizational behavior. The basic hypotheses of social exchange theory may need to be revised to recognize that among some individuals, reinforcements are less relevant in the decision to engage in certain organizational behaviors or adopt certain attitudes. Indeed, the results presented here support Organ and Konovsky's (1989) notion that there may be a dispositional component in the tendency to perceive, or at least attend to, unfairness. This notion appears to be intuitively consistent with everyday experience. For example, some people are more likely to say, "It just is not fair," while others may say, "Life was never supposed to be fair; so what?"

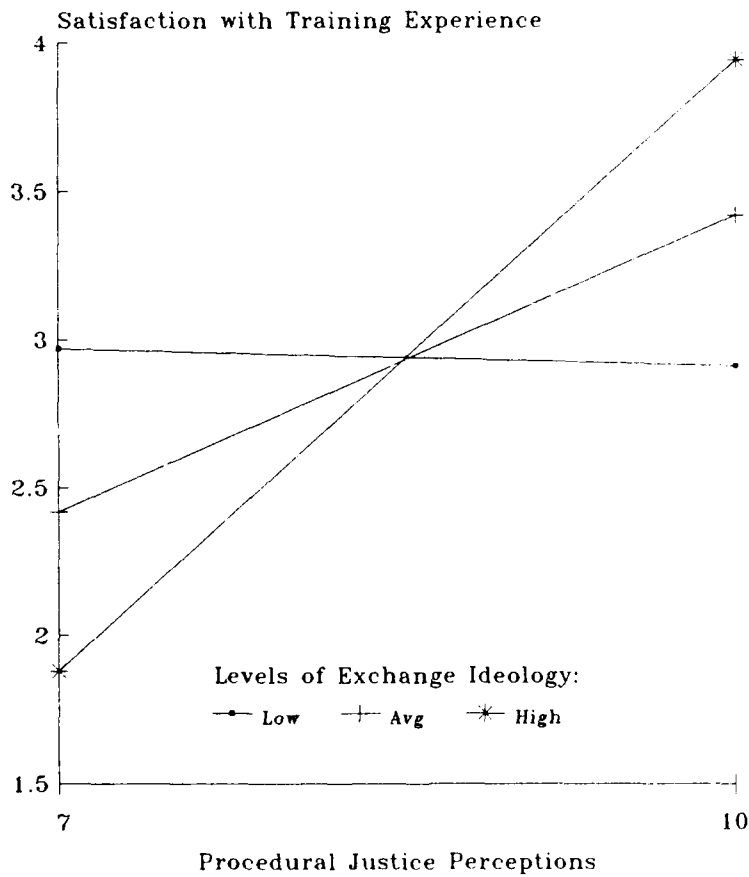
One practical implication of these results might be a suggestion that instructors should adapt different styles in providing feedback and support to their employees with regard to their exchange ideologies. However, such adaptation may not only be perceived as unfair but may also lead to unfair evaluation and training procedures. Indeed, it is possible that instructors may already be consciously or unconsciously "adapting," and employees with strong exchange ideologies may be more likely to let such variation affect their attitudes. Research is needed to explore possible differences already existing in within-instructor variations in providing feedback and support and the effect of these variations on perceived fairness. The results presented here suggest that instructors should follow fair procedures and make efforts to communicate how fair the procedures are.



<b>Accession For</b>	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Figure 1.

Satisfaction Scores Regressed On Procedural Justice Scores:  
Low, Average, and Exchange Ideology Scores



Note: Low score = 1 standard deviation below the mean; high score = 1 standard deviation above the mean.

## REFERENCES

- Adams, J. S. (1963). Toward an understanding of equity. *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Bateman, T. S. & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." *Academy of Management Journal*, 26, 587-595.
- Cohen, J. & Cohen, P. (1975). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Earlbaum.
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Etzioni, A. (1961). *A comparative analysis of complex organizations*. New York: The Free Press.
- Gould, S. (1979). An equity-exchange model of organizational involvement. *Academy of Management Review*, 4, 53-62.
- Greenberg, J. (1986). The distributive justice of organizational performance evaluations. In H. W. Bierhoff, R. L. Cohen, & J. Greenberg (Eds.), *Justice in social relations*. (pp. 337-351). New York: Plenum.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, 12, 9-22.
- Greenberg, J. (1988). Equity and workplace status: A field experiment. *Journal of Applied Psychology*, 73, 606-613.
- Joy, V., & Witt, L. A. (1991, May). *Gratification deferment and perceptions of justice*. Presented at the 63rd annual meeting of the Midwestern Psychological Association, Chicago.
- Landy, F. J., Barnes, J. L., & Murphy, K. R. (1978). Correlates of perceived fairness and accuracy of performance evaluation. *Journal of Applied Psychology*, 63, 751-754.
- Landy, F. J., Barnes-Farrell, J., & Cleveland, J. N. (1980). Perceived fairness and accuracy of performance evaluation: A follow-up. *Journal of Applied Psychology*, 65, 355-356.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in theory and research* (27-55). New York: Plenum Press.
- Leventhal, G. S., Karuza, J. Jr., Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. In G. Mikula (Ed.), *Justice and social interaction* (pp. 167-218). New York: Springer-Verlag.
- Levinson, H. (1965). Reciprocity: The relationship between man and organization. *Administrative Sciences Quarterly*, 9, 370-390.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- Mitchell, T. R. (1979). Organizational behavior. In M. R. Rosenzweig & L. W. Porter (Eds.), *Annual Review of Psychology*, 30, 243-281.
- Mowday, R. T. (1979). Equity theory predictions of behavior in work organizations. In R. M. Steers & L. W. Porter (Eds.), *Motivation and work behavior* (2nd ed.; pp. 124-146). New York: McGraw-Hill.
- Organ, D. W., & Konovsky, M. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, 74, 157-164.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology*, 36, 577-600.



- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91, 482-497.
- Stone, E. F., & Hollenbeck, J. R. (1989). Clarifying some controversial issues surrounding statistical procedures for detecting moderator variables: Empirical evidence and related evidence. *Journal of Applied Psychology*, 74, 3-10.
- Sweeny, P. D., McFarlin, D.B. & Cotton, S. L. (1991). Locus of control as a moderator of the relationship between perceived influence and procedural justice. *Human Relations*, 44, 333-342.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Earlbaum.
- Tyler, T. R. (1986). When does procedural justice matter in organizational settings? In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiation in organizations* (pp.7-23). New York: JAI Press.
- Witt, L. A. (1991). Equal opportunity perceptions and job attitudes. *Journal of Social Psychology*, 131, 431-433.
- Witt, L. A. (In press-a). Exchange ideology, job attitudes, and organizational citizenship behaviors. *Journal of Applied Social Psychology*.
- Witt, L. A. (In Press-b). Exchange ideology as a moderator of the relationships between importance of participation in decision-making and job attitudes. *Human Relations*.
- Witt, L. A., & Wilson, J. W. (1990). Income sufficiency as a predictor of job satisfaction and organizational commitment: Disposition differences. *Journal of Social Psychology*, 130, 267-268.
- Zedeck, S. (1971). Problems with the use of "moderator" variables. *Psychological Bulletin*, 76, 295-310.