

BUDGETARY PARTICIPATION, PERSONALITY AND PERCEPTION

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Managerial accounting researchers have long assumed that employees' perception of their level of participation in the budget setting process accurately reflects their structural level of participation. However, other factors, such as individual differences (personality), may impact how employees perceive their level of participation. Since managers can only control the structural level participation in the budget setting process, it is important to understand the factors which can influence employee perception of participation. This study uses an experiment with students at a Midwest university to test how personality differences affect perception of varying levels of structural participation. Results suggest individuals perceive types of participation differently, and personality significantly impacts how individuals perceive their involvement in the budget setting process.

Introduction

The participative budgeting stream of literature has long been interested in how subordinate employees respond to increased participation in setting a budget target (Shields & Shields, 1998). However, to date, research in this stream has not considered that the level of participation perceived by the subordinate manager could differ substantially from the actual, structural, amount of participation offered by the senior manager. Moreover, of great relevance to both practitioners, and researchers, individuals experiencing the same level of participation could perceive the experience differently. Such differences could help explain the inconsistent results seen in prior participative budgeting research.

In practice, managers can only directly affect how much involvement they allow employees in the budget setting process, the structural level of participation. A subordinate employee's perception is an assessment by that employee of their involvement and influence on the budget target. This assessment would certainly be informed by the structural level of participation offered, but also by individual differences within the employee. Simply put, two employees might experience the same budget setting process, but perceive the experience very differently.

While such an observation is quite intuitive, participative budgeting research routinely uses measures of perceived participation, most commonly derived from the scale first published in Milani (1975), as measures of participation (Brownell & McInnes, 1986; Mia, 1988; Wentzel, 2002). The lack of recognition that perceived participation and structural participation may function as different constructs presents a gap in the current research. This study attempts to fill this gap by presenting the results of a laboratory experiment hypothesizing significant interactions between the structural level of participation, and four personality dimensions drawn from the five-factor model of personality.

Results of the experiment indicate individual differences, personality, do interact with structural participation to affect perceived participation. Importantly, results suggest individuals may perceive their participation as falling, when the structural level of participation has increased. The results contribute to the extant literature by identifying one factor which may contribute to inconsistent results obtained in prior studies. The results contribute to practice by identifying the importance of the nature of participants in how participation is perceived.

Theory and Hypotheses

Participation in Budgeting

A key purpose for increasing employee participation in setting budget targets is to increase employee motivation (Argyris, 1960; Hofstede, 1968; Shields & Shields, 1998). While research in this area spans several decades, studies in this area have produced inconsistent results. A contributing factor to the lack of consensus within this research stream has been the plethora of theories, models, and variable operationalizations utilized (Brown, Evans Iii, & Moser, 2009; Shields & Shields, 1998). For example, budget participation has been operationalized in some studies as a manipulation (Brownell, 1981; Fisher, Frederickson, & Peffer, 2002; Kim, 1992; Kren, 1990), in other studies as a self-report measure of perceived participation (Brownell & McInnes, 1986; Chenhall & Brownell, 1988; Mia, 1988, 1989; Milani, 1975; Hossein Nouri & Parker, 1996; H. Nouri & Parker, 1998; Sholihin, Pike, Mangena, & Li, 2011; Wentzel, 2002; Wong-On-Wing, Guo, & Lui, 2010), and in yet others as a simple self-report (Searfoss & Monczka, 1973).

To date, studies have not made clear distinction between perceived participation in setting a budget target, and structural participation in setting the budget target. While a substantial number of studies utilize self-report instruments to assess perceived participation in the budgeting process, in particular instruments derived from Milani (1975), managers cannot directly affect an employee's perception of their level of participation. A manager can affect the degree to which he, or she, solicits input from an employee, but the manager cannot control how the employee perceives the solicitation.

The degree of participation a subordinate manager has in actuality may differ substantially from the manager's perception of their involvement and influence. A senior manager may well solicit substantial input from a subordinate manager, and seriously consider the input in setting the final budget target, but because his input was not explicitly accepted, perceive his participation to have been minimal. Conversely, another individual may perceive his involvement and influence as substantial because his senior manager solicited input. Thus, while studies have consistently used perceived participation as a proxy for participation, it is a distinct construct different than structural participation in the budget setting process. Thus, the research question for this work:

Does perception of participation differ significantly between individuals?

If such differences exist, both practice and research could be significantly impacted. From a research perspective, such differences could help explain the inconsistent results in this stream of research. Such results would suggest that while studies have treated an individual's structural level of participation, and their perceived level of participation as equivalent measures of participation, they are in fact fundamentally different. From a practitioner perspective, understanding that individuals perceive the same structural level of participation differently could help managers better structure their budgeting and incentive systems. At the very least, it would help managers have more accurate expectations of the effectiveness of participative budgeting systems.

The Five-Factor Model of Personality

Before delving into how personality might affect perceived participation, it is worthwhile to briefly introduce the five-factor model of personality, around which the study of personality has largely coalesced. While the broad acceptance of a five-factor model is a relatively recent phenomenon, the concept of a five-factor model has existed in personality research for many decades (J. M. Digman, 1990). The five broad personality factors are commonly described as: conscientiousness, neuroticism (also

called, with reverse scaling, emotional stability), agreeableness, extraversion and openness to experience (Costa & McCrae, 1988; J. M. Digman, 1990; John M. Digman & Inouye, 1986; Goldberg, 1990).

Conscientiousness is the personality trait which has shown the greatest and most consistent impact on work-related outcomes (Murray R. Barrick & Mount, 2005). The descriptors which typify individuals displaying a high level of conscientiousness include: intentional, dependable, thorough, responsible, achievement-oriented and persevering (Murray R. Barrick & Mount, 1991; Digman, 1990). As the descriptors strongly imply, individuals exhibiting a high level of conscientiousness tend to display a substantial degree of care and involvement for their work (Judge, 2002; Penney, David, & Witt, 2011).

The attention-to-detail and focus associated with individuals exhibiting high levels of conscientiousness (Murray R. Barrick & Mount, 1991) suggest such individuals would have a very accurate perception of their level of participation. In the low participation condition a highly conscientious individual would accurately perceive their request as having influenced the budget target. Conversely, given the distributive nature of most budget negotiations, a highly conscientious individual would perceive more keenly than others that the budget target had moved away from their original position in the high participation condition. Thus:

H1A: In low participation conditions, the personality trait conscientiousness will exhibit a significant, positive correlation with perceived participation.

H1B: In high participation conditions, the personality trait conscientiousness will exhibit a significant, negative relationship with perceived participation.

Like conscientiousness, neuroticism has exhibited broad effects on work-related outcomes, but with inverse effects (Murray R. Barrick & Mount, 2005). High levels of neuroticism have been associated with a poor ability to manage stress, which can function as a broad inhibitor to positive work outcomes (Murray R. Barrick & Mount, 1991). Descriptors typically associated with higher levels of neuroticism include: anxiousness, depression, anger, emotionality, worrisome, and insecure (Murray R. Barrick & Mount, 1991; Goldberg, 1990). Behaviors associated with higher levels of neuroticism include the previously mentioned poor ability to handle stress, and a belief that the individual has little ability to affect outcomes (Judge, 2002; Penney et al., 2011).

The general belief of an inability to influence outcomes associated with higher levels of neuroticism suggests higher levels of this trait would tend to correlate with generally lower perceived participation. In low participation conditions, individuals exhibiting higher levels of neuroticism would tend to perceive their request as having little influence. In high participation conditions, highly neurotic individuals would likely perceive the give-and-take of the negotiating process as substantially reducing their influence on the budget target, resulting in lower perceived participation. Thus:

H2A: In low participation conditions, the personality trait neuroticism will have a significant, negative correlation with perceived participation.

H2B: In high participation conditions, the personality trait neuroticism will exhibit a significant, negative relationship with perceived participation.

Agreeableness has shown consistent positive work-related outcomes in situations involving cooperative interaction (Murray R. Barrick & Mount, 2005; Murray R. Barrick, Mount, & Gupta, 2003; Mount, Barrick, & Stewart, 1998). The descriptors most closely associated with higher levels of agreeableness include: altruism, friendliness, sympathy, kindness, unselfishness, fairness and generosity (Murray R. Barrick & Mount, 1991, 2005; Goldberg, 1990; Judge, 2002). These typifying behaviors

suggest highly agreeable individuals thrive in situations which allow them to interact with others and contribute to their organization (Mount et al., 1998; Penney et al., 2011).

Additionally, agreeableness has been the personality factor most explored in negotiation research. Results from this research provide insight in how this dimension may respond to increased participation in budget setting. In negotiation outcome research highly agreeable individuals consistently generate poorer outcomes in distributive negotiations (zero-sum, win-lose type negotiations), but generate greater outcomes in integrative negotiations (win-win type negotiations) (Bottom & Sharma, 2013; Dimotakis, 2012). The results suggest highly agreeable individuals engage more when the circumstance allows collaboration, but withdraw when forced into confrontation. In a low participation condition, the highly agreeable individual would be expected to engage, as they perceive the opportunity to assist in determining the best budget target. However, in the high participation condition the distributive nature of most budget negotiations would tend to prompt withdrawal, and lower perceived participation. Thus:

H3A: In the low participation condition, the personality trait agreeableness will have a significant, positive correlation with perceived participation.

H3B: In the high participation condition, the personality trait agreeableness will exhibit a significant, negative relationship with perceived participation.

Research related to this dimension suggests at least two related, but not identical, sub-dimensions comprise what is generally considered the extraversion dimension (Murray R. Barrick & Mount, 1991). One aspect of extraversion relates to sociability. This sub-dimension focuses on a desire for social interaction. In terms of trait activation, the focus for individuals rating high on this sub-dimension seems to be interaction simply for the sake of interaction. The other sub-dimension of extraversion has been likened to ambition. Individuals rating high in this sub-dimension tend to focus not on interaction for the sake of interaction, but on initiating interaction as a way to gain reward, status and influence (Murray R. Barrick & Mount, 1991; Murray R. Barrick et al., 2003; Goldberg, 1990; Penney et al., 2011).

Individuals exhibiting high levels of extraversion would tend to focus on their ability to obtain their desired outcome (Murray R. Barrick, Mitchell, & Stewart, 2003; Mount et al., 1998). Thus, while more extraverted individuals would be expected to perceive themselves as having significantly participated in an outcome, they would also be expected to be more sensitive to situations where a negotiation moved away from their desired outcome. So, in high-participation conditions, usually involving budget negotiations, more extraverted individuals would likely view their influence on the budget target waning as the negotiated outcome moves away from their initial position. Thus:

H4A: In the low participation condition, the personality trait extraversion will exhibit a significant, positive relationship with perceived participation.

H4B: In the high participation condition, the personality trait extraversion will exhibit a significant, negative relationship with perceived participation.

Openness to experience is the least defined and least understood of the dimensions in the five-factor model of personality. The traits associated with this dimension range from cultural interests, to intellect, to creative pursuits and the ability to imagine and fantasize. While openness has been connected positively with training results in some studies, it has not shown a broad relationship with work-related outcomes (Murray R. Barrick & Mount, 1991, 2005; Murray R. Barrick et al., 2003; Goldberg, 1981, 1990; Judge, 2002; Penney et al., 2011). Since openness to experience has not been significantly associated with variables associated with this study, no hypotheses are postulated relating to it.

Methodology

Experiment

To test the postulated hypotheses, a laboratory experiment was conducted utilizing undergraduate students attending a university in the U.S. Midwest. Students received extra credit in College of Business courses for participating in the study. Additionally, students were compensated in “tickets”, which were entered in a drawing for one of two gift-cards. Students have often been utilized as proxies for professionals and manager in budgeting research (J. Fisher, Frederickson, & Peffer, 2002; Kren, 1990; Lindquist, 1995; Rankin, Schwartz, & Young, 2008; Schatzberg & Stevens, 2008; Stevens, 2002; Waller, 1988). Moreover, the personality traits of interest in this study have shown durability from young adulthood into old age (Costa & McCrae, 1988). Thus, the responses obtained in this experiment should be similar to responses the individuals would provide as managers in the very near future.

Before completing the experimental task, participants received experimental instructions, and completed two practice rounds of the task. Also, half of participants completed the personality assessment before completing the experimental task, while the other half completed it after. No difference was observed in the responses of the two conditions. After these initial procedures, all administered by a research assistant, the researcher greeted the participant, and set the budget goal for the production round. The method for setting the production round budget goal was determined by the experimental manipulation to which the participant had been assigned. After the budget for the production round had been set, the participant completed instruments to measure their perception of their level of participation in setting the production round budget target and of their motivation to attain the budget target (motivation responses were utilized in a different experiment). The participant then completed the 3-minute production round, which determined their final compensation. Total compensation was then calculated, paid, and the participant was excused from the laboratory.

The focal task in this study was a basic decoding task similar to that used in numerous prior participative budgeting studies (Chow, Cooper, & Haddad, 1991; Chow, Cooper, & Waller, 1988; Hossein Nouri & Kyj, 2008; Stevens, 2002), in which participants translated 2-digit numbers into letters during a 3-minute production round utilizing a translation key which was provided to them. The participant was provided with a packet of 10 sheets of paper containing rows of randomly ordered two-digit numbers (ranging from 11 – 88). Each number corresponded with a letter on the translation key. Each letter of the English alphabet was assigned three different numbers on the translation key, thus the numbers 12, 48, and 74 could all be correctly translated as “J”. Each correctly translated number counted as one good unit of production.

Compensation in this study was in the form of “tickets” which were entered into a drawing for two \$50 gift cards. Participants received ten tickets for participating. Additional tickets were earned for reaching and exceeding the budget goal set before the production round. The participant received a bonus of ten tickets for reaching the budget goal and an additional ticket for each unit of production in excess of the budget goal for the production round.

Of the 181 total observations, a final usable sample of 177 observations was obtained; the no participation condition contained 58 observations, the low participation condition contained 60 observations, and the high participation condition contained 59 observations. Two observations were removed from consideration because the participants left before completing all parts of the experiment. Another two did not fully complete the personality questionnaire and had to be removed from consideration. Additionally, three participants failed to answer a single item on the personality questionnaire; however, the response to this sole item (out of 50 total items in the questionnaire) was imputed utilizing the EM approach available in SPSS’s Missing Value Analysis.

The budget target was manipulated at three levels. At the first level the researcher assigned a budget target to the participant. In this “no participation” condition the researcher, playing the part of a manager, added a random number of units (ranging from 5 to 25) to the participant’s average performance in the familiarization rounds. The average performance in the second practice round was 61 correctly decoded numbers, and ranged as high as 91, so the addition does not seem overwhelming. The participant was not informed of how the manager arrived at the budget target. This participation level is utilized as a check of the participation manipulations. In the second level condition, “low participation”, the participant suggested a budget target for the production round to the manager, but the final budget goal was assigned by the manager. This budget goal was determined by adding a random number of units, also ranging from 5 to 25, to the participant’s suggested goal. In the third, “high participation”, condition the participant negotiated the budget target with the manager. In this condition, the participant suggested a budget target to the manager. Then, the manager counter-offered with a budget target determined in the same manner as in the low participation condition. After the counter-offer, the participant could either accept the counter-offer, or make a counter-offer of their own. The negotiation could continue for up to five rounds. If the participant accepted an offer from the manager, it became the budget target. If the manager’s position, determined by reducing the previous offer by a randomly determined number of units (ranging from 1 – 6) was below the participant’s counter offer, the manager accepted the participant’s offer and it became the budget target. If no agreement was reached after five rounds, the manager’s final offer became the budget target.

Other variables in this study were measured with well-established instruments. The International Personality Item Pool (IPIP) 50-item scale was used to assess each participant’s score for the five dimensions of the five-factor model of personality. This scale measures the five factors as articulated in Goldberg (1992). Each factor is assessed with ten items utilizing a five-point Likert scale, with anchors of “Very Inaccurate” and “Very Accurate”. Perceived level of budget participation was measured with the scale first introduced in Milani (1975), and utilized in innumerable participative budgeting studies since (Brownell & McInnes, 1986; Chenhall & Brownell, 1988; Chong & Chong, 2002; Mia, 1988, 1989; Hossein, Nouri & Parker, 1996; H. Nouri & Parker, 1998). The scale was modified to fit the experimental conditions.

Results

Data Assessment

A check of the participation manipulation was performed by completing an ANOVA analysis comparing responses to the modified Milani (1975) perception of participation scale across all three manipulations of the participation variable. The results indicated an overall significant difference across the three manipulations. Participants in the no participation (assigned) manipulation perceived participation to be lower than participants in the manipulations used to test the study hypotheses. Further analysis did not include the no participation condition.

Regression analysis was utilized to test the postulated hypotheses. The regression model utilized a dummy variable for the participation condition. This variable was coded as a 0 for the low participation condition, and as a 1 for the high participation condition. Variables for the four personality dimensions tested were calculated by summing the ten items relating to each dimension from the IPIP scale. Interaction terms to assess the moderating relationship of each personality dimension with the structural level of participation on perceived participation were calculated by multiplying each personality dimension variable with the structural participation variable for that observation.

Regression analysis was chosen over other possible tests, such as ANOVA, to avoid losing power to detect a significant relationship between the variables. The personality variables included are measured on an interval scale. Therefore, to assess the relationship of these variables with the categorical level of participation variable in other tests, such as an ANOVA, a median split of each of the personality related variables would be required. This would substantially reduce the power of the test to detect a significant relationship (Aiken, West, & Reno, 1991).

An initial assessment of the normality of variables indicated a modest deviation from normality for the participation variable. The treatment for this is a transformation of the data (Hair, Black, Babin, Anderson, & Tatham, 2006). A cubic transformation was determined to provide the best remedy. Additionally, since interaction terms will be included in the model to test for moderating effects, multicollinearity is a distinct concern. To address these concerns, the personality factors were centered before multiplying by the structural participation variables.

Test of Hypotheses

The final regression model consists of:

$CPRT3 = BGNG + CEXTR + CAGREE + CCONS + CNEUR + NGEX + NGAG + NGCN + NGNU$
where:

<u>VARIABLE</u>	<u>DESCRIPTION</u>	<u>VARIABLE</u>	<u>DESCRIPTION</u>
CPRT3	Perceived participation	CNEUR	Personality dimensions neuroticism
BGNG	Dummy variable (0 = low participation; 1 = high participation)	NGEX	Interaction term BGNG * CEXTR
CEXTR	Personality dimension extraversion	NGAG	Interaction term BGNG * CAGREE
CAGREE	Personality dimension agreeableness	NGCN	Interaction term BGNG * CCONS
CCONS	Personality dimension conscientiousness	NGNU	Interaction term BGNG * CNEUR

Initial results indicate a significant overall model which explains just over 23% of the observed variation in perceived participation, and includes several variables with coefficients possessing p-values below .05.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.540	.292	.233	1971.0383	1.996

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig
Regression	174275433.7	9	19363937.07	4.984	.000
Residual	423464136.3	109	3884992.076		

Total	597739570.0	118			
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Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-632.361	258.369		-2.448	.016
BGNG	1667.444	366.751	.372	4.547	.000
CEXTR	17.484	41.052	.061	.426	.671
CAGREE	156.029	57.856	.359	2.697	.008
CCONS	122.494	46.221	.321	2.650	.009
CNEUR	32.065	44.836	.097	.715	.476
NGEX	-80.377	55.362	-.203	-1.452	.149
NGAG	-23.281	76.244	-.041	-.305	.761
NGCN	-76.622	64.228	-.142	-1.193	.235
NGNU	-24.223	61.257	-.051	-.395	.693

However, since regression analysis is particularly sensitive to extreme values, it is important to assess the impact of outlier observations on the overall model. In performing this assessment, three observations were identified for possible removal from the analysis. Two of the observations (observation numbers 150 and 172) possessed standardized residuals of -2.01 and -2.09 respectively at the time of identification. Further analysis of the individual responses suggests the participants did not attend to the experimental manipulation. The third observation (observation number 42) possessed a high, but not extreme standardized residual (1.79); however, this observation possessed an outlier combination of values, resulting in a Mahalanobis distance value of 39.82, and held substantial influence on every variable in the statistical model. The leverage value for observation number 42 at the time of identification was .34. A regression analysis conducted without these three observations shows an improvement in adjusted R^2 from .233 to .293. Given this marked improvement in the predictive ability of the model, and the extreme nature of the three observations, the identified observations were removed from the regression analysis used to test this experiment's hypotheses.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.590	.348	.293	1821.2096	2.063

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig
Regression	186216625.1	9	20690736.12	6.238	.000
Residual	348264470.8	105	3316804.484		
Total	534481095.9	114			

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	-289.558	252.899		-1.145	.255
BGNG	1376.635	349.706	.319	3.937	.000
CEXTR	104.487	44.224	.378	2.363	.020
CAGREE	59.492	60.141	.142	.989	.325
CCONS	177.736	45.225	.472	3.930	.000
CNEUR	122.961	47.057	.386	2.613	.010
NGEX	-174.692	56.066	-.465	-3.116	.002
NGAG	83.189	75.764	.154	1.098	.275
NGCN	-159.437	62.306	-.301	-2.559	.012
NGNU	-120.816	60.890	-.271	-1.984	.050

Hypotheses H1A, H2A, H3A, and H4A all predict significant correlations between personality dimensions (conscientiousness, neuroticism, agreeableness, and extraversion) and perceived participation in the low participation condition. Coefficients for the respective personality variables in the regression model (CEXTR, CAGREE, CCONS, and CNEUR) with the prescribed sign and a p-value below .05 would support these hypotheses. The hypotheses variables for conscientiousness, and extraversion, meet this criteria, and hypotheses H1A, and H4A are supported. The coefficient for neuroticism is statistically significant (p-value < .05). However, the sign for this coefficient is positive, while the hypothesized sign was negative. Thus, while a statistically significant correlation exists, hypothesis H3A is not supported. The p-value for agreeableness' coefficient is greater than .05, indicating a non-significant correlation between that variable, and perceived participation. Therefore, H3A is not supported.

Hypotheses H1B, H2B, H3B, and H4B all predict significant interactions between increased participation in setting a budget goal (the high participation experimental condition) and the respective personality variables (conscientiousness, neuroticism, agreeableness, and extraversion). Coefficients for the interaction terms in the regression model possessing p-values below .05, and with the hypothesized sign would support these hypotheses. The coefficients for the interaction terms relating to conscientiousness, neuroticism, and extraversion all meet these requirements, indicating support for hypotheses H1B, H2B, and H4B. The coefficient for the interaction term related to agreeableness does not possess a p-value below .05, indicating no support for hypothesis H3B.

Discussion

The results of this experiment suggest that understanding what people perceive as their level of participation in setting a budget target is not quite as simple as assessing their structural level of participation. First, the results indicate that in a low-participation setting, three personality variables: extraversion, conscientiousness and neuroticism significantly impact an individual's perceived participation. This suggests that, to the extent increased perceived participation correlates with increased motivation to achieve a budget target, simply involving individuals exhibiting higher levels of these personality dimensions may positively contribute to increased individual and firm performance, even if the ultimate budget target is actually assigned.

The positive coefficient for neuroticism in the low-participation condition is somewhat surprising, and one avenue for possible future research. A distinctive feature of neuroticism is a lack of belief in one's ability to impact outcomes (Murray R. Barrick & Mount, 1991, 2005; J. M. Digman, 1990; Penney et al., 2011). However, the positive, significant result in this research suggests that this aspect of neuroticism is not necessarily related to the individual's perception of their involvement of an outcome. Although, the structure of the experiment may influence the observed results. The budget setting process was quite straightforward, the task was fairly simple, and the budget applied for only a single production round. This may be an optimal structure for someone possessing higher levels of neuroticism. Hopefully, further research can provide greater insight into this relationship.

The negative interaction effects between the negotiation condition and the personality variables extraversion, conscientiousness, and neuroticism are probably the most significant results for both research and practice. This suggests that what would be considered a higher level of structural participation may, in fact, correlate with lower perceived participation. This negative interaction may contribute to some of the confounding results observed in prior participative budgeting research. Survey research relying on self-report measures of perceived participation as the measure of participation would possess measures potentially significantly different than the structural levels of participation in place. Moreover, participants in studies utilizing manipulation of participation would act on perceptions of participation substantially different than the manipulation condition.

For practitioners, these results suggest simply involving participants in the budget setting process may prove confounding. Even though superiors may invite subordinates into the budget setting process, the personality of the participant, and the nature of the process, may interact such that the participant perceives having had much less participation than the superior believes was offered. Therefore, to the degree desirable consequent variables, such as motivation, are positively related to perceived participation, certain individuals may respond in a manner opposite of that desired.

These results also suggest participation may be a more complex variable than previously thought. The negotiation process used in the high participation manipulation was fairly distributive. No opportunity existed to seek alternatives which allowed both parties to "win". Ultimately, each party had to move away from their initial positions. This moving away appears to result in participants perceiving

less participation in setting the budget target. Further investigation of how participants perceive different forms of increased participation may prove enlightening.

Limitations and Directions for Future Research

This study contains limitations which may reduce the generalizability of its results. Most prominently, it is a laboratory experiment utilizing student participants performing a generic task. Thus, the study's applicability to the population of working adults is limited by the degree to which students are representative of the population and the degree to which responses to this generic task are similar to responses to actual budget target setting in the workplace. Additionally, this was a "one shot" task and the participants did not expect to maintain a relationship with the researcher after the experiment. However, managers in a work setting would tend to expect to continue working with supervisors and subordinates for the foreseeable future in most cases.

As mentioned in the discussion, the study identifies many questions worthy of investigation. Exploration of more refined manipulations of higher levels of structural participation, such as an integrative negotiation, as opposed to a distributive negotiation, may prove enlightening. Beyond this, further exploration of how personality relates to perception of participation in more refined manipulations of participation may provide valuable insights to both researchers and practitioners.

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