

**THE HUMAN VARIABLES WITHIN BUDGETARY CONTROL AND THEIR IMPLICATIONS
ON FINANCIAL PERFORMANCE AT HEIS**Dmytro Tsyhaniuk^{1*}, Wiafe Akenten²,¹ Department of Financial Technologies and Entrepreneurship, Sumy State University, Ukraine² Faculty of Business Administration, Ghana Baptist University College, Kumasi, Ashanti, Ghana

*corresponding author: Dmytro Tsyhaniuk, d.tsyhaniuk@uabs.sumdu.edu.ua

Budgets and budgetary controls are important components of management control intended to encourage resource utilization efficiency in support of the achievement of company strategic goals. Budget control aims to observe transparency and legality at all stages of the budget process to ensure responsible and effective performance by the state of its functions and tasks regarding the formation and spending of budget funds. This study evaluates how employee budget involvement and performance relate in a Ghanaian public university, specifically the University of Education. The University of Education was chosen as the study location to determine the relationship between budget participation and employee performance in Ghana's public universities. Because the government owns 100% of Ghana's public universities and because these institutions are subject to government oversight, the researchers believe that using a single case study is suitable. Throughout the investigation, a multi-analysis and participative strategy was used. Employee performance is evaluated for the research based on how well they contribute to the organization's achievement of the budget objective. The study's particular focus is on the behavioral aspects of budgeting procedures and the effect of budget participation on employees' effectiveness in meeting defined budgetary objectives. The researcher chose 110 respondents who are University of Education staff members using basic random sample and convenience sampling procedures. It is clear from our study that employee participation in the budgeting process is the cornerstone of achieving budget goals because it will enable employees to have a clear understanding of what the budget is meant for, have a voice by ensuring that resources are distributed fairly among departments and faculties of the university. From this, it is obvious that we accept our null hypothesis, according to which budget participation increases employees' performance and their view of the fairness of resource distribution and budget goal clarity. Future studies might also encompass the perspectives of key management figures such as Registrars, Directors of Finance, Vice Chancellors, and other essential officers who play significant roles in the budgeting process of these public universities.

Keywords: higher education management, public universities budgeting, employee budget participation, employee performance, budget, participative management

**ЛЮДСЬКИЙ ФАКТОР У БЮДЖЕТНОМУ КОНТРОЛІ ТА ЙОГО ВПЛИВ НА ФІНАНСОВУ
ЕФЕКТИВНІСТЬ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ**Дмитро Циганюк^{1*}, Віафе Акентен²,¹кафедра фінансових технологій та підприємництва, Сумський державний університет, Україна² Факультет бізнес-адміністрування, Баптистський коледж університету Гани, Кумасі, Гана

*автор-кореспондент: Дмитро Циганюк, d.tsyhaniuk@uabs.sumdu.edu.ua

Бюджетування та бюджетний контроль є важливими компонентами управлінського контролю, спрямованого на заохочення ефективності використання ресурсів для підтримки досягнення стратегічних цілей компанії. Бюджетний контроль має на меті дотримання прозорості та законності на всіх стадіях бюджетного процесу для відповідального та ефективного виконання державою своїх функцій і завдань щодо формування та витрачання бюджетних коштів. У цьому дослідженні оцінюється, як співвідносяться залучення працівників до бюджету та ефективність роботи в державному університеті Гани, зокрема в Педагогічному університеті. Педагогічний університет був обраний як місце проведення дослідження, щоб визначити взаємозв'язок між участю працівників у формуванні бюджету та продуктивністю працівників у державних університетах Гани. Оскільки уряд володіє 100% державних університетів Гани та оскільки ці заклади підлягають державному нагляду, дослідники вважають, що використання такого прикладу є доцільним. Під час дослідження використовувалася мультианаліз та стратегія участі. У цьому дослідженні результативність роботи співробітників розглядається з точки зору їх сприяння досягненню організацією бюджетної мети. Особлива увага в дослідженні зосереджена на поведінкових аспектах процедур бюджетування та впливу участі в бюджетуванні на ефективність співробітників у досягненні визначених бюджетних цілей. У дослідженні було залучено 110 респондентів, які є співробітниками Університету освіти, використовуючи базову випадкову вибірку та процедури зручної вибірки. З нашого дослідження стало зрозуміло, що участь працівників у процесі бюджетування є наріжним каменем досягнення бюджетних цілей, оскільки вона дозволяє працівникам мати чітке розуміння того, на що спрямований бюджет, мати право голосу, забезпечуючи справедливий розподіл ресурсів між відділами та факультетами університету. Таким чином, у дослідженні доведено прийняту нульову гіпотезу, згідно з якою, участь у бюджеті підвищує результативність працівників і покращує їхню думку про справедливість розподілу ресурсів і ясність цілей бюджету. Майбутні дослідження можуть також охоплювати перспективи ключових управлінських фігур, таких як ректори, фінансові директори, проректори та інші важливі посадові особи, які відіграють значну роль у бюджетному процесі цих державних університетів.

Ключові слова: управління у вищій освіті, бюджетування державних університетів, партисипативне бюджетування, ефективність працівників, бюджет, партисипативний менеджмент.

Cite as: Tsyhaniuk, D. & Akenten, W. (2024). The Human Variables Within Budgetary Control and Their Implications on Financial Performance at HEIs. *Visnyk of Sumy State University. Economy Series*, 2, 71-81. <https://doi.org/10.21272/10.21272/1817-9215.2024.1-07>

INTRODUCTION

Budgets and budgetary controls are crucial tools in management control systems, aimed at optimizing resource use to support the attainment of organizational strategic goals. According to Moolchand et al. [1], citing Altbach and Johnstone [2] and Petry and Kenney [3], public funding for many institutions has reportedly diminished recently and continues to decrease in real terms. This is evidenced by the delays and ongoing discussions regarding government grants and releases to public colleges in Ghana. Such public policy dynamics have led to increased competition for funding among universities [4].

Parkinson and Taggar [5] argue that effective budgeting processes, which incorporate positive elements, can secure the necessary support and appropriate attitude from both academic and administrative staff, thus enhancing performance. The limited available resources, coupled with numerous infrastructural and operational demands, necessitate efficient budgeting and consensus on underlying goals and resource allocation. Public universities, including the University of Education, develop annual operational budgets to project revenue and expenditure, aligning with both long-term and short-term goals as per Ghana's Financial Administration Act 2003 (Act 654) and Financial Administration Regulation 2004 (Act 654). These budgets conform to the government's approved Medium Term Expenditure Framework (MTEF). The budgeting process outlined in the Financial and Stores Regulation 2007 for public universities adopts a bottom-up approach, where departments and sections submit their budgets based on their operating plans for consolidation. Resource allocation is based on norms set by the National Council for Tertiary Education (NCTE), aimed at promoting fair and equitable resource distribution. Thus, a controlled resource distribution method and a bottom-up budgeting approach are expected to enhance the performance environment.

However, researchers like Wallander [6] suggest that a bottom-up approach to budgeting can lead to conflicts, as the input from end-users may differ from the directives of top management. While this approach promotes employee participation and boosts performance, Wallander points out that different professional perspectives can cause disagreements. For example, human resource managers might advocate for specific incentives and equipment, whereas accountants, focused on maintaining the organization's liquidity, may oppose these suggestions.

To mitigate such conflicts, initiating the budget process with top experts and cascading it downwards can ensure acceptance from employees without input, reducing conflicts between those who allocate resources and those who use them. Neely, Sutcliff, and Heyns [7] agree with Wallander, noting that it is not entirely accurate to claim that behavioral factors like budget participation significantly influence the budgeting process, as evidenced by the Financial Administration Act 2003 (Act 654) and Financial Administration Regulation 2004 Act 654, which form the basis for the budgets of Ghana's public universities. They argue that budgets are inherently based on strategic behaviors, and participation in budgeting does not necessarily result in fair resource distribution. Instead, allocation relies heavily on the relationships and persuasive abilities of managers or employees.

Given these differing perspectives, there is a need to clearly identify the role of behavioral elements in the budgeting process of public universities in Ghana. The Act aims to ensure that the recommended bottom-up approach for budget preparation includes all behavioral elements, ultimately benefiting the universities through enhanced employee performance.

LITERATURE REVIEW

The study's literature evaluation is primarily concerned with Ghana's public sector budgeting system and the behavioral aspects of budgeting, such as budget participation, budget goal clarity, procedure fairness, and perceptions of revenue distribution fairness. Literature on the relationship between budgetary behavior and staff performance and devotion to the corporate aim is also included. According to Reid's research from 2002 [8], a budget describes the financial expectations of a corporation for a future time frame. According to Topper's [9] commentary, the budget's functions include, among others, determining the amount of money needed to cover the costs of planned activities during a specified period, estimating the cost of a set of activities and then choosing which

ones will be carried out within the limits of the resources available, managing the business by allocating business funds to various activities, and adjusting the allocation. On the other hand, participation is viewed in the works of Mai [10], reinforced by Parkinson and Taggar as well as Lin and Chang [11], as a method for planning and goal-setting in the face of environmental unpredictability as well as for inspiring subordinates. According to the authors, taking part in budgeting has advantages due to a great information exchange, improved activity coordination, and the growth of team spirit. Allowing subordinates to participate in budget creation, according to Nouri and Parker [12], may lead to the disclosure of "private information" that would produce more accurate plans and budgets.

Shah [13] noted that employee participation in the budgeting process enables effective alignment of goals of various parties involved in the process, which is another advantage of budget participation. Numerous authors, including Chenhall and Brownell [14] and Parker and Kyi [15], who were both cited by Nasser [16], believe that budget involvement is the greatest method for making the employees aware of the organization's goals and for eliminating any role ambiguity. According to the authors, role uncertainty has a substantial negative correlation with individual performance, and budget participation can fix that.

Despite the contrary views expressed by authors like Neely, Sutcliff, and Heyns [7], who have highlighted budget issues and do not believe that budget participation results in a fair distribution of resources, authors like Gilliland [17], Cohen [18], Wentzel [19], Lind and Tyler [20], and Leventhal [21], believe that the aforementioned authors' claim is false. In the opinion of the authors who support budget participation, it is a way to achieve equity in the distribution of resources. In actuality, they compared equity theory and budget participation. According to the goal theory proposed by Locke [22], authors like Lin and Chang [11] support the notion that giving careful consideration to certain behavioral aspects of budgeting, such as allowing employee participation, encourages employees to be committed to the budget goal, which in turn will have a positive impact on the employees' behavior. In other words, increased employee performance will result from goal commitment attained by budget involvement. Although it is clear from the literature that budget participation is essential for motivating employees to work toward the budget goal, some authors, like Jones [23], hold the opposite view, arguing that participation in budgeting does not always translate into a commitment from the employee to work toward the budget goal because sometimes employees do not show an interest in participating and must be persuaded to do so. According to the author, the reason they have little interest in participating in the budget is because they think that doing so will only result in cost savings for their departments. It can be challenging to view budget participation as playing a vital role in goal commitment that will have a good impact on employees' performance, according to writers like Bognaes [24]. According to the author, this can be very challenging to accomplish because budget participation might be perceived as a waste of time that yields no benefits because employees don't exhibit interest in tasks for which they weren't hired. Employees are more likely to pay close attention to their job descriptions and disregard those that do not fit them if they are sufficiently specified. This means that it will be very difficult for them to be dedicated to helping to achieve the purpose of the budget if budget preparation is not a part of their job descriptions. One might be tempted to propose the following hypothesis regarding budget participation and its role in budget goal clarity, resource distribution fairness, goal commitment, and employee performance after taking into account the differing perspectives on this topic:

H0: Employee performance, equitable resource allocation, and goal commitment are all influenced by budget participation.

H1: Budget participation does not increase employees' performance, fairness in resource allocation, or commitment to goals.

The hypothesis was developed from the aforementioned assessment of the literature by different authors, and statistical methods were used to determine the link between the variables.

METHODOLOGY AND RESEARCH METHODS

The University of Education was chosen as the study location in order to determine the relationship between budget participation and employee performance in Ghana's public universities. Employee performance is evaluated for the research based on how well they contribute to the organization's achievement of the budget objective. Because the government owns 100% of Ghana's public universities and because these institutions are subject to government oversight, the researchers believe that using a single case study is suitable. Throughout the investigation, a multi-analysis and participative strategy was used. Through thorough and in-depth consultations and discussions, all significant stakeholders were involved in the study. A thorough analysis of the documentation produced by other researchers, governmental bodies, and institutions was also carried out.

The study's target demographic consists of all university employees, primarily from the Kumasi campus. Three functional faculties, six teaching departments, and twenty-nine non-teaching sections and units make up this campus. Three hundred forty-two people made up the entire employee population as of June 2013. The workforce included ten (10) heads of non-teaching departments, six (6) heads of teaching departments, and three (3) deans, twenty-five (25) non-academic sections and departments. The supporting staff, which consists of administrators and academics, numbers 298 people.

Both convenience and randomness were exploited in the sampling process. A total of 110 people were selected for the sample, including three deans, sixteen department heads, 25 coordinators, and 66 members of support staff. While the other staff members were chosen using a straightforward random selection process, the Deans, Heads of department, and Coordinators were chosen using a convenience sampling technique based on their availability. In order to do this, all of the names of the supporting staff were gathered from the university's human resources department, and sixty-six individuals were chosen through a lottery form. By visiting their departments, the researchers from there made contact with the chosen staff and informed them of their intentions. Deans, Heads of Department, and Coordinators were chosen based on the fact that they are responsible for managing their respective responsibility centers' budgets and act as spending officers. They hold important positions and are involved in allocating finances to accomplish the organizational objectives. The other staff members work for faculties, departments, and units to support coordinators, deans, and heads of departments in achieving their operational objectives.

Table 1. Distribution and response of questionnaires

S/N	Staff category	Expected Respondents	Actual Respondents
1	Deans	3	2
2	Heads of Departments	16	11
4	Heads of Units	25	24
5	Other supporting staff	66	30
	Total	110	69

Source: created by authors

Structured questionnaires with Likert-type response scaling were used to collect the data. The survey questionnaire was divided into three main sections to provide general information on the characteristics of the respondents and other elements that were going to be researched. The inquiries were all closed-ended. The first section of the questionnaire focuses on personality traits such job title, educational background, financial experience, work history gained at the institution, department, age, and gender. The second section of the study examined the behavioral aspects of budgeting, including participation, goal clarity, equitable resource distribution, goal commitment, and employee performance. 33 instruments were used, and questions were divided into four groups and graded on a five-point Likert scale. These tools are for budget participation (11 tools), budget objective clarity (7 tools), distributive fairness (7 tools), and procedural fairness (8 tools). In the third section, 25 instruments with five-point Likert scale questions were given to two groups. Employee performance is measured by 15 instruments, while corporate goal commitment is measured by 10 instruments.

This section aided the researchers in gathering data on commitment to and performance with regard to the University's Strategic Plan. The questionnaire's data was edited, categorized, tabulated, coded, and subjected to quantitative analysis. Using the SPSS software package (SPSS version 16), quantitative data analysis was carried out. The Pearson's correlation test was used to examine the relationship between the independent and dependent variables. Regression analysis was used to assess the influence of the independent variables on the dependent variables.

Measurement of Variables

Employee performance is measured by 15 instruments, while corporate goal commitment is measured by 10 instruments. This section aided the researchers in gathering data on commitment to and performance with regard to the University's Strategic Plan.

Budget goal clarity was assessed in this study using a six-item scale that was modified from one used in studies by Shields & Shields [25] and Nouri & Kyj [26]. Each item on the measure, which was designated BGC1 through BGC7, required participants to give their opinion on a 5-point Likert scale ranging from strongly disagree to strongly agree. The study's instrument's reliability analysis produced a Cronbach alpha of 0.836, indicating the measure's dependability.

The Magner and Johnson [27] scale, which was created for use in a budgeting setting and evaluates numerous comparisons bases that managers may use when assessing the fairness of distributions, was used to quantify distributive fairness. The scale used in the instrument's design went from Strongly Disagree to Strongly Agree. A 5-point Likert scale was used for the RDF1 to RDF7 instrument. When tested, a dependability coefficient of 0.836 was discovered.

Employee Performance was measured using a combination of questions modified from those in Mahoney et al., [28], a questionnaire was created to assess this. A 5-point Likert scale, from strongly agree to strongly disagree, was used to develop the instruments. EP1 through EP15 were the instrument codes. The study's instrument's reliability analysis produced a Cronbach alpha of 0.898, indicating the measure's dependability.

Goal Commitment was measured using a 5-point Likert-type scale instrument created by Hollenbeck et al. [29] was used to measure corporate goal commitment. Strongly agree to strongly disagree make up the scale. The equipment had the CCG1 to CCG10 code. The study's instrument's reliability analysis produced a Cronbach alpha of 0.733, indicating the measure's dependability. Table 2 below shows the reliability test of the instruments.

Table 2. Instruments Reliability Test

Variable	Coding	Cronbach's Alpha
Participation	BPL1-BPL11	0.834
Budget Goal Transparency	BGT1-BGT7	0.836
Appropriateness of Revenue Distribution	ARD1- ARD7	0.836
Employee Performance	EP1-EP15	0.898
Commitment to Corporate Goal	CCG-CCG10	0.733

Source: created by authors

RESULTS

The principal objective of this study is to analyze the relationship between staff performance and their involvement in budgeting at public universities in Ghana, specifically focusing on the University of Education. Various tests, including Pearson Correlation and Regression, were conducted to examine the relationship and the strength of the connections among these variables.

Budget Participation Level

Table 3 below shows the results obtained using descriptive statistics to assess the extent of budget participation among the respondents.

The average participation score was 3.4362 with a standard deviation of 0.645, indicating that most respondents rated their participation level as three or higher, agreeing that there was a satisfactory level of involvement in budget preparation at the university. The scores ranged from a minimum of 1.81 (disagree) to a maximum of 4.53 (strongly agree).

Table 3. Descriptive Statistics data on Budget Participation Level (BPL)

Variables	Q	Min	Max	Average	Std. Dev.
BPL1	78	1.00	5.00	3.6332	1.24690
BPL2	78	1.00	5.00	3.3578	0.89026
BPL3	78	1.00	5.00	3.2319	1.07201
BPL4	78	1.00	5.00	3.5172	1.12065
BPL5	78	2.00	5.00	3.8641	0.96010
BPL6	78	1.00	5.00	3.4313	0.93099
BPL7	78	1.00	5.00	3.2504	0.93099
BPL8	78	1.00	8.00	3.2909	1.16354
BPL9	78	1.00	5.00	2.8706	1.17106
BPL10	78	1.00	5.00	3.2039	0.98504
BPL11	78	1.00	5.00	3.2321	1.05123
Grand Total	78	1.81	4.53	3.4362	0.64500

Source: created by authors

Budget Goal Transparency

Table 4 below illustrates the results from descriptive statistics used to evaluate the clarity of budget goals within departments.

Table 4. Descriptive Statistic on Budget Goal Transparency (BGT)

Variable	Q	Min	Max	Average	Std. Dev.
BGT1	78	1.00	5.00	3.6427	0.84066
BGT2	78	2.00	5.00	3.6960	0.87958
BGT3	78	1.00	5.00	3.3818	0.80625
BGT4	78	1.00	5.00	3.5702	0.91520
BGT5	78	1.00	5.00	3.7012	0.69648
BGT6	78	2.00	5.00	3.6142	0.75379
BGT7	78	2.00	5.00	3.8121	0.75294
Grand Total	78	2.00	4.87	3.5931	0.57512

Source: created by authors

From the table, it can be seen that there is high degree of budget goal transparency in the university. The overall mean was 3.5931 at standard deviation of 0.57512. The response range between disagree to strongly agree thus showing a minimum value of 2.00 and a maximum of 4.87.

Appropriateness of Revenue Distribution

Table 5 below presents descriptive statistics to examine perceptions of fairness in revenue distribution and budget adequacy at the university.

Table 5. Descriptive Statistics on Appropriateness of Revenue Distribution (ARD)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ARD1	78	1.00	4.00	2.9431	1.08310
ARD2	78	1.00	5.00	2.7401	1.01060
ARD3	78	1.00	4.00	2.8706	0.93220
ARD4	78	1.00	5.00	3.0610	1.28326
ARD5	78	1.00	5.00	3.1914	0.81039
ARD6	78	1.00	5.00	3.0580	1.08311
ARD7	78	1.00	5.00	3.2174	0.94029
Grand Total	78	1.43	4.43	3.0203	0.73045

Source: created by authors

On average, respondents were uncertain about the fairness of revenue distribution and the adequacy of their departmental budgets. The overall mean was 3.0203 with a standard deviation of 0.73045, ranging from 1.43 (disagree) to 4.43 (strongly agree). Respondents were unsure if their departments received appropriate budgets (ARD1=2.9431), if the allocated budgets met their needs (ARD2=2.7401), and if the budgets were as expected (ARD3=2.8706). This uncertainty stems from a lack of awareness of resource availability and allocation mechanisms within the university.

Pearson Correlation Results

Table 6 below displays Pearson's Correlations results generated using the SPSS software to explore the relationships between variables.

Table 6. Pearson Correlation results

		BPart	BGoal	DApprpr	Perform	Commitment
BPart	Pearson Correlation	1	0.603**	0.395**	0.233	0.401**
	Sig. (2-tailed)	69	0.000	0.001	0.054	0.001
	N		69	69	69	69
BGoal	Pearson Correlation	0.603**	1	0.499**	0.233	0.423**
	Sig. (2-tailed)	0.000		0.000	0.054	0.000
	N	69	69	69	69	69
DApprpr	Pearson Correlation	0.395**	0.499**	1	0.039	0.230
	Sig. (2-tailed)	0.001	0.000		0.748	0.057
	N	69	69	69	69	69
Perform	Pearson Correlation	0.233	0.233	0.039	1	0.675**
	Sig. (2-tailed)	0.054	0.054	0.748		0.000
	N	69	69	69	69	69
Commitment	Pearson Correlation	0.401**	0.423**	0.230	0.675**	1
	Sig. (2-tailed)	0.001	0.000	0.057	0.000	
	N	69	69	69	69	69

** . Correlation is significant at the 0.01 level (2tailed).

Source: created by authors

Based on the correlation table previously mentioned, a strong positive relationship exists between budget participation and the clarity of budget goals, the perceived fairness of fund allocation, and employees' commitment to corporate objectives. However, no significant link is observed between budget participation and employee performance. This indicates that greater employee involvement in the budgeting process enhances their understanding of budget goals and their perception of fairness in revenue distribution and procedures. Nevertheless, factors such as attitude and selflessness also play a crucial role in an employee's contribution to achieving budget goals.

Furthermore, there is a significant positive correlation between distribution fairness and employees' commitment to corporate objectives, as well as between budget goal clarity and these factors. On the contrary, the correlation between employee performance and budget goal clarity is minimal. Additionally, clearer financial targets are associated with higher commitment to corporate goals and better performance. Although the correlation is not statistically significant, there is a positive relationship between dedication to corporate objectives and the perception of fairness in income distribution. Conversely, there is a negative correlation between employee performance and the perception of fairness in revenue distribution.

Regression Results

The results in Table 7 below were generated in the SPSS software in order to explore the statistically significant predictor of employees' performance and commitment to corporate goals.

Table 7. Regression results (Employees performance)

R_Square=0.498				F=12.452		
Adjusted R_Square=0.461				Sig= 0.000		
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.638	0.487		1.348	0.176
	BPL	0.016	0.098	0.019	0.170	0.879
	BGT	0.040	0.121	0.040	0.290	0.774
	ARD	-0.167	0.091	-0.227	-1.863	0.070
	Commitment	0.938	0.129	0.714	6.964	0.000

Source: created by authors

The results show that the overall effect of budgeting participation, budget goals transparency, perception of appropriateness of revenue distribution, and aim commitment ($B=0.638$, $t=1.348$, $p=0.176$) are responsible for (Adjusted R Square =0.461), which is 49.80% of the variance in employee performance. Objective commitment ($B=0.938$, $t=6.964$, $p>0.000$) states that the statistically significant predictor of employee performance in achieving budget goals is participation in budgeting. Therefore, allowing employees to engage in the budgeting process will boost their commitment to the university's corporate objectives, thereby enhancing the university's overall performance. The findings suggest that none of the individual behavioral aspects of budgeting significantly influence employee performance. Consequently, a combination of goal transparency, appropriateness in distribution, and commitment to budget objectives can positively affect the performance. This implies that organizations must prioritize budget participation, as it triggers other behavioral factors that eventually enhance employee performance through the attainment of budget goals. The results are presented in Table 8. The researchers utilized regression analysis to further investigate the strength of the relationship between commitment to budget objectives and other behavioral parts.

Table 8. Regression results (Commitment to corporate goal)

R_Square=0.218				F=4.434		
Adjusted R_Square=0.166				Sig=.010		
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.604	0.301		8.642	0.000
	Budget Participation	0.151	0.088	0.237	1.654	0.098
	Budget Goal Transparency	0.223	0.108	0.318	2.019	0.051
	Distribution appropriateness	0.025	0.085	0.053	0.287	0.767

Source: created by authors

The results indicate that the adjusted R Square value of 0.218 means that 21.80% of the variance in employee commitment to budget goals can be explained by the combined influence of behavioral factors, including budget participation, clarity of budget goals, and perceptions of fairness in revenue

distribution ($B=2.604$, $t=8.642$, $p=0.000$). The clarity of budget goals emerges as the statistically significant predictor of employee commitment to budget goals at the university ($B=0.223$, $t=2.019$, $p>0.051$). This suggests that when employees are involved in the budgeting process, they tend to have a clearer understanding of the budget goals, which significantly enhances their commitment to those goals.

Our study's findings align with Charpentier's [30] assertion that budget participation increases subordinates' commitment to budget goals, ultimately leading to the achievement of those goals [31, 32]. Although the university's management has fostered an environment where budget participation encourages employees' commitment to both departmental and university-wide budget goals to boost performance, additional attention is needed [33, 34]. The Ghana Audit Service, responsible for auditing public institutions, should encourage managers to involve their employees in the budgeting process to further enhance their commitment to achieving budget goals [35, 36, 37].

CONCLUSIONS

The main aim of this research is to investigate the link between budget participation and employee performance. Our study shows that involving employees in the budgeting process is crucial for reaching budget goals. This involvement allows employees to clearly understand the budget's purpose, have a say in ensuring fair resource allocation among university departments and faculties, and comprehend budget objectives.

As a result, we support our null hypothesis, which suggests that budget participation boosts employee performance and their perception of fairness in resource distribution and clarity of budget goals. Although we dismiss our alternative hypothesis, we cannot entirely ignore the views presented by other authors in our literature review, who argue that budget involvement does not always lead to achieving budget goals or enhancing employee productivity. Our findings corroborate this, indicating that while budget participation underpins other behavioral aspects, none of these alone can enable the university to achieve its financial targets.

Thus, organizations that engage employees in the budgeting process must also effectively handle other behavioral elements. They should ensure that employees have a clear understanding of budget goals through their participation, provide feedback and input on perceived unfair resource distribution, and maintain commitment to achieving budget goals. Negative attitudes and behaviors towards any of these factors will make it challenging for the organization to meet its budgetary targets.

This research has several strengths, yet a few limitations encountered during the study suggest areas for further investigation. While this study focused exclusively on public universities, particularly the University of Education, future research could expand to include private universities. The survey in this study captured the views of Deans, Heads of Departments, Coordinators, and other support staff. Future studies might also encompass the perspectives of key management figures such as Registrars, Directors of Finance, Vice Chancellors, and other essential officers who play significant roles in the budgeting process of these public universities.

REFERENCES

1. Raghunandan, M., Ramgulam, N., Raghunandan-Mohammed, K., Fyfe, D., & Raghunandan, R. (2012). Examining the Behavioural Aspects of Budgeting with particular emphasis on Public Sector/Service Budgets.
2. Altbach, P.G., & Johnstone, D.B. (1993). The Funding of Higher Education: International Perspectives. *Garland Publishing, New York, NY*.
3. Petry, J.R., & Kenney, G.E. (1991). The impact on higher education: funding shortfalls and their impact on policy making in the 1990s. *Unpublished conference paper presented at Annual Meeting of the American Educational Studies Association, Kansas, MO, 24 October, 1-18*.
4. David, R. G., & Bart de Gouw (1997). Budgetary response attitudes in a university environment. *International Journal of Educational Management*. 11/4 179–186.
5. Parkinson, J. & Taggar, S. (2000). Impact of Strategy, Human Resource Management, Budgeting and Participation on Return on Assets. *Journal of Human Resource Costing & Accounting*,

5(2), 45-61. <https://doi.org/10.1108/eb029068>.

6. Wallander, J. (1999). Budgeting – an unnecessary evil. *Scandinavian Journal of Management*, 15.
7. Neely, A., Sutcliff, M.R., & Heyns, H.R. (2001). Driving Value through Strategic Planning and Budgeting. *New York, NY: Accenture*.
8. Reid, S. (2002). A critical evaluation of the effect of participation in budget target setting of motivation. *Managerial Auditing Journal*, 17(3), 98-101.
9. Topper, E. (2007). Supervisor's attitude and employee's performance. *New Library Word*, 108 (9-10), 54-66. <https://doi.org/10.1108/03074800710823999>.
10. Mai, L. (1988). Managerial Attitude, Motivation, and the Effectiveness of Budget Participation. *Accounting Organisations and Society*, 13, 465-475.
11. Lin, S. & Chang, J. (2005). Goal orientation and organizational commitment as explanatory factors of employees' mobility. *Personnel Review*, 34(3), 331-353. <https://doi.org/10.1108/00483480510591462>
12. Nouri, H. & Parker, R. (1998). The Relationship between Budget Participation and Job Performance: The Roles of Budget Adequacy and Organisational Commitment. *Accounting, Organisations and Society*, 23(5-6), 467-483.
13. Shah, A. (2007). Public Sector Governance and Accountability Series: Participatory Budgeting. *The International Bank for Reconstruction and Development/The World Bank, Washington*.
14. Chenhall, R. & Brownell, P. (1988). The effect, of Participative Budgeting on Job Satisfaction and Performance: Role Ambiguity as an Intervening Variable. *Accounting Organisations and Society*, 13, 225-233.
15. Parker, R. J., & Kyi, L. (2006). Vertical information sharing in the budgeting process. *Accounting, Organizations and Society*, 31(1), 27-45. <https://doi.org/10.1016/j.aos.2004.07.005>
16. Nassar, M., Mah'd, O., Nimer, Kh. & Alokdeh, S. (2011). The Impact of Managers' Related Variables and Department Features on Budget Characteristics. *The Case of Private Jordanian Universities*.
17. Gilliland, S. W. (1993). The Perceived Fairness of Selection Systems: An Organizational Justice Perspective. *Academy of Management Review*, 18(4), 694-734.
18. Cohen, R. L. (1987). Distributive Justice: Theory and Research. *Social Justice Research*, 1, 19-40.
19. Wentzel, K. (2002). The Influence of Fairness Perceptions and Goal Commitment on Managers' Performance in a Budget Setting. *Behavioural Research in Accounting*, 14, 247-271.
20. Lind, E. A., & Tyler, T. R. (1988). The Social Psychology of Procedural Justice. *New York: Plenum Press*.
21. Levanthal, G. S. (1980). What should be Done with Equity Theory? In K. J. Gergen, M. S. Greenberg and R. H. Willis (Eds), *Social exchange: Advances in theory and research*, 27-55.
22. Locke, E. A., Shaw, K. N., Saari, L. M., & Latham. G. P. (1981). Goal Setting and Task Performance. *Psychological Bulletin*, 125-152.
23. Jones, D. (1987). The Productivity Effects of Worker Directors and Financial Participation in the Firm: The Case of British Retail Cooperatives. *ILR Review*. 41.
24. Bogsnes, B. (2009). Implementing Beyond Budgeting: Unlocking the Performance Potential. *John Wiley & Sons*.
25. Shields, J. F., & Shields, M. D., (1998). Antecedents of Participative Budgeting. *Accounting, Organisations and Society*, 23, 49-76.
26. Nouri, H., & Kyj, L. (2008). The effect of performance feedback on prior budgetary participative research using survey methodology: An empirical study. *Critical perspectives on accounting, Elsevier*, 19(8), 1431-1453. <https://doi.org/10.1016/j.cpa.2007.11.003>
27. Magner, N.R., & Johnson, G.J. (1995). Municipal Officials' Reactions to Justice in budgetary Resource Allocation. *Public Administration Quarterly*, 18. 439-57. <http://www.jstor.org/stable/40861636>

28. Mahoney, T. A., Jerdee, T. H., & Carroll, S. J. (1963). Development of managerial performance: A research approach. *Cincinnati u.a.: South-Western Publ. Co.*
29. Hollenbeck, J., Williams, C. & Klein, H. (1989). An Empirical Examination of the Antecedents of Commitment to Difficult Goals. *Journal of Applied Psychology*, 74, 18-23. <https://doi.org/10.1037/0021-9010.74.1.18>.
30. Charpentier, C. (1998). Budgetary Participation in a Public Service Organisation. *Working Paper Series in Business Administration*.
31. Brownell, P. (1982). The role of accounting data in performance evaluation, budgetary participation, and organizational effectiveness. *Journal of Accounting Research*, Spring, 12-27.
32. Dunk, A. S. (1993). The Effect of Budget Emphasis and Information Asymmetry on the Relation between Budgetary Participation and Slack. *The Accounting Review*, 68(2), 400-411.
33. Hopwood, A. G. (1974). Leadership Climate and the Use of Accounting Data In Performance Evaluation. *The Accounting Review*, 49(3), 485-493.
34. Kenis, I. (1979). Effects of Budgetary Goal Characteristics on Managerial Attitudes and Performance. *The Accounting Review*, October, 54(4), 707-721.
35. Kren, L. (1992). Budgetary Participation and Managerial Performance: The Impact of Information and Environmental Volatility. *The Accounting Review*, 67(3), 511-26.
36. Milani, K. (1975). The Relationship of Participation in Budget-Setting to Industrial Supervisor Performance and Attitudes. *The Accounting Review*, 50(2), 274-288.
37. Bonner, W. E. S. (2008). Judgment and Decision Making in Accounting. *Pearson Education Inc., Upper Saddle River, New Jersey*.