

Relationship between Budget Participation, Budget Procedural Fairness, Organisational Commitment and Managerial Performance

Killian Osikhena Ogiedu
Department Of Accounting
University Of Benin
Benin City
E-mail: koogiedu@yahoo.com
Phone: 08033600045

&

James Odi (PhD)
Department Of Accounting
University Of Benin
Benin City
E-mail: odijames@yahoo.com
Phone: 08056580011

Abstract

This study examines the role of budgetary participation, procedural fairness and organizational commitment on managerial performance. It presents the results from a sample of supervisors in Nigerian manufacturing industries using the questionnaire method and the ordinary least squares analysis as the analytical tool. The results show that there is a three way interaction between budget participation, budget procedural fairness and organizational commitment that influence managerial performance. The study recommends, that in order to increase managerial performance, managers should be allowed full participation in budget preparation and that the budget procedures should be fair.

Introduction

In the present day competitive operating environment, there is increasing need for corporations to increase managerial performance. One of the ways which has been suggested in the literature is managerial participation in budgeting. Budget participation implies that top managers and their subordinates jointly contribute in the determination process for resources use and generation in their own activities and operations. In other words, budget participation has an influence on managerial performance. A budget is not only a financial plan that sets forth cost and revenue goals for responsibility centres within a business firm, but also communication, performance evaluation, and motivation (Kenis, 1979). Organization theorists have asserted that there is a positive relationship between employee performance and participation in budgeting or goal setting (Kenis, 1992).

There has been considerable literature on the motivational and cognitive mechanisms by which participation may be related to employee performance (Lock et al, 1986; Murray, 1990). Some researchers have found that there is a positive relationship between participation and motivation (Merchant, 1981) while others did not (Brownell and McInnes, 1986). This led to the suggestion

by Brownell and McInness (1986), that future researches should examine how participation influences performance without the mediatory effect of motivation. Other accounting researchers examined how cognitive factors explain the effect of participation influence performance. Brownell (1988) finds that budgetary participation provided information that reduced role ambiguity which contributed to improved performance. Also Mia (1989), found the relationship between participation and performance to be moderated by job difficulty. Many other researches have been conducted on the relationship between budget participation and performance and the explanatory variables. However these researches have not developed comprehensive models that adequately explain the intervening factors between budgetary participation and performance.

This study therefore examines (against the background of prior studies) the role of budgetary participation, procedural fairness and organizational commitment on managerial performance. The remaining part of the study is divided into five (5) sections. The first examines the existing literature and develops the hypotheses. The next section is on the research methodology including measurement of variables and the research model. The third section summarises the findings of the study while fourth section is on results and discussions. The last section deals with the conclusion and recommendations.

Literature Review and Hypothesis Development

The relationship between budget participation and performance has a long history in the managerial accounting literature (Leach-Lopez et al, 2007). In fact budget participation has been one of the most researched topics in management accounting for over 40 years (Shields and Shields, 1998; Eker, 2008). Some of these studies have examined the effect of participative budgeting on managerial performance through various view points such as expectancy theory (Brownell and McInnes, 1986), cognitive dissonance theory (Tiller, 1983); person – environment- fit theory (Shields, Deng and Kato, 2000); organizational justice theory (Libby, 1999, 2000) and role theory (Chenhall & Brownell, 1986). These studies only provided piecemeal evidence to these relationships. For example (Kennis, 1979) argued that budget participation is positively and significantly associated with performance while Milani (1975) finds a weak positive relationship between participation and performance. On the other hand, Bryan and Locke (1967) find a negative relationship between participation and performance. The inconsistency in the results led to the examination of various mediating variable between budget participation and managerial performance: role ambiguity (Becker and Gren, 1962); national culture (Lau and Buckland, 200; Tsui, 2001), organizational culture (Goddard, 1997; O'Connor, 1995; Subramaniam & Ashkanasy, 2001); environmental uncertainty (Govindarajan, 1986; Gul, 1991; Dunk & Lysons, 1997); market competition (Chong *et al*, 2005); information asymmetry (Dunk, 1993; Chow et al, 1988); task characteristics (uncertainty/difficulty) (Brownell & Hirst, 1986; Brownell & Dunk, 1991); Lau & Tan, 1986; Orpen, 1991); Locus of control (Brownell, 1981, Brownell, 1982); supervisory evaluative style (Brownell, 1981; Brownell & Hirst, 1986, Brownell & Dunk, 1991); job related information (Kren, 1992; Chong & Chong, 2002; Chong & Johnson, 2007; Magner, Welker & Compbell, 1996; Shields & Shields, 1998); management Accounting systems (Choe, 1998; Tsui, 2001) and organizational commitment (Noun & Parker, 1998); job relevant information (Eker, 2008) among other variables.

We contribute to this literature by examining the relationship between budget participation and managerial performance with mediating variables as budget procedural fairness and organizational commitment among Nigerian managers working in Nigerian registered companies. The dependent variable was managerial performance while the independent variable budget participation, budget procedural fairness and organizational commitment. Their interactions were investigated for their impact managerial performance. In the following subsections, we examine the dependent variable and the independent variables.

Budget participation and managerial performance.

The relationships between budget participation and managerial performance can be viewed from two perspectives viz psychological and cognitive perspectives. First, because of identification and involvement with budget goals, participation is related to performance and consequently leads to enhanced motivation and commitment to performance and consequently leads to enhanced motivation and commitment to the budget (Murray, 1990; Chow et al 1988; Lau & Buckland, 2001). Secondly as a result of improving flow of information between superiors and subordinates, budget participation leads to higher quality decisions. Viewed from these perspectives, participation leads to higher motivation, higher commitment, higher quality decision and higher performance.

Previous empirical studies indicate that the relationship between budgetary participation and performance is inconsistent. The results of some the studies indicate a positive relationship (Merchant, 1981; Brownell, 1982) while some indicate positive insignificant relationship (Milani, 1975; Brownell & Hirst, 1986; Dunk, 1989). Some other studies indicate negative relationship (Stedry, 1960; Cherrington & Cherrington, 1973). Prior studies indicate that participation in budgetary setting benefits managers in many ways, such as showing job-related information (Parker & Kyj, 2006), decreasing information asymmetry (Kien, 1992), diminishing managers role ambiguity (Chenhall & Brownell, 1988) and reducing job related tension (Kennis, 1995; Shields, et al, 2000). However as stated earlier, these studies provides inconsistent results for budgetary participation's effect on performance. Thus we propose that:

H1: There is a positive relationship between budget participation and managerial performance.

Budgetary procedural fairness and managerial performance

Procedural and interactional fairness in organizational decision making, have been examined in a number of contexts including budgeting and related settings such as pay allocation and performance appraisal (Broker & Wiesenfeld, 1996; Colquith et al, 2001 and Greenberg, 1990). Procedural fairness theory is concerned with the impact of the fairness of decision making procedures on the attitudes and behaviour of the people involved in and affected by those decisions (Lind & Tyler, 1998; Levanthel, 1980).

Procedural fairness recognizes the positive benefits of allowing employees to participate in decision-making(Lind & Tyler, 1988; Maiga & Jacobs, 2007). Empirical studies have found, that a decision maker's behaviour was significantly related to perceptions of procedural

fairness(Shapiro & Breth, 1993). Studies have found that even if outcomes are not favourable to an individual, they are less likely to be dissatisfied with these unfavourable outcomes, if they believe that procedures used to derive them are fair (Lind & Tyler, 1988; Folger & Bies, 1989).

There is scant literature on the simple and direct relationship between budgetary procedural fairness and managerial performance. However, from the above there is a link between procedural fairness and employee satisfaction and hence employee performance. This invariably means that there is a positive relationship between procedural fairness and managerial performance. We thus hypothesize that:

H2: There is a positive relationship between budgetary procedural fairness and managerial performance.

Organizational commitment and managerial performance

According to Laka-Mathebula (2004), organizational researchers agree that a consensus has not yet been reached over the definition of organizational commitment (Mowday, 1998; Suleiman & Isle, 2000a; 2000b; Tangaro, 2001). The way organizational commitment is defined depends on the approach to commitment that one is adhering to (Scholl, 1981). In this direction, organizational commitment is defined either as an employee's attitudes or as a force that binds an employee to an organization.

Participation in decision making enhances effective organizational commitment (Nodes and Steers, 1981; Mayer & Schoorman, 1998). Earlier studies have suggested that manager's participation will enhance their organisational commitment (Magner et al, 1995; Nouri & Parker, 1998; Parker & Kyj, 2006). Employee's organizational commitment and job satisfaction are positively correlated (Vanderberg & Lanke, 1992; Liou, 1995). Previous studies indicate that affective organizational commitment benefit employee's performance (Allen & Meyer, 1996; Randall, 1990; Riketa, 2002). When managers have committed to an organization, they will accept organizational goals and involve more effort to attain the goals and improve their performance. This leads us to the third hypothesis:

H3: There is a positive relationship between organizational commitment and managerial performance.

Variable interactions

There have been various studies on the interactions between various variables to determined their joint affects on managerial performance. We examine below, the various interactions among the variables.

Budget participation, procedural fairness and managerial performance

According to Sholihin *et al* (2007), the term 'procedural fairness' was first used by Thibaut *et al* (1974) and Thibaut and Walker (1975) to refer to the social psychological consequences of procedural variation with particular emphasis on fairness judgments (Lind & Tyler, 988). Libby (1999) examines the relationships between the use of fair budgeting process and subordinates'

performance and found that the combination of participation and procedural fairness leads to improved performance. Wentzel (2002) finds that budgetary participation has no significant direct effect on either managerial performance or budgetary performance. Rather, the effect was indirect through a high perception of fairness that was translated into higher commitment to the budget goals. We thus hypothesize that:

H4: There is a positive interaction between budget participation and procedural fairness that influences managerial performance.

Budget participation, organization commitment, and managerial performance

Nouri and Parker (1998) find from their study that budget participation affects job performance by means of organizational commitment as an intervening variable. Many studies on organizational commitment assert that democratic and participatory processes in general, are quite significant for the development of this sense. The basic idea of participative decision making (including participative budgeting) is that employees should adopt decisions made by participative method and try to apply the decision to being successful. In this way, participation serves to integrate employees in the organization and commit them to organizational decisions (Lincoln & Kalleberg, 1985). Thus as participation of personnel to decision making is improving, the feeling of organizational commitment also increases. This creates an effect to increase their performance. Participatory budget as one of the participation channels has an important role to play in bringing about these positive effects. Budget participation is a variable, which has the strongest effect on all the motivation variables. (Milani, 1975; Frucot & Shearon, 1991). This leads us to the next hypothesis:

H5: There is a positive interaction between budget participation and organizational commitment that influences managerial performance.

Budget participation procedural fairness, organizational commitment and managerial performance

There are no studies on the combined intervening effects of procedural fairness and organizational commitment on the relationship between budget participation and managerial performance. However, these effects can be inferred from previous other studies that pertain to the respective variables. Lau and Lim (2002 a, 2002b) use a survey method to investigate the effects of procedural justice in performance evaluation. Both studies find that procedural fairness is associated with managerial performance. Lau and Lim (2000a) find that the effect of procedural fairness on managerial performance is indirect via budget performance. Mayner *et al* (1995) asserts that budget participation affects subordinates' trust in supervisors which could lead to trust in the organization and consequently greater organizational commitment. The greater organizational commitment will in turn lead to higher managerial performance. In other words, where managers participate in the budgeting process and there is procedural fairness, such managers will have a sense of organization commitment which in turn will lead to higher performance on their part. This leads us to the principal hypothesis:

H6: There is a three way interaction between budget participation, budget procedural fairness and organizational commitment that influences managerial performance.

Research Method

Sample and data collection

This study employs a cross sectional questionnaire survey to collect empirical data from a sample of 200 subordinate managers who were randomly selected from manufacturing companies quoted in the Nigerian stock exchange. A questionnaire with a covering letter was physically administered to the subordinate managers who play a role in the budgeting process and also have accounting responsibility for the budget results. Approximately 40% or 50 of the respondents returned the questionnaire. 45 or 56.3% of the returned questionnaire were found usable. Thus the final response rate was 22.5%. The following criteria were used for declining a questionnaire usable. (i) The particular respondent had a budget responsibility in the unit; (ii) The unit was an investment center, and (iii) The respondent has held the position for at least two years

Measurement of variables

The variables used to test the hypothesis are budget participation, budget procedural fairness, organizational commitment and managerial performance. (see appendix for an extract of the questionnaire).

Milani's six item measures, used previously in studies of their type was used to assess the subordinate managerial degree of participation in the budget process. The Milani's response scale is a seven point Likert type scale. However, in this study, scale has been reduced to a five point Linkert type scale to align the measures with others in the research instrument as well as simplify if for the research environment.

Procedural fairness was assessed using an eight item Linkert scale type questionnaire. Six of the items were adapted from Magner and Johnsons (1995)'s scale, which pertain to five of Leventhal's (1980) six rules for determining the fairness of allocation procedure. The two remaining questions were developed to address Levenhal (1980)'s representative role and the informational fact of procedural fairness (Greenberg, 19930). Maiga and Jacobs (2007) used the eight point Linkert scale described above. Just like the scale for budget participation, the scale was reduced from seven point to a five point Linkert scale.

Organizational commitment was measured using a nine item scale developed by Mowday *et al* and used by Nouw and Parker (1998). The scale is a five point Linkert type scale. Managerial performance was measured by the Linkert type scale developed by Mahoney *et al* (1965).

Research Model

The principal framework for the study of the relationship among the variable is established here. The mathematical model presented below was used to test the hypothesis using the Ordinary Least Square Regression Method.

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_1 X_2 + b_5 X_1 X_3 + b_6 X_2 X_3 + b_7 X_1 X_2 X_3 + e$$

Where

Y = Managerial performance

B = Constant

X₁ = Budget Participation (BP)

X₂ = Budget Procedural Fairness (BPF)

X₃ = Organizational Commitment (OC)

X₁ X₂ = two way interaction between budget participation and procedural fairness (BP)(BPF)

X₁ X₃ = two way interaction between budget participation and organizational Commitment (BP)(OC)

X₂ X₃ = two way interactive between procedural fairness and organizational commitment (PF)(OC)

X₁ X₂ X₃ = three way interaction between procedural fairness and organizational commitment (BP/BPF/OC)

E = error term

Results

The study consists of two main divisions namely, the interaction model (principal model) that investigates the interaction of the variables that determine managerial performance and the unit models that examine the effects of the individual variables and lower levels of interactions of these variables on managerial performance. We shall first examine the principal three factors model involving the highest level of interactions among the variables.

The model consists of four factors (budget participation, budget procedural fairness, organizational commitment and managerial performance). The measures of fit are assessed using structural equation modeling. There is no consensus on a single set of measure of fit (Murayana, 1998). The standard practice is to report several measures (Maiga & Jacobs, 2007). In this study, we utilize the R bar squared, the Durbin Watsin Statistic and the F-statistic to assess the fitness of the regression models. The regression uses an alpha significance level of 5%. This is consistent with conventional guidelines on accounting research (Kerlinger, 1986). The result of the repression of the three – way interaction model is shown in table 1 below.

Table 1 Ordinary Least Squares Estimation For Three Factor Model

Dependent variable is Y = Managerial Performance

45 observations used for estimation from 1 to 45

Regressor	Coefficient	Standard Error	T-Ratio	[Prob]
A	-2.4645	1.7993	-1.3697	[.179]
BP	-1.1734	0.7852	-1.4942	[.144]
BPF	4.9853	2.1041	2.3693	[.023]
OC	5.6987	2.0243	2.8152	[.008]

BP/BPF	0.1868	0.1533	1.2184	[.231]
BP/OC	-0.5613	0.6761	-83021	[.412]
PF/OC	-8.2312	2.6934	-3.0560	[.004]
BP/BPF/OC	2.4687	1.0495	2.3523	[.024]
R-Squared		.51645	R-Bar-Squared	.42497
F-stat. F (7, 37)	5.6453	(.000)	DW –statistic	2.4653

It was hypothesized that the three independent variables would interact to affect managerial performance. Thus, it was expected that the coefficient of the three-way interaction term, b7 would be statistically significant (Dunk, 1993). The results in table 1 above, indicate that b7 is significant at $p=0.024$. The R squared is 0.51645 while the R bar squared is 0.42497. R bar squared is considered a better measure of goodness of fit because it takes into account the loss of degree of freedom associated with adding extra variables (Brooks, 2002). The R bar squared of 0.424977 means that the proposed model explains 42.497% of the variations in the independent variable, namely managerial performance. This percentage is acceptable because the model did not contain all the variables known to affect managerial performance.

The Durbin Watson statistic for the regression is 2.4653. The Durbin Watson statistic tests the null hypothesis that the residuals from an ordinary least square regression are not auto correlated against the alternative that the residuals are auto-correlated (see Durbin and Watson, 1951). It is a test for first order correlations. The Durbin Watson statistic ranges in value from 0 to 4. A value of 2 indicates non-correlation in the residuals while a value of 0 indicates perfect negative autocorrelation (Brooke, 2002). The model value of 2.4653 is close to 2, indicating that there is no auto correlation.

The last statistic used to assess the fitness of the model is the F –statistic which measure the overall fit of the model (Brooks, 2002). The R –statistic is used by comparing the model value of $F(7,37) = 5.6453$ is greater than the critical value of 2.306. This means that there was an overall goodness of fit.

No attempt was made to interpret the results of significance tests for the main effects (direct effects of the independent variables) and the two way interactions terms since the variables are not measured on ratio scales (Southwood, 1978; Dunk, 1993). Southwood (1978) demonstrated that the coefficient of main effects and lower-order interaction terms together with their statistics are arbitrary if ratio scales are not employed. Thus the main effects and lower level interactions are tested using univariate regression analysis.

The first hypothesis in the series says that there is a positive relationship between budget participation and management performance. The ordinary least squares estimation results are shown in table 2 below.

Table 2 Ordinary Least Squares Estimation For Budget Participation

Regressor	Coefficient	Standard Error	T-Ratio	[Prob.]
A	0.71850	0.075725	9.4884	[.000]
BP	0.21310	0.088261	2.4144	[.020]

R-Squared	.11938	R-Bar-Squared	.09890
F-stat. F(1, 43)	5.8293 (.020) DW –	statistic	2.2670

The Univariate model between budget participation and managerial performance is significant at $P = 0.02$. The R squared is 0.11938 while the R bar squared is 0.098902. This means that budget participation explains only 9.89% of the variations in managerial performance. This is understandable as budget participation is only one of the many factors that affects managerial performance. The Durbin Watson Statistics is 2.2670 which is close to 2. This means that there is no autocorrelation in the residuals. The model value of $F(1,43) = 5.8293$ is greater than the table value of 4.053. This means that there is an overall goodness of fit in the relationship between budget participation and managerial performance. Thus the hypothesis is accepted.

The second hypothesis says that there is a positive relationship between budgeting procedural fairness and managerial performance. The ordinary least squares estimation results are shown in table 3 below.

Table 3 Ordinary Least Squares Estimation For Budget Fairness

Dependent variable is $y =$ managerial performance

45 observations used for estimation from 1 to 45

Regressor	Coefficient	Standard Error	T-Ratio	[Prob.]
A	.60170	.12885	4.6696	[.000]
BPF	.35032	.15099	2.3202	[.025]
R-Squared	.11126	R-Bar-Squared	.09059	
F-stat. F(1, 43)	5.3833[.025]	DW-statistic	2.2161	

From the table R squared is 0.11126 while the R bar squared is 0.090596. The R bar squared of 0.090596 means that budgeting procedural fairness explain 9.0596% of the variations in managerial performance. The Durbin Watson Statistics of 2.2161 is close to 2 indicating that there is no auto-correlation in the residuals. The calculated value of $F(1, 43) = 5.383$ is greater than the critical value of 4.053 which means that there is an overall goodness of fit. Above all, the regression coefficient is significant at $P = 0.025$ which is within the significance level of $P = 0.05$. Thus the hypothesis is accepted.

The next hypothesis says that there is a positive relationship between organizational commitment and managerial performance. The ordinary least squares estimation result is shown in table 4 below.

Table 4 Ordinary Least Squares Estimation for Organizational commitment.

Dependent variable is $y =$ managerial performance

45 observations used for estimation from 1 to 45

Regressor	Coefficient	Standard Error	T-Ratio	[Prob.]
A	.54843	.14986	3.6595	[.001]
OC	.41804	.17793	2.3495	[.023]
R-Squared	.11377	R-Bar-Squared	.0931	
F-stat. F(1, 43)	5.5203[.023]	DW –statistic	2.3216	

From the table, R squared is 0.11377 while R bar squared is 0.093163. This means that organizational commitment explains 9.32% of the variations in managerial performance. The Durbin Watson Statistics is 2.3216 which is close to 2. This means that there is no auto-correlation in the residuals. The calculated value of $F(1, 43) = 5.5203$ is greater than the critical value of 4.053. This means that there is an overall goodness of fit. Also the regression coefficient is significant at $P = 0.023$ which is within the threshold value of $P = 0.05$. Using the above statistics, the hypothesis is accepted.

The next hypothesis says that there is a positive interaction between budget participation and procedural fairness that influences managerial performance. The ordinary least squares estimation for this interaction is shown in table 5 below.

Table 5 Ordinary Least Squares Estimation for Budget Participation and Budget Procedural Fairness

Dependent variable is $y =$ managerial performance

45 observations used for estimation from 1 to 45

Regressor	Coefficient	Standard Error	T-Ratio	[Prob]
A	.71730	.052874	13.5663	[.000]
BP/BPF	.25806	.073618	3.5053	[.001]
R-Squared	.22225	R-Bar-Squared	.20416	
F-stat. $F(1, 43)$	12.2874[.001]	DW –statistic	2.1220	

From the table, R squared is 0.22225 while R bar squared is 0.20416. This means that the interactions between budget participation and budget procedural fairness explain 22.225% of the variations in managerial performance. The regression coefficient is significant at $P = 0.001$. The Durbin Watson Statistic is 2.1220 which is close to 2 and therefore acceptable. The table value of $F(1, 43) = 12.2874$ is greater than the critical value of 4.053. This means that there is an overall goodness of fit. Thus the hypothesis is accepted.

The next hypothesis says that there is a positive interaction between budget participation and organizational commitment that affects managerial performance. The regression results are shown in table 6 below.

Table 6 Ordinary Least Squares Estimation for Budget Participation and Organizational Commitment

Dependent variable is $y =$ managerial performance

45 observations used for estimation from 1 to 45

Regressor	Coefficient	Standard Error	T-Ratio	[Prob.]
A	.64590	.068804	9.3875	[.000]
BP/OC	.35613	.095660	3.7229	[.001]
R-Squared	.24375	R-Bar-Squared	.22617	
F-stat. $F(1, 43)$	13.8598[.001]	DW –statistic	2.3165	

From the table, R squared is 0.24375 while R bar squared is 0.22617 meaning that the interactions between budget participation and organizational commitment explains 22.617% of

the variations in managerial performance. The Durbin Watson Statistic of 2.3165 from the regression results is close to 2, which means there is no autocorrelation. The calculated value of $F(1, 43) = 13.8598$ is greater than the critical value of 4.052 indicating that there is an overall goodness of fit. The regression coefficient is significant at $P = 0.001$ which is less than the threshold value of $P = 0.05$. Thus the hypothesis is accepted.

Discussion of Results

The study proposes two broad classes of hypothesis – the principal hypothesis and other subsidiary hypotheses. The principal hypothesis is based on the principal model which establishes the effect of the three-way interactions of budget participation, budget procedural fairness and organizational commitment on managerial performance. The other group of hypotheses examines the effect of the individual variables and their lower level interactions on managerial performance. The results show that there is a positive interaction between budget participation, budgeting procedural fairness and organizational commitment that affects managerial performance. However, the results show that the theoretical structural principal model provides only a limited explanation for the variations in managerial performance. This is understandable as there are other variable other than three in the model that affects managerial performance. Though there have been many studies in the relationship between budget participation and managerial performance, no study has examined the combined moderating effects of budget procedural fairness and organizational commitment.

The first hypothesis says that there is a positive relationship between budget participation and managerial performance. This proposition was accepted by the study. This is in line with the position of merchant, 1981, Brownell, 1982 among others. It however, contrasts with the position of Steady, 1960 and Cherrington and Cherrington, 1973) subsidiary who finds that there is a negative relationship between budget participation and managerial performance.

The next hypothesis says that there is a positive relationship between budgetary procedural fairness and managerial performance. This position was also supported by the study. There is scanty literature on the direct relationship between budget procedural fairness and managerial fairness.

The study also supported the hypothesis that there is a positive relationship between organizational commitment and managerial performance. This is in line with the findings of Allen and Meyer, 1996; Randall, 1990; and Riketa, 2002. The next hypothesis is on the effect of the interaction between budget participation and budgetary procedural fairness on managerial performance. This position was supported by the study just as the effects of the interaction between budget participation and organizational commitment. There is however, scanty literature on these interactions.

The effects of the variables are observed from the study of the principal model and the subsidiary models. From the results, the variables explain very little variations in managerial performance. However, when these variables interact, they progressively explain higher proportions of the variations of in the defendant variable. The three ways interaction model gave the highest explanations of the variations in managerial performance.

Summary of Findings

This study was carried to examine the role of budgetary participation, procedural fairness and organizational commitment on managerial performance. From the study, the following major findings were made: (i) There is a positive relationship between budget participation and managerial performance.(ii) There is a positive relationship between budgetary procedural fairness and managerial performance.(iii) There is a positive relationship between organizational commitment and managerial performance(iv) There is a positive interaction between budget participation and procedural fairness that influences managerial performance (v) There is a positive interaction between budget participation and organizational commitment that influence managerial performance (vi) There is a three way interaction between budget participation, budget procedural fairness and organizational commitment that influences managerial performance.

Conclusion and Recommendations

Overall, the results show that there is a positive three way interactions between budgetary participation, budgetary procedural fairness and organizational commitment that affects managerial performance. The study also finds that there is a positive relationship between budget participation, budget procedural fairness and organizational commitment respectively on managerial performance.The results have both theoretical and practical implications. The study, from a theoretical perspective, extends our understanding of some of the factors that affect managerial performance in a budgeting setting. The study also critically illuminated the interactions among these variables.

From a practical viewpoint, the results of the study have implication for managerial motivation and performance in a budgetary setting. It explains how budget participation and budgetary procedural fairness can lead to organizational commitment and eventually to managerial performance. Thus to increase managerial performance it is recommended that managers should be involved in the budgetary process. Also the budgetary procedures should be fair to ensure organizational commitment that would translate into higher managerial performance.

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Appendix

Questionnaire on the Relationship between Budget Participation, Budget Procedural Fairness, Organisationsl Commitment And Managerial Performance

Please tick as appropriate

Is your division investment centre?

- 1 (A) YES
- (A) NO
2. Do you have a responsibility for achieving the budget in your unit
- (A) YES
- (B) NO

If your answers to the above two questions is Yes, please answer the following question, otherwise stop here and return the questionnaire.

Below are a list of statement about budget in your organization. Kindly indicate the extent to which you agree or disagree with the respective statement using the following codes:

SA = Strongly Agree A = Agree UD = Undecided or not sure
D = Disagree SD = Strongly Disagree

S/N	DESCRIPTION	SA	A	UD	D	SD
SECTION A :BUDGET PARTICIPATION						
1	I am involved in setting on my final budget.					
2	My superior clearly explains budget revision to me					
3	I have frequent budget related discussion with my superior.					

4	I have a great deal of influence on my final budget.					
5	My contribution to the budget is very important.					
6	My superior initiates frequent budget discussions when the budget is being prepared.					
SECTION B :BUDGETARY PROCEDURAL FAIRNESS						
7	Budgeting procedures are applied consistently across all responsibility areas					
8	Budgeting procedures are applied consistently across time					
9	Budgetary decisions for my area of responsibility are based on accurate information and well informed opinions					
10	The current budgeting procedures contain provisions that allow me to appeal the budget set for my area of responsibility					
11	The current budgeting procedures conform to my own standards of ethics and morality					
12	Budgetary decision makers try hard not to favour one responsibility area over another					
13	The current budgeting procedures adequately represents the concerns of responsibility areas					
14	Budgetary decision makers adequately explain how budget allocations for my responsibility are determined					
SECTION C: ORGANISATIONAL COMMITMENT						
15	I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.					
16	I talk up this organization to my friends as a great organization to work for.					
17	I would accept almost any type of job assignment in order to keep working for this organization					
18	I found that my values and the organizations values are very similar.					
19	I am proud to tell others that I am part of this company.					
20	This organization really inspires the very best in me in the way of job performance.					
21	I am extremely glad that I choose the organization to work for over others I was considering at the time I joined.					
22	For me this is the best of all possible organizations for which to work.					
23	I really care about the fate of this organization.					

Section D: Performance

Rate your performance as a man

S/N	TASK	VERY HIGH	HIGH	MODERATE	LOW	VERY SLOW
24	Planning					
25	Investigation					
26	Coordinate					
27	Evaluating					
28	Supervising					
29	Staffing					
30	Negotiating					
31	Representing					
32	Overall performance					