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Leadership, Budget Participation, Budgetary Fairness, and Organizational Commitment

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LEADERSHIP, BUDGET PARTICIPATION, BUDGETARY FAIRNESS, AND ORGANIZATIONAL COMMITMENT

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ABSTRACT

This study examines how leadership style, budget participation, and perceptions of budgetary fairness influence an important employee outcome, organizational commitment. In the proposed model, the leadership style of the superior, specifically consideration, is linked to subordinate participation in the budgeting process. Both leadership style and budget participation, in turn, influence employee beliefs about budgetary fairness, that is, beliefs concerning the procedural and distributive justice of the budgeting system. Finally, the justice of the budgeting system and its antecedents (leadership and budget participation) affect organizational commitment. Results from a survey of supervisors and managers in several firms support the proposed model.

Keywords: Leadership style; consideration; budget participation; budgetary fairness; organizational commitment

INTRODUCTION

Organizational commitment is one of the most widely examined constructs in organizational behavior as “it is assumed to influence almost any behavior that is beneficial to the organization” (Ricketta, 2002, p. 257). Prior studies in organizational behavior argue that commitment positively influences a number of employee and organizational outcomes such as turnover, work attendance, work effort, job performance, and organizational citizenship behaviors (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Randall, 1990; Ricketta, 2002). Accounting researchers, in their studies of accountants, also recognize the importance of organizational commitment on outcomes such as turnover (e.g., see reviews in Ketchand & Strawser, 1998, 2001). Given the evidence that commitment has favorable consequences, researchers have sought to identify the causes or antecedents of commitment. Such knowledge may enable organizations to foster commitment and therefore gain the advantages associated with it.

The current study examines several potential antecedents of organizational commitment, specifically leadership style, budget participation, and perceptions of budgetary fairness. The study borrows from several literatures including management accounting, leadership, and organizational justice. In the proposed model, leadership style, specifically consideration, is an exogenous variable that influences commitment both directly and indirectly through the proposed intervening variables: budget participation and budgeting fairness. Regarding the relation between leadership and budget participation, the current study proposes that considerate leaders foster the budget participation of subordinates as the leaders attempt to develop relations that are open and supportive (Kyj & Parker, 2008). In the theoretical model, both leadership style and budget participation influence employee beliefs in budgetary fairness. As argued in this chapter, considerate leaders, because they consult with subordinates, foster subordinate beliefs in the procedural and distributive justice of the budget system. To the knowledge of the authors, the current study is the only study that examines links between leadership and perceptions of budgetary fairness. Budget participation is also included as an antecedent of budgetary fairness as Wentzel (2002) reports evidence supporting this relation.

Leadership style, budget participation, and budgetary fairness, in turn, are theorized to have a direct effect on organizational commitment. Prior studies in organizational behavior report evidence that considerate leaders foster employee commitment (e.g., Lok, Westwood, & Crawford, 2005; Michaels & Spector, 1982; Morris & Sherman, 1981) while accounting studies argue that

budget participation increases commitment (e.g., Nouri & Parker, 1998; Parker & Kyj, 2006). Regarding the relation between perceptions of budgetary fairness and organizational commitment, several studies report that, in governmental and university departments, budgetary fairness influences commitment (Magner & Johnson, 1995; Magner & Welker, 1994; Staley, Dastoor, Magner, & Stolp, 2003). As argued in these studies, employees who believe that the procedural and distributive justice of the budgeting system is high will exhibit strong commitment to the organization. The theoretical model in the current study extends these budgeting studies by including variables (leadership style and budget participation) that are theorized to be antecedents of both budgetary fairness and organizational commitment. To properly assess the direct effect of budgetary fairness on organization commitment, antecedents that are common to both budgetary fairness and organizational commitment should be included in the model (Pedhazur, 1982).

To summarize the proposed model, leadership style influences budget participation. Leadership style and budget participation are linked to perceptions of budgetary fairness, which, in turn, is linked to organizational commitment. Leadership style is theorized to affect organizational commitment both directly and indirectly (via the proposed intervening variables, budget participation and budgetary fairness). Budget participation is theorized to influence organizational commitment both directly and indirectly (via budgetary fairness). To examine these relations, a survey of 77 managers and supervisors in several firms was conducted. Results, using path analysis and structural equation modeling (SEM), provide support for most links of the proposed model. Considerate leadership is associated with organizational commitment and all budgeting variables (budget participation, procedural justice of budgeting system, distributive justice of budgeting system). Budget participation and procedural justice (but not distributive justice) are linked to commitment.

The next section of this chapter discusses the relevant literature and hypotheses while the following section is research method. Results are discussed thereafter followed by the conclusion.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The proposed model appears in Fig. 1. As indicated, leadership style is the exogenous variable and it is theorized to influence the budgeting variables,

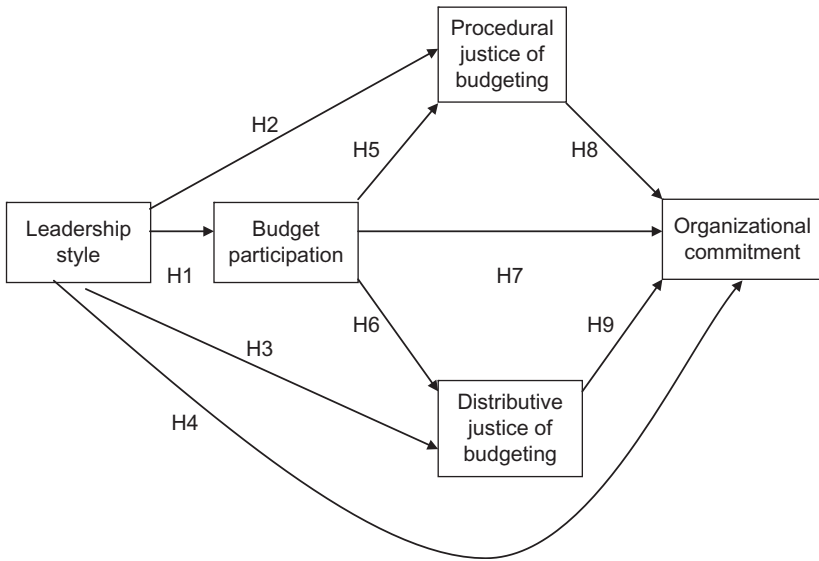


Fig. 1. Theoretical Model.

which in turn, influence organizational commitment. Further, leadership is theorized to directly affect commitment. The theoretical rationale for each proposed relation in the model is discussed in the following sections.

Leadership Style

Scholars have defined organizational leadership in a wide variety of ways which poses a challenge to the leadership field (e.g., Bass, 2008; Yukl, 1989). Borrowing from researchers at a major conference, we use the following definition of leadership: “the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organization of which they are members” (House, Javidan, & Dorfman, 2001, p. 494). In the leadership literature, an early stream of research, the Ohio State Leadership Studies, attempted to identify leadership styles that are effective with regard to outcomes such as performance, motivation, and job satisfaction. Researchers focused on two dimensions of leader behavior within groups: initiating structure (task oriented behavior), and consideration (relationship oriented behavior). As noted in the

meta-analysis by Judge, Piccolo, and Ilies (2004), these constructs have appeared in several hundred studies. Accounting researchers have used them extensively (e.g., Hartmann, Naranjo-Gil, & Perego, 2010; Hopwood, 1974; Jiambalvo & Pratt, 1982; Kelley & Margheim, 1990; Kida, 1984; Otley & Pierce, 1995). This includes researchers who argue that the considerate leadership style is relevant to budgeting issues (Kyj & Parker, 2008; Marginson & Ogden, 2005).

Bass (2008), in his overview of prior studies, defines considerate leadership as:

the extent to which a leader exhibits concern for the welfare of other members of the group. The *considerate* leader expresses appreciation for good work, stresses the importance of job satisfaction, maintains and strengthens the self-esteem of subordinates by treating them as equals, makes special efforts to help subordinates feel at ease, is easy to approach, puts subordinates suggestions into operations, and obtains subordinates' approval on important matters before going ahead In contrast, the *inconsiderate* leader criticizes subordinates in public, treats them without considering their feelings, threatens their security, and refuses to accept their suggestions or to explain his or her actions. (p. 529)

Kyj and Parker (2008) report evidence of a relation between considerate leadership and budget participation. Budget participation is the extent to which employees are involved in setting the budget for their area of responsibility (Brownell, 1982). As argued in Kyj and Parker (2008), budget participation, in part, reflects the relation between superior and subordinate. Considerate superiors will attempt to encourage subordinate involvement in the budgeting process as the superiors seek to develop relations that are open and mutually respectful. The following hypothesis summarizes these arguments:

H1. Considerate leadership has a positive association with budget participation.

Leadership and Budgetary Fairness

Organizational justice involves employee beliefs about how fairly the employee is treated. Traditionally, researchers have focused on the fairness of the allocation of organizational rewards such as pay. Specifically, distributive justice refers to the fairness of outcomes which employees assess by comparing their outcomes (such as pay) relative to others, "referents," such as coworkers. Alternatively, procedural justice refers to the fairness of the *process* by which allocations are made. As Folger and Cropanzano (1998)

note, a lengthy research stream demonstrates that organizational justice (both distributive and procedural justice) is important to employees and has consequences for their attitudes and behaviors.

The budget system involves the allocation of organizational resources and such allocations have important consequences for managers (e.g., [Magner & Johnson, 1995](#); [Magner & Welker, 1994](#); [Staley et al., 2003](#)). For example, managers without adequate budget resources tend to have lower job performance ([Nouri & Parker, 1998](#)). Accordingly, managers will be sensitive to the perceived fairness of the budgeting system. Prior studies identify two forms of budgetary fairness: (1) distributive justice which involves the fairness of the budget allocations received by the employee; and (2) procedural justice which involves the fairness of how allocation decisions are made ([Magner & Johnson, 1995](#); [Magner & Welker, 1994](#); [Staley et al., 2003](#)).

The current study proposes that a considerate leadership style influences perceptions of both distributive and procedural justice of the budgeting system. To our knowledge, no accounting researchers have examined these relations. The connection between considerate leadership and organizational justice has not been investigated in the organizational behavior and related literatures ([Judge et al., 2004](#)). In the conclusion of their meta-analysis of leadership style, [Judge et al. \(2004, p. 45\)](#) call for future research in this area. They argue that “considerate leaders should provide higher procedural justice in that they appear to follow several of [Leventhal’s \(1980\)](#) rules.” [Leventhal \(1980\)](#) represents a seminal work in the organizational justice literature as he identifies rules used by individuals to evaluate the fairness of the allocation process. Many of these rules, such as correctability and representativeness, are congruent with considerate leadership. Correctability “dictates that opportunities must exist to modify and reverse decisions made at various points in the allocation process” ([Leventhal, 1980](#), pp. 42–43). Under the representativeness rule, the concerns and outlook of the individual must be represented in the allocation decision. In budgeting decisions, considerate leaders may allow subordinates greater opportunities for both correctability and representativeness as considerate leaders have open relations with subordinates that include consultation; consequently, subordinates of such leaders may have stronger beliefs in the procedural fairness of the budgeting system. The related hypothesis appears below:

H2. Considerate leadership has a positive association with procedural justice of the budgeting system.

The current study proposes that considerate leadership influences employee beliefs about not only procedural justice but also distributive justice. The budget allocations received by subordinates with considerate leaders are more likely to reflect the needs and concerns of the subordinates and therefore be considered fairer.

H3. Considerate leadership has a positive association with distributive justice of the budgeting system.

Organizational Commitment

Organizational commitment has been widely studied in applied psychology, management, and accounting (for an overview of accounting studies, see [Ketchand & Strawser, 2001](#)). While several conceptualizations of organizational commitment exist, affective commitment is probably the most popular in the literatures and the most relevant to the current study. Affective commitment is an “emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization” ([Allen & Meyer, 1990](#), p. 2).

Several studies report evidence that leadership style is associated with the affective commitment of subordinates (e.g., [Lok et al., 2005](#); [Michaels & Spector, 1982](#); [Morris & Sherman, 1981](#)). As [Morris and Sherman \(1981\)](#) argue, based upon prior research (primarily [Katz & Kahn, 1978](#)), the behavior of formal organizational leaders influences the extent to which employees identify with the organization. Considerate leaders foster employee commitment to the organization. The hypothesis below follows:

H4. Considerate leadership style has a positive association with organizational commitment.

Budget Participation and Budgetary Fairness

As noted by several researchers, employee participation in decision-making has been widely examined in the organizational justice literature (e.g., [Roberson, Moye, & Locke, 1999](#); [Wentzel, 2002](#)). Research demonstrates “that input into a decision-making process and/or control over the resulting outcome enhances individual perceptions of procedural justice” ([Roberson et al., p. 586](#)). How this effect occurs has been debated within the literature (see summary by [Wentzel, 2002](#)). In the instrumental

(or self-interest) explanation, individuals seek participation in decisions that affect the individual to gain control, either directly or indirectly, over the outcome. Such control enhances the individual's fairness perceptions. In the relational or group-value explanation, control over outcomes is not critical in assessing fairness. In this viewpoint, a participative process that allows individuals to express their views is fair as it demonstrates that the individual is respected in the workplace, that is, that the employee is an accepted member of that social group.

Wentzel (2002) argues that the findings in the organizational behavior literature regarding participative decision-making are applicable to budgeting. Participation in the budgeting process enhances employee beliefs in the procedural fairness of the budgeting process. The following hypothesis summarizes her arguments:

H5. Budget participation has a positive association with the procedural justice of the budgeting system.

Budget participation also may enhance employee perceptions of distributive justice as participation allows managers the opportunity to secure budgets that meet their needs (Wentzel, 2002). The related hypothesis appears below:

H6. Budget participation has a positive association with the distributive justice of the budgeting system.

Budget participation also may have a direct relation with organizational commitment as proposed in Nouri and Parker (1998) and Parker and Kyj (2006). As discussed in those studies, researchers in management and applied psychology report evidence that employee participation in decision-making enhances employee commitment. Regarding budget participation, such participation facilitates employee identification with not only the budget goals the employee helps to create but also other organizational goals (Hanson, 1966). The related hypothesis is:

H7. Budget participation has a positive association with organizational commitment.

Budgetary Fairness and Organizational Commitment

A stream of research, drawing upon the organizational justice literature, has examined the relation between budgetary fairness and organizational

commitment (Magner & Johnson, 1995; Magner & Welker, 1994; Staley et al., 2003). These studies argue that budget allocations are important to managers and that the perceptions of procedural and distributive justice regarding budget allocations influence manager commitment to the organization. Fair allocations foster commitment. The following hypotheses summarize the arguments:

H8. Procedural justice of budgeting system has a positive association with organizational commitment.

H9. Distributive justice of budgeting system has a positive association with organizational commitment.

The current study extends these prior studies in several ways. Prior studies focus on nonprofit organizations such as universities (Magner & Welker, 1994) and government (Magner & Johnson, 1995; Staley et al., 2003). The current study uses a sample of business managers. Further, in the statistical analysis, the current study controls for leadership style and budget participation which, as hypothesized previously, are antecedents of both budgetary fairness and organizational commitment.

RESEARCH METHOD

Data Collection

To secure companies for survey distribution, the authors asked the Deans of their business school to identify large firms with strong school affiliations that seemed likely to participate. Finance-related firms such as banks and insurance companies were excluded. The four companies identified by the Deans agreed to participate. They included a utility, a manufacturer of lift trucks, and two pharmaceutical companies. The companies are located in the Midwest and Southeast United States. Senior executives at the firms were contacted initially by phone; subsequently, the executives received a written report that included an overview of the project and a sample questionnaire. As specified in the report, senior executives were instructed to distribute the surveys to supervisors/managers/executives who “have management responsibilities” and “budget responsibilities meaning that, for their area of responsibility, they have a role in budget preparation and are held accountable for meeting budget goals.”

Company officials identified 103 potential respondents. Of these, 79 responded although two did not complete the survey and thus are not included in the data analysis. The effective response rate is 75% (77/103). Of the participants, 38 worked in pharmaceutical companies, 32 worked in a utility, 7 worked in a manufacturer of lift trucks. The median age of the respondents is 51 years. On average, they worked 15 years for their current employer and have 19 employees below them in the organizational hierarchy. The sample is predominately male (81%) and well educated. Of the sample, 60% have bachelor degrees while 30% have masters or higher.

The cover letter to the participants briefly explained the study and specified that the employee must be “in charge of a responsibility center (such as department, unit, division, etc.) with a formal budget.” Further, the participant “must have budget responsibilities meaning, that for your area of responsibility, you have a role in budget preparation and you are held accountable for meeting budget goals to some extent.” Respondents were instructed to complete the surveys independently and not to identify themselves to ensure anonymity. They mailed the completed questionnaires directly to the researchers using postage-paid envelopes provided to them.

Measures

Measures for variables appear in [Appendix A](#). All measures use a seven-point Likert scale. Budget participation is anchored on “very little” to “very much,” while the other constructs use “strongly disagree” to “strongly agree.” To measure the leadership style of superiors, specifically the consideration of the superior toward subordinates, the current study used a scale from the Leader Behavior Description Questionnaire (LBDQ, Form XII) developed by [Stogdill \(1963\)](#). This scale has been used extensively in the organizational behavior literature (see reviews by [House, 1996](#); [House & Baetz, 1979](#); [Schriesheim & Bird, 1979](#)). The scale also has been used in numerous accounting studies (e.g., [Brownell, 1983](#); [Kelley & Margheim, 1990](#); [Kida, 1984](#); [Jiambalvo & Pratt, 1982](#); [Otley & Pierce, 1995](#); [Pratt & Jiambalvo, 1981, 1982](#)).

Budget participation was measured using the six-item scale developed by [Milani \(1975\)](#). This scale assesses the involvement and influence that an individual has in the budgeting process. The response scale ranges from one (very little) to seven (very much). Prior accounting studies report

satisfactory reliability and validity (e.g., Brownell & Hirst, 1986; Chong & Chong, 2002; Mia, 1988; Nouri & Parker, 1998; Wentzel, 2002).

The perceived fairness of the budgetary system was assessed using measures developed initially by Magner and Johnson (1995) and later modified by Wentzel (2002) who reports satisfactory reliability and construct validity for them. The scale for procedural justice contains eight items that examine employee perceptions of the fairness of budgeting procedures. Theoretically, the items are based on Leventhal's (1980) rules for determining the fairness of resource allocations. The scale for distributive justice contains five items that examine the fairness of the budget in terms of meeting the manager's needs and expectations.

To measure organizational commitment, a six-item scale was used from Meyer, Allen, and Smith (1993). Several studies report strong reliability and construct validity for this measure (e.g., Allen & Meyer, 1990; Dunham, Grube, & Castaneda, 1994; Hackett, Bycio, & Hausdorf, 1994). (Also see review of construct validity by Allen & Meyer, 1996.)

To assess the construct validity of the measures, factor analysis was performed using the principal factor method followed by an oblique rotation. Several items for the budgeting measures cross-loaded – standardized factor loadings for the item exceeded 0.40 for two factors. These items were deleted in the study. The remaining items load on the appropriate factors (see Appendix B). The Cronbach alpha for each revised measure exceeds 0.80 (see Table 1).

Data Analysis

Initially, path analysis is used to assess the hypotheses. Each proposed link between the variables has a path coefficient that is a standardized regression coefficient (Asher, 1983; Pedhazur, 1982). There are four regressions for the theoretical model: (1) budget participation is regressed on leadership style; (2) procedural justice of budgeting system is regressed on its antecedents, leadership style and budget participation; (3) distributive justice of budgeting system is regressed on its antecedents, leadership style and budget participation; (4) organizational commitment is regressed on its antecedents, leadership style, budget participation, procedural justice, and distributive justice. Before fitting the regression models, consideration was given to including company as a covariate. However, analysis of variance showed no statistical differences across companies for any of the variables (p -values > 0.10); consequently, company was not used as a covariate.¹

RESULTS

Descriptive statistics for the measures appear in [Table 1](#). Inter-correlations are reported in [Table 2](#). Regression results for the path analysis appear in [Table 3](#). [Fig. 2](#) illustrates the path coefficients in the theoretical model.

In general, statistical results support the theoretical model. H1 proposes an association between considerate leadership style and budget participation. As the results demonstrate ([Table 3](#), Equation 1), the path coefficient for this relation is 0.314 and it is statistically significant ($p = 0.005$). H2 and H5 propose that leadership style and budget participation are associated with the procedural justice of the budgeting system. Results in [Table 3](#) (Equation 2) support the hypotheses. The path coefficients are 0.336 for leadership style and 0.434 for budget participation, both of which have p -values of 0.001. H3 and H6 propose that leadership style and budget participation are linked to the distributive justice of the budgeting system.

Table 1. Descriptive Statistics.

	Mean	SD	Observed Range	Theoretical Range	Cronbach Alpha
Leadership style (LS)	26.584	6.443	7–35	5–35	0.90
Budget participation (BP)	19.013	4.517	8–27	4–28	0.81
Procedural justice of budgeting (PJB)	24.221	6.597	5–35	5–35	0.90
Distributive justice of budgeting (DJB)	21.143	4.599	9–28	4–28	0.92
Organizational commitment (OC)	23.130	4.165	12–28	4–28	0.83

See [Appendix A](#) for items that make up each scale.

Table 2. Correlations.

	LS	BP	PJB	DJB	OC
LS	1.00				
BP	0.31	1.00			
PJB	0.47	0.54	1.00		
DJB	0.33	0.43	0.52	1.00	
OC	0.61	0.38	0.53	0.33	1.00

Same abbreviations as in [Table 1](#).

Pearson correlation coefficients.

All coefficients have a p -value of less than 0.01.

Table 3. Path Analysis Results.

Equation	Dependent Variable	Independent Variable	Associated Hypothesis	Path Coefficient	<i>t</i>	<i>p</i>	<i>R</i> ²
(1)	BP	LS	H1	0.314	2.86	0.005	0.10
(2)	PJB	LS	H2	0.336	3.52	0.001	0.39
		BP	H5	0.434	4.55	0.001	
(3)	DJB	LS	H3	0.217	2.01	0.024	0.22
		BP	H6	0.358	3.32	0.001	
(4)	OC	LS	H4	0.453	4.54	0.001	0.45
		BP	H7	0.102	0.97	0.337	
		PJB	H8	0.254	2.14	0.018	
		DJB	H9	0.006	0.06	0.956	

Same abbreviations as in Table 2.

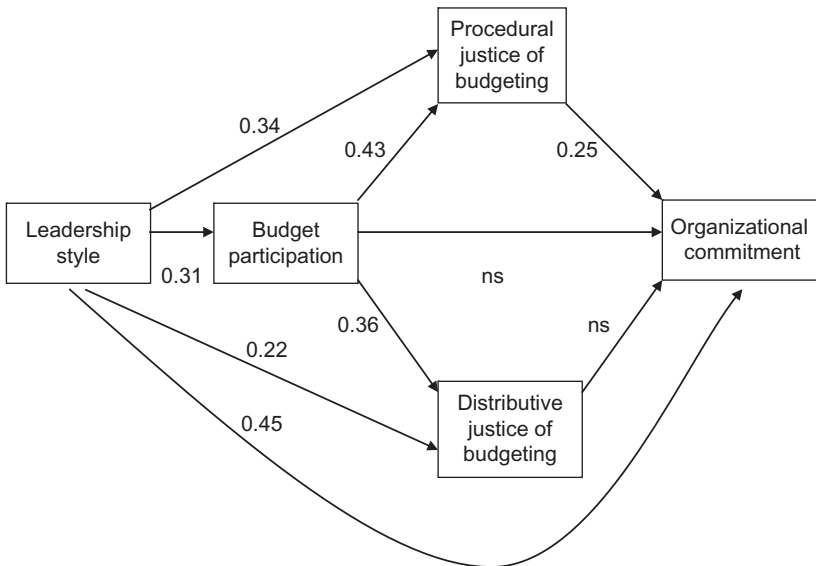


Fig. 2. Path Coefficients. *Note:* All coefficients are significant at 0.025 level except those marked as ns (not significant).

Results in Table 3 (Equation 3) support these propositions. The related path coefficients are 0.217 ($p=0.024$) for leadership style and 0.358 ($p=0.001$) for budget participation. Finally, several hypotheses (H4, H7, H8, and H9) propose links that involve organizational commitment.

The results are reported in Table 3 (Equation 4). As theorized in H4, leadership style has a significant association with organizational commitment (path coefficient of 0.453, $p=0.001$). Regarding H7, the proposed relation between budget participation and commitment is not significant. The theorized relation between procedural justice and commitment (H8) has a significant path coefficient, 0.254 ($p=0.018$), while the proposed relation between distributive justice and commitment (H9) is not significant.

Further analysis suggests that budget participation mediates the relation between leadership style and budgetary fairness. To assess mediation, the significance of the relevant indirect effect is tested using the techniques advocated by Sobel (1982), with resampling modifications recommended by Preacher and Hayes (2008). Indirect effects are estimated using 1,000 bootstrap samples, with the results shown in Table 4. Regarding the relation between leadership style and the procedural justice of the budgeting system, the indirect effect through budget participation is positive and significant ($p < 0.05$). Regarding the relation between leadership style and the distributive justice of the budgeting system, the indirect effect through budget participation also is positive and significant ($p < 0.05$). Results also suggest that the effect of budget participation on organizational commitment is mediated by procedural justice, but not by distributive justice of the budgeting system. The indirect effect of budget participation on commitment through procedural justice is positive and significant ($p < 0.05$); however, the indirect effect of budget participation on commitment through distributive justice is not significant ($p > 0.10$). Finally, leadership style has a significant indirect effect on commitment through procedural justice ($p < 0.01$), but not through budget participation ($p > 0.10$) or distributive justice ($p > 0.05$).

Table 4. Indirect Effects Analysis.

Dependent Variable	Independent Variable	Mediating Variable	95% CI for Effect ^a	<i>p</i> -value
PJB	LS	BP	(0.03, 0.32)	0.015
DJB	LS	BP	(0.02, 0.18)	0.029
OC	BP	PJB	(0.09, 0.37)	0.001
OC	BP	DJB	(-0.005, 0.16)	0.115
OC	LS	BP, PJB	(0.01, 0.17)	0.059

^aConfidence intervals are corrected for bias and may disagree slightly from the normal-theory *p*-value.

Same abbreviations as in Tables 2 and 3.

Additional Analysis

The regression equations employed in the path analysis assume that the constructs are measured without error. In reality, these are latent constructs that are subject to measurement error. Ideally, one would account for this measurement error by fitting an SEM, where the measured items identified in the factor analysis are utilized as indicators of the latent constructs and paths are hypothesized between the latent constructs. However, many researchers (e.g., Curran, Bollen, Chen, Paxton, & Kirby, 2003; Hu & Bentler, 1999; Olsson, Foss, & Breivik, 2004) recommend a sample size of at least 200 in order to attain robust estimates of the SEM parameters and reliable model fit statistics. Thus, traditional SEM is problematic for this study's sample size of 77.

Despite the small-sample issues, an SEM with latent constructs was fitted using the CALIS procedure in SAS 9.3. To account for the potential problem of unreliable fit statistics, we employed a modified estimate of model fit proposed by Swain (1975) and recommended in the small-sample case by Herzog and Boomsma (2009). The estimates (and statistical significance) of the model path coefficients obtained by SEM were nearly identical to those shown in Fig. 1. Thus, the inferences about the path coefficients made in the previous section are the same regardless of whether one employs regression/path analysis or the more complex SEM method. Regarding the overall fit of the structural model, adjusted CFI is 0.90 while adjusted RMSEA is 0.09.

In this small-sample case, one also could consider using partial least squares (PLS) to estimate the parameters of the latent variable model. However, recent research (Goodhue, Lewis, & Thompson, 2012) finds that in the case of small samples (e.g., sample sizes less than 90), PLS has no advantage in either accuracy of parameter estimates or power over either SEM or the regression-based path analysis. Also, several studies (e.g., Haenlein & Kaplan, 2004) report that PLS tends to underestimate the correlations between the latent variables and overestimate the parameters of the measurement model. Consequently, PLS is not a good option as a data analytic tool for this study.

DISCUSSION

As documented in an extensive research stream in the business and applied psychology literatures, the commitment of an individual to an organization

is linked to favorable employee behaviors such as higher work effort, higher performance, and reduced turnover (e.g., Mathieu & Zajac, 1990; Meyer & Allen, 1997; Randall, 1990; Riketta, 2002). Understanding the causes, that is, antecedents, of commitment may enable organizations to secure the benefits associated with it. The current study proposes a commitment model in which leadership style influences budget variables, which, in turn, influence commitment. In other words, characteristics of the budgeting system mediate the relation between leadership and commitment.

Results of a survey of 77 business managers support the theoretical model. Before discussing the results involving specific links within the model, we note that survey methodology such as used in the current study has a number of limitations. Results may be specific to the firms that participated in the study. Constructs may be measured with error. There may be omitted variables that are relevant to the theoretical model. Finally, causal direction between variables cannot be proven in this type of research.

Survey results suggest that considerate leadership has a direct relation with commitment, a finding that is congruent with prior studies (e.g., Lok et al., 2005; Michaels & Spector, 1982; Morris & Sherman, 1981). Further, leadership has significant indirect effects on commitment via budget participation and budget fairness. Considerate leadership is associated with subordinate participation in the budgeting process. Both consideration and budget participation, in turn, are linked to perceptions of budgetary fairness. Results involving consideration and budgetary fairness support the theoretical arguments of the current chapter. Accordingly, considerate leaders follow Leventhal's (1980) rules, such as correctability and representativeness, which employees use to assess the fairness of the budget process (specifically, the procedural justice of budgeting). Regarding distributive justice, results support the argument that considerate leaders are more likely to try to secure budget allocations for the subordinate that reflect the needs and concerns of the subordinate. While the current study examines how one dimension of leadership, consideration, influences budgeting variables, future research could examine the influence of other types of leadership on budgeting. Also, there may be variables other than leadership and budget participation that affect employee perceptions of budgetary fairness. The effect of budgetary fairness on employee outcomes other than commitment is another area for future research.

Regarding the relation between budgetary fairness and commitment, the current study finds that the perceptions of the procedural justice of the budgeting system influence commitment while distributive justice does not.

These results are consistent with those reported in prior studies (Magner & Johnson, 1995; Staley et al., 2003). Results of the current and prior studies provide strong evidence that, in the budgeting process, procedural justice is salient to employee attachment to the organization. Fair budget procedures (i.e., high procedural justice) may signal to the individual the fairness of organization procedures in general. Fair budget procedures are unbiased and decisions are consistent across departments and time. Fair budget decision-making is based upon complete information; also, full explanations are provided to employees. These attributes of decision-making (lack of bias, complete information, full explanation) are valued by employees as they, according to the group-value model of procedural justice (e.g., Tyler, Degoey, & Smith, 1996), demonstrate that the employee is worthy of respect. Fair organizational procedures acknowledge and protect the interests of the employee. In contrast, the fairness of budget *outcomes* for the employee's department (budgetary distributive justice) does not have salience in terms of employee commitment to the organization.

Regarding the relation between budget participation and organizational commitment, the current study finds that participation does not directly affect commitment; instead participation influences commitment indirectly through the perceptions of procedural justice. The effect of budget participation on commitment is mediated by procedural justice. Prior accounting studies (e.g., Nouri & Parker, 1998; Parker & Kyj, 2006) propose and report evidence of a direct link between participation and commitment. Results of the current study suggest a more complex, mediated relation.

Budget participation is a key variable in the theoretical model of the current study. As Shields and Shields (1998, p. 49) argue, budget participation is "one of the most researched topics in management accounting." It has been theorized to influence a number of employee and organizational outcomes. According to Shields and Shields (1998), many studies in this area fail to clearly discuss why participation exists; consequently, the variables included in the models often do not have strong theoretical support. They argue that for this research stream to progress, researchers must explicitly discuss their beliefs about the causes of participation and choose variables accordingly. They further argue that "theoretical and empirical models would be more complete and reliable if they ... included causal antecedents to participative budgeting in addition to its effects" (p. 50). In this view, budget participation is part of a nomological network that includes its antecedents, its mediators and moderators, and outcomes. The current study attempts to develop such a network.

NOTE

1. We also found no differences between genders and age groups.

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REFERENCES

- Allen, N., & Meyer, J. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1–18.
- Allen, N., & Meyer, J. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, *49*, 252–276.
- Asher, R. (1983). *Causal modeling*. Thousand Oaks, CA: Sage Publications.
- Bass, B. (2008). *The Bass handbook of leadership* (4th ed.). New York, NY: Free Press.
- Brownell, P. (1982). Participation in the budgeting process, when it works and when it doesn't. *Journal of Accounting Literature*, (Spring), 124–153.
- Brownell, P. (1983). Leadership style, budgetary participation and managerial behavior. *Accounting, Organizations and Society*, *8*, 307–321.
- Brownell, P., & Hirst, M. (1986). Reliance on accounting information, budgetary participation, and task uncertainty: Tests of a three-way interaction. *Journal of Accounting Research*, *24*, 241–249.
- Chong, V., & Chong, K. (2002). Budget goal commitment and informational effects of budget participation on performance: A structural equation modeling approach. *Behavioral Research in Accounting*, *14*, 65–86.
- Curran, P. J., Bollen, K. A., Chen, F., Paxton, P., & Kirby, J. (2003). Finite sampling properties of the point estimates and confidence intervals of the RMSEA. *Sociological Methods & Research*, *32*, 208–252.
- Dunham, R., Grube, J., & Castaneda, M. (1994). Organizational commitment: The utility of an integrative definition. *Journal of Applied Psychology*, *79*, 370–380.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage Publications.
- Goodhue, D. L., Lewis, W., & Thompson, R. (2012). Comparing PLS to regression and Lisrel: A response to Marcoulides, Chin, and Saunders. *MIS Quarterly*, *36*, 703–716.

- Hackett, R., Bycio, P., & Hausdorf, P. (1994). Further assessment of Meyer and Allen's (1991) three-component model of organizational commitment. *Journal of Applied Psychology, 79*, 15–23.
- Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis. *Understanding Statistics, 3*, 283–297.
- Hanson, E. (1966). The budgetary control function. *The Accounting Review, 41*, 239–243.
- Hartmann, F., Naranjo-Gil, D., & Perego, P. (2010). The effects of leadership styles and use of performance measures on managerial work-related attitudes. *European Accounting Review, 19*(2), 275–310.
- Herzog, W., & Boomsma, A. (2009). Small-sample robust estimators of noncentrality-based and incremental model fit. *Structural Equation Modeling, 16*, 1–27.
- Hopwood, A. (1974). Leadership climate and use of accounting data in performance evaluation. *The Accounting Review, 49*, 485–495.
- House, R. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly, 7*, 323–353.
- House, R., & Baetz, M. (1979). Leadership: Some empirical generalizations and new research directions. In B. Staw (Ed.), *Research in organizational behavior* (Vol. 1, pp. 341–422). Greenwich, CT: JAI Press.
- House, R., Javidan, M., & Dorfman, P. (2001). Project GLOBE: An introduction. *Applied Psychology: An International Review, 50*, 489–505.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.
- Jiambalvo, J., & Pratt, J. (1982). Task complexity and leadership effectiveness in CPA firms. *The Accounting Review, 57*, 734–750.
- Judge, T., Piccolo, R., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology, 89*, 36–51.
- Katz, D., & Kahn, R. (1978). *The social psychology of organizations*. New York, NY: Wiley.
- Kelley, T., & Margheim, L. (1990). The impact of time pressure, personality, and leadership variables on dysfunctional auditor behavior. *Auditing: A Journal of Practice and Theory, 9*, 21–42.
- Ketchand, A., & Strawser, J. (1998). The existence of multiple measures of organizational commitment and experience-related differences in a public accounting setting. *Behavioral Research in Accounting, 10*, 109–137.
- Ketchand, A., & Strawser, J. (2001). Multiple dimensions of organizational commitment: Implications for future accounting research. *Behavioral Research in Accounting, 13*, 221–251.
- Kida, T. (1984). Performance evaluation and review meeting characteristics in public accounting firms. *Accounting, Organizations and Society, 9*, 137–147.
- Kyj, L., & Parker, R. (2008). Antecedents of budget participation: Leadership style, information asymmetry, and evaluative use of budget. *Abacus, 44*, 423–442.
- Leventhal, G. (1980). What should be done with equity theory? In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27–55). New York, NY: Plenum Press.
- Lok, P., Westwood, R., & Crawford, J. (2005). Perceptions of organizational subculture and their significance for organizational commitment. *Applied Psychology: An International Review, 54*, 490–514.

- Magner, N., & Johnson, G. (1995). Municipal officials' reactions to justice in budgetary resource allocation. *Public Administrative Quarterly*, 18, 439–456.
- Magner, N., & Welker, R. (1994). Responsibility center managers' reactions to justice in budgetary resource allocation. *Advances in Management Accounting*, 3, 237–253.
- Marginson, D., & Ogden, S. (2005). Coping with ambiguity through the budget: The positive effects of budgetary targets on managers' budgeting behaviours. *Accounting, Organizations & Society*, 30(5), 435–456.
- Mathieu, J., & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108, 171–194.
- Meyer, J., & Allen, N. (1997). *Commitment in the workplace*. Thousand Oaks, CA: Sage Publications.
- Meyer, J., Allen, N., & Smith, C. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538–551.
- Mia, L. (1988). Managerial attitude, motivation, and the effectiveness of budget participation. *Accounting, Organizations and Society*, 13, 465–475.
- Michaels, C., & Spector, P. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand, and Meglino model. *Journal of Applied Psychology*, 67, 53–59.
- Milani, K. (1975). The relationship of participation in budgeting-setting to industrial supervisor performance and attitudes. *The Accounting Review*, 50, 274–284.
- Morris, J., & Sherman, J. (1981). Generalizability of an organizational commitment model. *Academy of Management Journal*, 24, 512–526.
- Nouri, H., & Parker, R. (1998). The relationship between budget participation and job performance: The roles of budget adequacy and organizational commitment. *Accounting, Organizations and Society*, 23, 467–483.
- Olsson, U. H., Foss, T., & Breivik, E. (2004). Two equivalent discrepancy functions for maximum likelihood estimation: Do their test statistics follow a non-central chi-square distribution under model misspecification? *Sociological Methods & Research*, 32, 453–500.
- Otley, D., & Pierce, B. (1995). The control problem in public accounting firms: An empirical study of the impact of leadership style. *Accounting, Organizations and Society*, 20, 405–420.
- Parker, R., & Kyj, L. (2006). Vertical information sharing in the budgeting process. *Accounting, Organizations and Society*, 31, 27–45.
- Pedhazur, E. (1982). *Multiple regression in behavioral research* (2nd ed.). Fort Worth, TX: Harcourt Brace Jovanovich.
- Pratt, J., & Jiambalvo, J. (1981). Relationships between leader behaviors and audit team performance. *Accounting, Organizations and Society*, 6, 133–142.
- Pratt, J., & Jiambalvo, J. (1982). Determinants of leader behavior in an audit environment. *Accounting, Organizations and Society*, 7, 369–379.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Randall, D. (1990). The consequences of organizational commitment: Methodological investigation. *Journal of Organizational Behavior*, 11, 361–378.
- Ricketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior*, 23, 257–266.

- Roberson, Q., Moye, N., & Locke, E. (1999). Identifying a missing link between participation and satisfaction: The mediating role of procedural justice perceptions. *Journal of Applied Psychology, 84*, 585–593.
- Schriesheim, C., & Bird, B. (1979). Contributions of the Ohio State studies to the field of leadership. *Journal of Management, 5*, 135–145.
- Shields, J., & Shields, M. (1998). Antecedents of participative budgeting. *Accounting, Organizations and Society, 23*, 49–76.
- Sobel, M. (1982). Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco, CA: Jossey-Bass.
- Staley, A., Dastoor, B., Magner, N., & Stolp, C. (2003). The contribution of organizational justice in budget decision-making to federal managers' organizational commitment. *Journal of Public Budgeting, Accounting & Financial Management, 15*, 505–524.
- Stogdill, R. (1963). *Manual for the leader behavior description questionnaire, form XII*. Columbus, OH: Bureau of Business Research, Ohio State University.
- Swain, A. J. (1975). *Analysis of parametric structures for variance matrices*. Unpublished doctoral dissertation, Department of Statistics, University of Adelaide, Australia.
- Tyler, T. R., DeGoey, P., & Smith, H. (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. *Journal of Personality and Social Psychology, 70*, 913–930.
- Wentzel, K. (2002). The influence of fairness perceptions and goal commitment on managers' performance in a budgeting setting. *Behavior Research in Accounting, 14*, 247–271.
- Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management, 15*, 251–289.

APPENDIX A: SURVEY QUESTIONS

Response scale for budget participation ranges from one, very little, to seven, very much.

Response scale for all other variables ranges from one, strongly disagree, to seven, strongly agree.

Budget participation (BP)

1. The importance of your contribution to the budget.
- *2. The frequency of budget-related discussions initiated by your superior when budgets are being set.
3. The amount of influence you feel you have on the final budget.
4. The frequency of budget-related discussions with superiors initiated by you.
5. The portion of the budget you are involved in setting.
- *6. The amount of reasoning provided to you by a superior when the budget is revised.

Leadership style (LS)

1. My immediate supervisor is friendly and approachable.
2. My immediate supervisor explains his/her actions to subordinates.
3. My immediate supervisor treats his subordinates as his/her equals.
4. My immediate supervisor looks out for the personal welfare of subordinates.
5. My immediate supervisor acts without consulting his/her subordinates (reverse wording).

Budget participation (BP)

1. The importance of your contribution to the budget.
- *2. The frequency of budget-related discussions initiated by your superior when budgets are being set.
3. The amount of influence you feel you have on the final budget.
4. The frequency of budget-related discussions with superiors initiated by you.
5. The portion of the budget you are involved in setting.
- *6. The amount of reasoning provided to you by a superior when the budget is revised.

Procedural justice of budgeting (PJB)

- *1. The current budgeting procedures conform to my own standards of ethics and morality.
2. Budgeting procedures are applied consistently across all responsibility areas.
3. In my company, the budgeting procedures adequately represent the concerns of all responsibility areas.
- *4. Budgetary decision makers try hard not to favor one responsibility area over another.
5. Budgeting procedures are applied consistently across time.
6. Budgetary decision makers adequately explain how budget allocations for my responsibility area are determined.
7. Budgeting decisions for my area of responsibility are based on accurate information and well-formed opinions.
- *8. The current budgeting procedures contain provisions that allow me to appeal the budget set for my area of responsibility.

Distributive justice of budgeting (DJB)

1. The budget of my responsibility area was what I expected it to be.
2. My responsibility area received the budget that it deserved.
3. The budget allocated to my responsibility area adequately reflects my needs.
- *4. My supervisor expresses concern and sensitivity when discussing budget restrictions placed on my area of responsibility.
5. I consider the budget of my responsibility area to be fair.

Organizational commitment (OC)

1. I feel a strong sense of belonging to my organization.
2. This organization has a great deal of personal meaning for me.
3. I really feel as if this organization's problems are my own.
- *4. I feel emotionally attached to this organization.
- *5. I would be happy to spend the rest of my career with this organization.
6. I do not feel like "part of the family" at this organization (reverse wording)

*Deleted from study as factor analysis indicates cross-loadings (using criterion of 0.40).

APPENDIX B: STANDARDIZED FACTOR LOADINGS

Variable	Standardized Loadings
Leadership style	
LS1	0.78
LS2	0.80
LS3	0.88
LS4	0.88
LS5	0.67
Budget participation	
BP1	0.86
BP3	0.72
BP4	0.61
BP5	0.84
Procedural justice of budgeting	
PJB2	0.86
PJB3	0.87
PJB5	0.81
PJB6	0.73
PJB7	0.56
Distributive justice of budgeting	
DJB1	0.76
DJB2	0.99
DJB3	0.98
DJB5	0.77
Organizational commitment	
OC1	0.65
OC2	0.89
OC3	0.59
OC6	0.71

Note: Numbering of items corresponds to list in [Appendix A](#).