

# Evidence of Value-Expressive Participation Effects in Budgeting

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## Abstract

*Accounting researchers have defined budgetary participation to encompass employee influence, or control, over budget targets. This view implies that control is a necessary condition for favorable participation effects to occur. This paper presents the results of two field studies that indicate participation can lead to improved employee attitudes even when it does not afford the employees budgetary control.*

## Introduction

Participation in budgeting has been defined by accounting researchers to encompass employee influence (i.e., control) over budget targets (Kenis, 1979; Kren and Liao, 1988). Brownell (1982a, p. 124), for example, defined participation in budgeting "... as a process in which individuals, whose performance will be evaluated, and possibly rewarded, on the basis of their achievement of budgeted targets, are involved in, and have influence on (emphasis added), the setting of these targets." This definition implies that subordinate control over the budget is a necessary condition for favorable participation effects to occur. However, evidence from other research domains has shown that the opportunity to express views and opinions during a decision-making process affects participant responses even when it does not result in influence over the final decision outcome. These value-expressive (Tyler et al., 1985) effects suggest that participation through expression can yield organizational benefits even when employee input is not reflected in the final budget targets.

The present research investigated whether employee opportunities for expression during an organizational budgeting process make a contribution to affective employee responses beyond that of employee control over the budgeting process. Results from two surveys, involving employees from different functional areas, indicate that expression in budgeting makes a unique contribution to employee attitudes toward the organization and the budgeting process. The confirmation of value-expressive effects in a budgeting setting have important implications for the design of organizational budgeting systems and for future budgeting research.

## Theoretical and Empirical Support for Value-Expressive Effects

Thibaut and Walker (1975) reported the results of a series of studies which indicated that people's reactions to a decision-making process are affected by the distribution of control among the participants. They distinguished between two types of control. Process control is the extent to which the individual has an opportunity to express views and opinions during the decision-making process, and decision control is the extent to which the individual can influence the outcome of the decision-making process. In this article, we use the term voice (Folger, 1977) rather than process control, because control (or influence) is not a necessary element of the condition. Voice represents one mechanism by which individuals participate in decision making (Greenberg and Folger, 1983). Thibaut and Walker found that legal procedures which granted voice to disputants enhanced procedural justice, or the perceived fairness of the procedures, and disputants were more satisfied with such procedures. The seminal work of Thibaut and Walker motivated many subsequent studies of voice, which have generally supported favorable voice effects, particularly on attitudes (e.g., Folger, 1977; Houlden et al., 1978; Lind et al., 1980; Greenberg, 1986; Leung and Lind, 1986; Kanfer et al., 1987; Bies and Shapiro, 1988).

Thibaut and Walker posited that voice effects occur because individuals perceive expression as a means of ensuring equitable decision outcomes. Brett (1986) suggested that voice is important to participants because it allows them to secure favorable decision outcomes. Both of these positions are consistent with an "outcomes-oriented" view of voice effects (Lind and Tyler, 1988): voice works because it leads to decision control.

But researchers have also forwarded a value-express-

sive explanation for voice effects: people apprise the opportunity to express their views as an end in itself. Lind et al. (1983), for example, reported that individuals with high voice judged legal procedures to be fairer, although they had little influence over the outcome of the dispute. If voice is important only as an indirect means of influence over decision outcomes, voice effects should not appear under conditions of low decision control. Tyler et al. (1985) and Tyler (1987) investigated value-expressive effects in political and educational settings. They found voice enhanced procedural justice and evaluations of institutions and leaders even under conditions of low decision control.

Earley and Lind (1987) extended the study of value-expressive effects to an organizational decision-making context. Laboratory subjects permitted to both give their views about alternative task assignment procedures and choose a procedure had higher procedural justice, higher task commitment, and better performance than those who chose a procedure without an opportunity for expression. Perhaps the most striking example of value-expressive effects occurred in a laboratory experiment by Lind et al. (1990). Subjects who gave their opinions about a goal after the goal had been set (when they could not influence goal level) reported higher procedural justice and goal acceptance, and performed better, than subjects in a mute (i.e., no voice) condition.

Prominent theoretical explanations for value-expressive effects have a common theme: voice conveys to the participant that decision makers consider him a person worthy of their attention. Lind and Tyler (1988) argued that people value membership in social groups (such as the organization they work for), and view the opportunity for expression as a validation of their standing in the group. Lane (1988) proposed that the opportunity to be heard enhances the dignity of the participant. Folger and Konovsky (1989) concluded that granting expression to an employee is a form of respect from the organization, which Locke et al. (1986) consider the most fundamental employee value.

The research cited above indicates that voice, a form of participation, has effects on participant responses that are independent of influence over the decision outcome, and that these value-expressive effects hold across several decision-making contexts. Confirmation of these relationships in an organizational budgeting context would provide support for excluding influence as a necessary condition of participation in budgeting, and would give insight into the processes by which participation works. We hypothesize that employee voice in budgeting makes a contribution to affective employee responses that is independent of the contribution made by employee control over budgeting. The research reported here focused on affective criterion variables because of the difficulty of measuring behaviors in

survey research and because voice has been shown as a particularly potent determinant of participant attitudes toward institutions, leaders, and decision-making processes (Lind and Tyler, 1988).

## Study 1

### *Sample*

Production employees of a large manufacturing plant in the central United States were surveyed. In order to be eligible to receive a survey, an employee had to (1) have a clearly defined responsibility for meeting budgetary targets, and (2) be evaluated partly on the basis of budgetary performance. These two conditions were established to ensure that the group of respondents included individuals on whom the firm's budgeting process had a significant impact. Members of the plant's budgeting committee selected 300 employees who met the required conditions and distributed the surveys to these individuals. Employees were not selected randomly and participation was voluntary. Surveys were returned to a member of the budgeting committee in a sealed envelope.

The respondents returned 157 usable surveys (52 percent of those distributed). Males represented 73 percent of the final sample. Nonsupervisory employees comprised 57 percent of the sample, while 28 percent were lower-level supervisors, 14 percent were middle-level supervisors, and one percent were upper-level supervisors. Subjects had a mean age of 38 years and a mean tenure of 12 years at the firm.

To establish that the nonsupervisory subjects were, in fact, subject to budgetary control, the survey contained the following item: "my superiors compare the actual results for my unit against the budget when they evaluate me." The item was measured on a scale ranging from 1 to 7 with the endpoints "not at all" and "to a great extent." The mean value for the nonsupervisory respondents (3.79) was not significantly different ( $p < .05$ ) from the mean value for the supervisory respondents (4.22).

### *Independent Variables*

Voice in budgeting and control over budgeting. Separate six-item scales developed by the authors measured employee perceptions of voice in budgeting and control over budgeting. Panels A and B of Table 1 display the voice and control scales, respectively. The items on the voice scale were phrased to address the amount of expression the employee had in the budgeting process, as distinct from the amount of influence. In contrast, the control scale was designed to establish whether a subject felt that he or she actually had an impact on the final budget targets. The items on the

scales were grouped and factor analyzed with both an orthogonal (varimax) and oblique (oblimin) rotation. Under each rotation method, two factors with eigenvalues greater than 1.0 emerged. The voice items had their highest loadings on one of the factors and the control items had their highest loadings on the other factor. The results of the factor analysis indicate that each scale is measuring a separate construct, and the items on each individual scale are measuring the same construct.

#### *Dependent Variables*

Organizational commitment. The nine-item short form of Mowday et al.'s (1979) 15-item scale measured

organizational commitment, which is the relative strength of an individual's identification with and involvement in the organization (Porter et al., 1976). Organizational commitment represents an affective response to the whole organization (Williams and Hazer, 1986). Mowday et al. (1979) summarized the results of studies involving a variety of employee groups and concluded that the scale has acceptable levels of reliability and validity.

Satisfaction with supervisor. Seventeen items from the 18-item satisfaction-with-supervisor subscale of the Job Description Index (JDI) (Smith et al., 1969) measured employee attitudes toward their immediate

**Table 1**  
**Voice, Control, and Procedural Justice Scales**

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<p><u>Panel A.</u> "Voice in Budgeting" Scale, relating to "my company"<sup>a</sup></p> <ol style="list-style-type: none"> <li>1. Provides me the opportunity to express an opinion about budgetary decisions affecting my unit.</li> <li>2. Encourages budget preparers to consult with those affected by the budget when the budget is being prepared.</li> <li>3. Gives me the freedom to voice my concerns about the budget.</li> <li>4. Has procedures which provide a forum for me to have my say about budget matters.</li> <li>5. Seeks out information that I have which might be relevant to budgeting decisions.</li> <li>6. Makes me feel at ease to offer suggestions about budgets which affect me.</li> </ol> <p><u>Panel B.</u> "Control over Budgeting" Scale<sup>b</sup></p> <ol style="list-style-type: none"> <li>1. If you are assigned an unfair budget, how much opportunity do you have to change that budget?</li> <li>2. To what extent are budgeting decisions affecting your unit the joint responsibility of you and others?</li> <li>3. How much does the budget for your unit reflect your opinion as to the proper budgetary level?</li> <li>4. If several alternatives are being considered in a budgeting decision relating to your unit, how much choice do you have in the final selection among the alternatives?</li> <li>5. To what extent do people involved in developing the budget for your unit incorporate your ideas into the budget?</li> <li>6. How much approval do you have over the final budget for your unit?</li> </ol> <p><u>Panel C.</u> "Procedural Justice" Scale, rating "company's budgetary procedures"<sup>c</sup></p> <ol style="list-style-type: none"> <li>1. Unfair - Fair</li> <li>2. Ethical - Unethical<sup>d</sup> (R)</li> <li>3. Moral - Immoral<sup>d</sup> (R)</li> <li>4. Improper - Proper</li> <li>5. Dishonest - Honest<sup>d</sup></li> <li>6. Appropriate - Inappropriate (R)</li> <li>7. Biased - Unbiased<sup>d</sup></li> <li>8. Bad - Good<sup>d</sup></li> <li>9. Just - Unjust (R)</li> <li>10. Inequitable - Equitable</li> </ol>	
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<sup>a</sup> Each item had a dichotomous scale with responses "could do at least a little better" and "does a sufficient job."

<sup>b</sup> Each item had a 7-point bipolar scale with the endpoints "very little" and "very much."

<sup>c</sup> Each item had a 7-point scale. (R) Reverse-scored item.

<sup>d</sup> This item was excluded from the scale in Study 2.

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supervisor. The reliability and validity of the JDI are well-supported (Robinson et al., 1969; Muchinsky and Tuttle, 1979).

**Procedural justice in budgeting.** A ten-item semantic differential scale (Osgood and Suci, 1955) constructed by the authors measured procedural justice in the budgeting process. The scale is shown in Panel C of Table 1. The adjective pairs were intended to evoke a general evaluative response to the budgeting process, as suggested by Lind and Tyler (1988), rather than to focus on fairness *per se*.

**Budget usefulness.** A four-item scale, composed of items originally developed by Swieringa and Moncur (1975), measured budget usefulness. The scale was used as an affective criterion variable in previous budgeting studies by Govindarajan (1986), Chenhall (1986), Merchant (1981), and Kenis (1979).

## Results

Table 2 reports the means, standard deviations, inter-correlations, and internal reliability coefficients for the variables in Study 1. The reliability coefficient of each scale was .80 or higher, and most bivariate correlation coefficients were significant at  $p < .01$ .

The top of Table 3 shows the results of a full regression analysis that included all of the study variables. Voice was correlated with organizational commitment and procedural justice, and control was a predictor of procedural justice and budget usefulness.

The primary analytical technique used in the study was usefulness analysis (Darlington, 1968), which assessed the independent effects of voice and control on the attitudinal criterion variables. The results of the usefulness analysis are displayed in the bottom portion

**Table 2**  
**Means, Standard Deviations, Correlations,**  
**and Reliabilities - Study 1<sup>a,b</sup>**

Scale	Mean	s.d.	1	2	3	4	5	6
1. Voice <sup>c</sup>	3.62	2.34	<u>.89</u>					
2. Control <sup>d</sup>	24.47	9.37	.71	<u>.90</u>				
3. Organizational commitment <sup>e</sup>	51.45	8.01	.30	.20	<u>.83</u>			
4. Satisfaction with supervisor <sup>f</sup>	41.72	9.68	.30	.29	.30	<u>.85</u>		
5. Procedural justice <sup>g</sup>	53.64	10.12	.57	.53	.41	.39	<u>.90</u>	
6. Budget usefulness <sup>h</sup>	16.42	5.21	.29	.38	.36	.23	.41	<u>.80</u>

<sup>a</sup> Alpha reliability coefficients are shown on the diagonal and are underlined.

<sup>b</sup> All correlation coefficients are significant at  $p < .025$ .

<sup>c</sup> Each of the six items had a dichotomous scale scored 0 or 1. The items were summed.

<sup>d</sup> Each of the six items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>e</sup> Each of the nine items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>f</sup> Each of the 17 items was scored 0, 1, or 3 in accord with the instructions of Smith et al. (1969). The items were summed.

<sup>g</sup> Each of the five items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>h</sup> Each of the four items had a 7-point bipolar scale scored 1 to 7. The items were summed.

of Table 3. Voice made a unique contribution to variance in organizational commitment and procedural justice, which supports value-expressive participation effects. Control made a unique contribution to variance in procedural justice and budget usefulness. Neither variable made an independent contribution to satisfaction with supervisor. Although both voice and control had a unique association with procedural justice, the independent contribution of voice was over twice as great as that of control.

dures and budget targets for other employees in the organization, they are subject to budgetary control themselves. The questionnaire was designed so the CMAs responded from their perspective as employees accountable for budget targets in their area of responsibility.

Two hundred fifty-three respondents (38 percent of the random sample) returned usable questionnaires and were retained in the study. The mean age of the

**Table 3**  
**Effects of Voice and Control - Study 1**

Independent variables	Organizational commitment	Satisfaction with supervisor	Procedural justice	Budget usefulness
Beta Coefficients				
Voice	.33**	.19	.39**	.04
Control	-.04	.16	.26**	.35**
R <sup>2</sup>	.09**	.11**	.37**	.14**
Usefulness Analysis				
Voice beyond control	.056**	.018	.078**	.001
Control beyond voice	.001	.013	.035**	.062**

*Note:* In the usefulness analysis, when the entry indicates X beyond Y, it means the increment in the square of the multiple correlation coefficient when X is added following Y.  
\* p < .05  
\*\* p < .01

## Study 2

Because Study 1 used a sample comprised only of production workers from a single plant, the results may not apply to employees in other functional areas and in other organizations. Study 2 gathered data from a national sample of employees working in the accounting and finance functions to establish generality of the findings.

### Method

Data were obtained from a questionnaire mailed to Certified Management Accountants (CMAs) working in the accounting and finance functions at U.S. companies. A random sample of 658 persons meeting these criteria was drawn from the National Association of Accountant's *Roster of Certified Management Accountants*. While accounting and finance staff develop budgeting proce-

respondents was 40 years, with a mean tenure at their present company of nine years. Males comprised 86 percent of the respondents.

The scales described previously were used in Study 2, with the exception that the procedural justice scale contained only five of the original ten items. Factor analysis again indicated that the voice and control scales were measuring separate constructs.

### Results

Means, standard deviations, intercorrelations, and internal reliability coefficients for the variables in Study 2 are presented in Table 4. Each reliability coefficient was .85 or higher, and all bivariate correlations were significant at  $p < 0.05$ .

The results of a full regression analysis on the

**Table 4**  
**Means, Standard Deviations, Correlations,**  
**and Reliabilities - Study 2<sup>a,b</sup>**

Scale	Mean	s.d.	1	2	3	4	5	6
1. Voice <sup>c</sup>	4.38	2.02	<u>.85</u>					
2. Control <sup>d</sup>	30.69	7.38	.63	<u>.88</u>				
3. Organizational commitment <sup>e</sup>	45.62	10.12	.27	.19	<u>.91</u>			
4. Satisfaction with supervisor <sup>f</sup>	38.43	11.42	.25	.12	.46	<u>.87</u>		
5. Procedural justice <sup>g</sup>	24.97	5.82	.53	.47	.52	.37	<u>.91</u>	
6. Budget usefulness <sup>h</sup>	16.98	5.67	.48	.61	.50	.23	.13	<u>.88</u>

<sup>a</sup> Alpha reliability coefficients are shown on the diagonal and are underlined.

<sup>b</sup> All correlation coefficients are significant at  $p < .025$ .

<sup>c</sup> Each of the six items had a dichotomous scale scored 0 or 1. The items were summed.

<sup>d</sup> Each of the six items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>e</sup> Each of the nine items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>f</sup> Each of the 17 items was scored 0, 1, or 3 in accord with the instructions of Smith et al. (1969). The items were summed.

<sup>g</sup> Each of the five items had a 7-point bipolar scale scored 1 to 7. The items were summed.

<sup>h</sup> Each of the four items had a 7-point bipolar scale scored 1 to 7. The items were summed.

variables are reported in the top portion of Table 5. Voice was a predictor of each of the criterion variables (organizational commitment, satisfaction with supervisor, procedural justice, and budget usefulness). Control was correlated with only procedural justice and budget usefulness.

The bottom portion of Table 5 summarizes the results of a usefulness analysis on the data in Study 2. Voice made a unique contribution to variance in procedural justice and organizational commitment, which is consistent with Study 1, but also had an independent effect on satisfaction with supervisor and budget usefulness. Each of these results support value-expressive participation effects. Control again had a unique association only with procedural justice and budget usefulness. As in Study 1, the independent contribution of voice to procedural justice was over twice that of control. Although voice and control each had a unique effect on budget usefulness, the magnitude of the control effect was much larger.

## General Discussion

The results of the present research indicate that favorable participation effects stem from more than the control over budget decisions which participation affords subordinate employees. Employee attitudes toward the organization and the budgeting process can be enhanced solely because participation in budgeting provides an outlet for expression, which employees value as an end in itself. These value-expressive participation processes are often more important than those linked to control, and occur even in the absence of control-related effects.

The existence of value-expressive participation processes means that an organization can benefit from allowing employees to give their views about the budget even in situations where these views are not ultimately reflected in budget targets. This is an important aspect of value-expressive effects, because employee budgetary input must sometimes be rejected in light of superior information or the need to coordinate different organizational subunits. Cohen (1985) has expressed concerns

**Table 5**  
**Effects of Voice and Control - Study 2**

Independent variables	Organizational commitment	Satisfaction with supervisor	Procedural justice	Budget usefulness
Beta Coefficients				
Voice	.25**	.29**	.38**	.17**
Control	.04	-.06	.23**	.50**
R <sup>2</sup>	.08**	.06**	.31**	.38**
Usefulness Analysis				
Voice beyond control	.037**	.049**	.087**	.016**
Control beyond voice	.000	.002	.033**	.152**

**Note:** In the usefulness analysis, when the entry indicates X beyond Y, it means the increment in the square of the multiple correlation coefficient when X is added following Y.  
 \* p < .05  
 \*\* p < .01

that decision makers may abuse value-expressive effects by soliciting voice even when they have no intention of considering the input. However, Tyler (1987) provided evidence that value-expressive effects disappear when decision makers fail to give participant viewpoints due consideration. For both ethical and practical reasons, managers should refrain from granting subordinate voice in budgeting only as an insincere attempt to gain acceptance of the budget or engender goodwill from employees.

Guided by the notion that participation must encompass control, previous budgeting studies have either confounded value-expressive and control-related participation effects, or ignored value-expressive effects completely. In our opinion, the frequently-used Milani (1975) participation scale (Brownell, 1982b; Frucot and Shearon, 1991) contains both items measuring employee voice in budgeting and items measuring employee control over budgeting. All six items are summed as a single measure of participation, however, which prevents the separation of distinct value-expressive and control-related effects. Laboratory subjects in "participation" conditions typically are allowed to select their own budget targets (i.e., have a high degree of control), but have little opportunity to express their viewpoints prior to selection (e.g., Brownell, 1981; Tiller, 1983). This type of participation manipulation does not provide an environment for value-expressive effects. The failure to

recognize and measure distinct value-expressive and control-related effects reduces the comparability of participation studies and hinders the development of normative guidelines for effective use of participative budgeting.

While the present studies support value-expressive effects on employee attitudes, they did not address value-expressive effects on behavior. Some employee behaviors, such as turnover and absenteeism, are strongly related to satisfaction, commitment, and other attitudes (Porter and Steers, 1973; Locke and Schweiger, 1979; Clegg, 1983), and may be affected by value-expressive participation processes. Value-expressive effects on performance are probably less likely. Participation effects on performance appear to stem more from motivational and cognitive processes than affective processes (Murray, 1990; Locke and Schweiger, 1979, Campbell and Ginchin, 1986).

The findings reported here are subject to several limitations stemming from the research design. The assumed causal ordering from voice and control to the criterion variables cannot be proved with cross-sectional data. Additionally, the measures of association may be inflated by common-method bias. Finally, the psychometric properties of the new voice, control, and procedural justice scales were not rigorously tested. While the results must be interpreted in light of these limita-

tions, the relationships are consistent with theory and previous empirical evidence.

### Suggestions for Future Research

Future budgeting research should investigate the reasons why employees value budgetary expression independently of control. Although theory has attributed value-expressive effects to respect and status that the opportunity to voice one's views and opinions conveys to the individual (Lind and Tyler, 1988; Lane, 1988; Folger and Konovsky, 1989), no empirical studies have directly examined the psychological processes underlying these effects.

The results of the present studies indicate that the relative strength of value-expressive and control-related participation effects can differ, depending on the outcome variable of interest. For example, value-expressive effects were found to make a larger contribution to organizational commitment, satisfaction with supervisor, and procedural justice, while control-related effects explained more variation in budget usefulness. Researchers should begin to construct a taxonomy of those attitudes and behaviors most closely associated with each aspect of budgetary participation.

In order to further investigate separate value-expressive and control-related participation effects, budgeting researchers need valid and reliable measures of voice and control. The scales used in the present research can serve as groundwork for the development of measures that capture the essential characteristics of these two constructs.

### \*\*\*References\*\*\*

- Bies, R.J., and D.L. Shapiro, "Voice and Justification: Their Influence on Procedural Fairness Judgments," *Academy of Management Journal*, Vol. 31, pp. 676-85, 1988.
- Brett, J.M., "Commentary on Procedural Justice Papers," in *Research on Negotiation in Organizations*, Vol. 1, edited by R. Lewicki, M. Bazerman, and B. Sheppard, JAI Press, Greenwich, CT, 1986.
- Brownell, P., "Participation in Budgeting, Locus of Control, and Organizational Effectiveness," *The Accounting Review*, Vol. 56, pp. 844-60, 1981.
- \_\_\_\_\_, "Participation in the Budgeting Process: When It Works and When It Doesn't," *Journal of Accounting Literature*, Vol. 1, pp. 124-53, 1982a.
- \_\_\_\_\_, "A Field Study Examination of Budgetary Participation and Locus of Control," *The Accounting Review*, Vol. 57, pp. 766-77, 1982b.
- Campbell, D.J., and K.F. Geringer, "The Interactive Effects of Task Complexity and Participation on Task Performance: A Field Experiment," *Organizational Behavior and Human Decision Processes*, Vol. 38, pp. 162-180, 1986.
- Chenhall, R.H., "Authoritarian and Participative Budgeting: A Dyadic Analysis," *The Accounting Review*, Vol. 57, pp. 263-71, 1986.
- Clegg, C.W., "Psychology of Employee Lateness, Absence, and Turnover: A Methodological Critique and Empirical Study," *Journal of Applied Psychology*, Vol. 68, pp. 88-101, 1983.
- Cohen, R.L., "Procedural Justice and Participation," *Human Relations*, Vol. 38, pp. 643-663, 1985.
- Darlington, R.B., "Multiple Regression in Psychological Research," *Psychological Bulletin*, Vol. 79, pp. 161-182, 1968.
- Earley, P.C., and E.A. Lind, "Procedural Justice and Participation in Task Selection: The Role of Control in Mediating Justice Judgments," *Journal of Personality and Social Psychology*, Vol. 52, pp. 1148-60, 1987.
- Folger, R., "Distributive and Procedural Justice: Combined Impact of "Voice" and Improvement on Experienced Inequity," *Journal of Personality and Social Psychology*, Vol. 35, pp.108-19, 1977.
- \_\_\_\_\_, and M.A. Konovsky, "Effects of Procedural and Distributive Justice on Reactions to Pay Raise Decisions," *Academy of Management Journal*, Vol. 32, pp. 115-30, 1989.
- Frucot, V., and W.T. Shearon, "Budgetary Participation, Locus of Control, and Mexican Managerial Performance and Job Satisfaction," *The Accounting Review*, Vol. 66, pp. 80-99, 1991.
- Govindarajan, V., "Impact of Participation in the Budgetary Process on Managerial Attitudes and Performance: Universalistic and Contingency Perspectives," *Decision Sciences*, Vol. 17, pp. 496-516, 1986.
- Greenberg, J., "Determinants of Perceived Fairness of Performance Evaluations," *Journal of Applied Psychology*, Vol. 71, pp. 340-42, 1986.
- \_\_\_\_\_, and R. Folger, "Procedural Justice, Participation, and the Fair Process Effect," in *Basic Group Process*, edited by P. Paulus, Springer-Verlag, New York, pp. 235-256, 1983.
- Kanfer, R., J. Sawyer, P.C. Earley, and E.A. Lind, "Participation in Task Evaluation Procedures: The Effects of Influential Opinion Expression and Knowledge of Evaluation Criteria on Attitudes and Performance," *Social Justice Research*, Vol. 1, pp. 235-49, 1987.
- Kenis, I., "Effects of Budgetary Goal Characteristics on Managerial Attitudes and Performance," *The Accounting Review*, Vol. 54, pp. 707-21, 1979.
- Kren, L., and W.M. Liao, "The Role of Accounting Information in the Control of Organizations: A Review of the Evidence," *Journal of Accounting Literature*, Vol. 7, pp. 280-309, 1988.
- Lane, R.E., "Procedural Goods in a Democracy: How is One Treated Versus What One Gets," *Social Justice Research*, Vol. 2, pp. 177-192, 1988.



22. Leung, K., and E.A. Lind, "Procedural Justice and Culture: Effects of Culture, Gender, and Investigator Status on Procedural Preferences," *Journal of Personality and Social Psychology*, Vol. 50, pp. 1134-1140, 1986.
23. Lind, E.A., R. Kanfer, and P.C. Earley, "Voice, Control, and Procedural Justice: Instrumental and Noninstrumental Concerns in Fairness Judgments," *Journal of Personality and Social Psychology*, Vol. 59, pp. 952-959, 1990.
24. \_\_\_\_\_, S. Kurtz, L. Musante, L. Walker, and J.W. Thibaut, "Procedure and Outcome Effects on Reactions to Adjudicated Resolution of Conflicts of Interests," *Journal of Personality and Social Psychology*, Vol. 39, pp. 643-653, 1980.
25. \_\_\_\_\_, R.I. Lissak, and D.E. Conlon, "Decision Control and Process Control Effects on Procedural Fairness Judgments," *Journal of Applied Social Psychology*, Vol. 13, pp. 338-50, 1983.
26. \_\_\_\_\_, and T.R. Tyler, *The Social Psychology of Procedural Justice*, Plenum Press, New York, 1988.
27. Locke, E.A., and D.M. Schweiger, "Participation in Decision-Making: One More Look," in *Research in Organizational Behavior*, edited by B. Staw, JAI Press, Greenwich, CT, pp. 265-339, 1979.
28. \_\_\_\_\_, \_\_\_\_\_, and G.P. Latham, "Participation in Decision Making: When Should It Be Used?" *Organizational Dynamics*, Vol. 14, No. 3, pp. 65-79, 1986.
29. Merchant, K., "The Design of the Corporate Budgeting System: Influences on Managerial Behavior and Performance," *The Accounting Review*, Vol. 56, pp. 813-29, 1981.
30. Milani, K.W., "The Relationship of Participation in Budget Setting to Industrial Supervisor Performance and Attitudes: A Field Study," *The Accounting Review*, Vol. 50, pp. 274-84, 1975.
31. Mowday, R., R. Steers, and L. Porter, "The Measurement of Organizational Commitment," *Journal of Vocational Behavior*, Vol. 14, pp. 224-47, 1979.
32. Muchinsky, P., and M. Tuttle, "Employee Turnover: An Empirical and Methodological Assessment," *Journal of Vocational Behavior*, Vol. 14, pp. 43-77, 1979.
33. Murray, D., "The Performance Effects of Participative Budgeting: An Integration of Intervening and Moderating Variables," *Behavioral Research in Accounting*, Vol. 2, pp. 104-23, 1990.
34. Osgood, C.E., and G.J. Suci, "Factor Analysis of Meaning," *Journal of Experimental Psychology*, Vol. 50, pp. 325-338, 1955.
35. Porter, L., W. Crampon, and F. Smith, "Organizational Commitment and Managerial Turnover: A Longitudinal Study," *Organizational Behavior and Human Performance*, Vol. 15, pp. 87-98, 1976.
36. \_\_\_\_\_, and R.M. Steers, "Organizational, Work, and Personal Factors in Employee Turnover and Absenteeism," *Psychological Bulletin*, Vol. 80, pp. 151-176, 1973.
37. Robinson, J., R. Athanasiou, and K. Head, *Measures of Occupational Attitudes and Occupational Characteristics*, Institute for Social Research, Ann Arbor, MI, 1978.
38. Smith, P.C., M. Kendall, and C.L. Hulin, *The Measurement of Satisfaction in Work and Retirement*, Rand McNally, Chicago, 1969.
39. Swieringa, R., and R. Moncur, *Some Effects of Participative Budgeting on Managerial Behavior*, National Association of Accountants, New York, 1975.
40. Thibaut, J., and L. Walker, *Procedural Justice: A Psychological Analysis*, Erlbaum, Hillsdale, NJ, 1975.
41. Tiller, M.G., "The Dissonance Model of Participative Budgeting: An Empirical Exploration," *Journal of Accounting Research*, Vol. 21, pp. 581-95, 1983.
42. Tyler, T.R., "Conditions Leading to Value Expressive Effects in Judgments of Procedural Justice: A Test of Four Models," *Journal of Personality and Social Psychology*, Vol. 52, pp. 333-44, 1987.
43. \_\_\_\_\_, K. Rasinski, and N. Spodick, "The Influence of Voice on Satisfaction with Leaders: Exploring the Meaning of Process Control," *Journal of Personality and Social Psychology*, Vol. 48, pp. 72-81, 1985.
44. Williams, L.J., and J.T. Hazer, "Antecedents and Consequences of Satisfaction and Commitment in Turnover Models: A Reanalysis Using Latent Variable Structural Equation Methods," *Journal of Applied Psychology*, Vol. 71: pp. 219-231, 1986.