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## Impact of motivation and participative leadership style on employee performance: Mediating the role of job satisfaction

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### Abstract

African higher educational institutions are characterized by limited resources hindering progress. Employees in such institutions are inclined to maintain dedication to their roles, address challenges and pursue excellence in their tasks. Motivation and leadership style play a crucial role in overcoming these challenges. Therefore, this study focuses on the relationship between motivation, participative leadership style, job satisfaction and employee performance at public universities in Ghana. It explored the impact of motivation and participative leadership style on employee performance as well as how job satisfaction plays a moderating role in achieving a goal. This study determined how work satisfaction mediated motivation, participatory leadership style and employee performance in six Ghanaian public universities. A quantitative approach was adopted and a structured questionnaire was administered to 306 university employees who were selected by using both cluster and simple random sampling techniques. The acquired data were analyzed quantitatively by using the Structural Equation Model (SEM) in response to the given hypothesis. The findings revealed that motivation and a participatory leadership style had a considerable positive impact on staff performance. Furthermore, the study revealed that job satisfaction served as a mediator in the relationship between motivation, a participative leadership style and employee performance. Based on the findings, it is recommended that employers at public universities enhance employee motivation and engagement. This can be done by fostering a work environment characterized by supportive leadership, opportunities for growth and development and cultivating a culture that emphasizes appreciation and acknowledgment of performance.

**Keywords:** Employee, Ghana, Job satisfaction, Motivation, Participative leadership style, Public universities, Structural equation model.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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## 1. Introduction

Higher educational institutions in developing nations especially in Africa often face challenges in progressing at a rapid pace. This is largely due to insufficient resources hindering progress [2]. In such circumstances, effective management plays a pivotal role in achieving institutional goals [1]. This can be achieved through motivation and effective leadership. Motivation and leadership are integral factors influencing employee performance and organizational prosperity. Organizations have recognized the importance of inspiring employees and employing effective leadership approaches to attain optimal performance levels. Notably, participative leadership styles have been correlated with employee motivation and performance highlighting the significance of organizational behavior and job satisfaction in driving employees towards goal achievement [2, 3]. Therefore, the impact of these variables on employee performance in educational institutions of higher learning needs to be extensively studied. Understanding the links between motivation, participatory leadership, job satisfaction and employee performance is essential for institutions that are inspiring to enhancing performance. According to Gong, et al. [4] there is a strong link between motivation, participatory leadership, work satisfaction and employee performance. Furthermore, Luthans, et al. [5] argued that participative leadership improves employee work satisfaction which in turn improves employee performance.

A participative leadership style can increase employee motivation leading to job satisfaction particularly when employees in an institution enjoy a sense of ownership and involvement in the decision-making process at the workplace. Job satisfaction is influenced by a variety of factors including the work environment, job design, compensation and social relationships at work [6]. These factors enhance motivation to the highest level. High levels of motivation, participative leadership and job satisfaction are positively associated with employee performance. When employees are motivated, involved in decision-making and satisfied with their jobs, they are likely to perform well and achieve institutional goals. A number of factors such as the workplace environment, the nature of the job, salary, and co-worker relationships can affect job satisfaction [6]. These factors further create a positive climate leading to a high level of motivation, participative leadership, work satisfaction and employee performance. Motivated employees who are engaged in decision-making processes and are satisfied with their employment are more inclined to perform effectively and achieve organizational goals.

Several researchers have examined the relationship between employee motivation and performance as well as the significance of job satisfaction as a mediator between motivation and performance [7, 8] while other studies can be found on the importance of job satisfaction as a mediator between motivation and performance [9, 10]. Meanwhile, studies on leadership style established that a collaborative leadership style has been associated with higher levels of performance and staff motivation [11, 12]. However, the mediating role of job satisfaction in the relationship between participative leadership, motivation and employee performance has received relatively little attention [13-15]. This is a gap that the researchers seek to fill with evidence from six Ghanaian public universities. It is expected that the study will provide valuable insights into the dynamics of employee performance, job satisfaction, leadership, motivation and research on the subject.

## 2. Theoretical Framework

The theories that underpin this study include Herzberg's two-factor theory, transformational leadership theory and social exchange theory. The researchers discussed the implications of each of the theories in connection with the impact of motivation and participative leadership style on employee performance: the mediating role of job satisfaction.

### 2.1. Herzberg's Two-Factor Theory

Herzberg [16] propounded the two-factor theory [16]. It is a theory of motivation that describes how various factors affect worker satisfaction and motivation. According to this theory, both hygienic elements and motivators have an impact on employee motivation. Hygiene elements are essential to prevent employee dissatisfaction. These elements cover other factors like working conditions, pay, job security, corporate rules and connections with co-workers. Employee dissatisfaction may result if these factors are unsatisfactory. In contrast, motivators are elements that contribute to employee motivation and pleasure [17]. They include chances for advancement, admiration, success, accountability and difficult work. These elements may contribute to greater employee engagement and satisfaction if they exist.

According to Herzberg's two-factor theory, motivators as well as the existence or absence of hygienic elements can affect employee motivation and satisfaction [16, 17]. As a result, a participatory leadership approach that prioritizes employee involvement and empowerment can raise employee enthusiasm and job satisfaction which in turn can enhance performance. Employees are involved in decision-making processes, given feedback and their contributions are acknowledged by participatory leaders. This management approach can produce a productive workplace that encourages employee satisfaction and motivation. Since both hygienic considerations and motivators have an impact on job satisfaction, it mediates this link. Employees are more likely to be motivated and perform effectively if they are happy in their jobs. Hence, workplace performance, motivation and leadership style are all mediated by job satisfaction.

Herzberg's two-factor theory and its connection to worker motivation and job satisfaction have been supported by several research studies. Al-Emadi and Al-Emadi [18] discovered that the participative leadership style was favourably associated with employee motivation and job satisfaction which in turn had a beneficial impact on employee performance. Similarly, Kaur and Gupta [19] discovered that both hygienic issues and motivators affected employee motivation and job satisfaction. The study also discovered that a participative leadership style improved performance, job satisfaction and staff motivation. It can be said here that Herzberg's two-factor theory in the context of participative leadership style offers a helpful foundation for comprehending the connection between motivation, job satisfaction and worker performance.

Organizations may build a productive workplace that encourages employee contentment, motivation and performance by focusing on both hygiene aspects and motivators.

Herzberg's two-factor theory suggests that managers need to establish an environment that encourages motivation, job satisfaction and good performance and must concentrate on both hygiene elements and motivators. This means that businesses should try to offer workers a secure and comfortable work environment, fair pay, possibilities for advancement, recognition and fulfilling work. Managers may foster a work environment that promotes dedication, engagement and productivity.

## *2.2. Social Exchange Theory*

Social Exchange Theory (SET) was first introduced by Homans [20]. It is a sociological and psychological theory that explains social change and stability as a process of negotiated exchanges between individuals or groups. The SET posits that individuals make decisions based on the potential rewards and costs of a particular behaviour or action [21]. In the context of the workplace, employees engage in a social exchange relationship with their organization, exchanging their time, effort and skills for various rewards such as pay, benefits and job satisfaction. According to the theory, employee behaviour and performance are determined by the nature of this exchange relationship particularly the balance between costs and benefits [20]. The effects of SET are wide-ranging. One implication is that people would behave or interact in ways that provided them with the biggest gain for the smallest investment [22]. This may be evident in how people conduct business as they aim to maximize earnings while reducing losses. Similarly, people aim to minimize expenses while maximizing gains from their interactions with others through social connections. Another implication of SET is that relationships are more likely to last and be stable when both parties believe they are benefiting from the relationship more than it is costing them. A relationship is effective when both partners believe they are receiving more than they are providing. The SET contends that social interactions are influenced by both the immediate social and cultural context in which they take place and individual needs and aspirations. For instance, cultural norms and values may have an impact on the nature of interactions and the expectations that people have for their relationships. SET can be connected to the effects of motivation and a participative leadership style on worker performance through the mediating effect of job satisfaction. Organizations can use this information to improve employee performance by implementing a participative leadership style, giving incentives and ensuring job happiness.

## *2.3. Transformational Leadership Theory*

Burns [23] first introduced transformational leadership theory (TLT) in 1978 and Bernard Bass later developed it in the 1980s [23, 24]. This theory focuses on how leaders may change the attitudes and beliefs of their followers to inspire and drive them to realize their maximum potential. The four pillars of this leadership approach are inspirational motivation, intellectual stimulation and individualized consideration [24]. Transformational leadership has been shown to improve staff engagement, work satisfaction and employee performance [25]. Employees tend to be more engaged and productive when they are motivated resulting in greater job performance [26]. Transformational leaders can influence employee motivation by giving employees a sense of purpose and meaning as well as intellectual stimulation which involves encouraging staff to think creatively and challenge the status quo [25]. Another important facet of transformative leadership is participatory leadership which entails including employees in decision-making and empowering them to own their jobs [25]. Employee performance can benefit from participatory leadership by enhancing job satisfaction and motivation as employees feel more appreciated and invested in the organization [27]. Individualized consideration which entails knowing and responding to employees' specific wants and aspirations can have an impact on workplace happiness [25]. Employee motivation, commitment and retention can all be affected by job satisfaction which is a significant aspect of employee success [28]. Furthermore, Akbar, et al. [29] discovered that both motivation and participative leadership style had a favourable impact on employee performance and that job satisfaction mediated this link to some extent. This implies that job satisfaction is an important factor in the link between leadership style and employee performance.

## **3. Literature Review**

The researchers reviewed the literature by covering themes like motivation and employee performance, participative leadership style and employee performance, participative leadership style and job satisfaction. The details of the literature are presented as follows:

### *3.1. Motivation and Employee Performance*

Motivation is described as the driving force that guides and sustains goal-directed activity in an individual. Motivation is thought to directly predict a worker's job performance [30]. Employee motivation, attitudes and skills are important indicators of job performance [31]. Individuals who are motivated and invested in their work are extremely valuable to a company. Motivation is an important component in every organization for increasing employee morale and achieving organizational goals [32]. Organizations succeed because motivated individuals are constantly striving to enhance their job performance. Employees who are motivated will be more productive since they enjoy their jobs. In this instance, employees are content at work which minimizes absenteeism and as a result, labour turnover. Managers face several problems as individuals are valuable assets in the organization's search for future success to keep highly motivated personnel [33]. It should be highlighted that the only human capital in every organization is the employees and their performance determines whether the organization succeeds or fails. High-motivated individuals typically succeed because employee quality has a significant impact on job performance [34]. Job performance is the main emphasis of management at all levels in

organizations and it diminishes once motivation levels start to drop. Additionally, managers are confronted with a crucial question about the elements that affect employee performance at every level of management.

### *3.2. Participative Leadership Style and Employee Performance*

The effectiveness of an organization is closely tied to its leadership with a leader's management approach significantly influencing employee satisfaction. [Yi-Ying, et al. \[35\]](#) argues that participatory leadership entails involving staff members in decision-making processes. The participative leadership style encourages and enhances employees' ability to undertake essential responsibilities and tasks despite the leader retaining ultimate authority [\[36\]](#). In essence, a participative leader cultivates a culture of learning among their followers. According to [Bell and Themba \[37\]](#), the participative approach involves collaborative decision-making between management and employees leading to well-informed choices. This inclusive approach where employees feel valued and engaged in organizational decision-making enhances employee performance within the company. [Ghaffari, et al. \[38\]](#) add that a participative leader actively engages with employees to develop, clarify and achieve corporate objectives resulting in improved employee performance, work efficiency and effectiveness. [Mwaisaka, et al. \[39\]](#) further argue that the participative leadership style fosters mutual respect and job efficiency among employees leading to enhanced employee performance. In a nutshell, participative leadership fosters transparent communication channels and a culture of trust promoting seamless collaboration among team members and thereby enhancing coordination, productivity and overall performance.

### *3.3. Participative Leadership Style and Job Satisfaction*

The participative leadership style prioritizes collaboration, inclusivity and shared decision-making with the goal of fostering a supportive and empowering workplace environment [\[36\]](#). Employee participation in decision-making processes, including planning, problem-solving and goal setting, fuels both individual and organizational achievements [\[40\]](#). Recent research has shown the importance of a participative leadership style for worker performance [\[35\]](#). The participative leadership style entails delegating responsibility and giving employees independence in their work [\[37\]](#) which inspires them and improves their job happiness. Studies have shown that participative leadership style and employees' job satisfaction are positively correlated [\[41\]](#). A sign of job satisfaction connotes employees' favourable work reactions and attitudes towards their jobs and workplace [\[42, 43\]](#) revealed that empowering staff members and including them in decision-making increases both their job happiness and performance. Furthermore, [Chan \[44\]](#) found that participative leadership style affects job satisfaction more strongly in collectivist cultures than in individualistic cultures. This is due to the priority placed on group cohesion and consensus in collectivist societies which is consistent with the participative leadership style. Therefore, the relationship between a participative leadership style and job satisfaction can be influenced by the cultural setting which is a significant aspect. However, research has shown a conflicting association between a participative leadership style and work satisfaction among employees [\[45\]](#). Such differences could be attributed to factors such as differences in the implementation or interpretation of participative leadership, variations in organizational settings, the diverse demographics and job roles of employees across studies and the influence of individual traits, attitudes and expectations on research outcomes in this area. This study examines the ongoing argument about the connection between a job and a participative leadership style.

### *3.4. Motivation and Job Satisfaction*

It can be learned from the two-factor theory that motivation and job satisfaction are elements that are critical for an organization's success because motivated personnel are needed to accomplish goals and objectives in the fast-paced, dynamic work environment of today's firms [\[46\]](#). The act of initiating, directing and maintaining behaviour to reach a certain objective is called motivation [\[47\]](#). In the workplace, motivation is crucial for workers to perform successfully and accomplish the goals of the company. In the business world of the twenty-first century, it has become necessary to boost employees' morale and job happiness. Hence, motivation and job satisfaction have become essential ingredients.

The need-based theory, process theory, Herzberg two factor theory, Maslow theory of needs, reinforcement theory, self-determination theory and many more theories teach, enlighten and educate us on many approaches to encourage employees to boost their job happiness. Job satisfaction gives us a sense of goal attainment [\[48\]](#) while motivation strengthens one's consistency and sense of direction towards goals and objectives [\[49\]](#). According to [Rožman, et al. \[50\]](#) an employee's motivation level affects how satisfied they are with their jobs (intrinsic and extrinsic). There is still an unsettled debate on motivation and job satisfaction that needs to be addressed in this study.

### *3.5. Job Satisfaction and Employee Performance*

Two key constructs are employee performance and job satisfaction in the study of organizational behaviour. Employee performance refers to the level of productivity and effectiveness of employees in attaining organizational goals whereas job satisfaction refers to the degree to which individuals are satisfied with their jobs or work environments [\[3, 51\]](#). There is a growing amount of research that examines the relationship between employee performance and job happiness. [Hawthorne, et al. \[52\]](#) carried out one of the first investigations on the relationship between job happiness and worker performance. The Hawthorne studies discovered that employee performance was also influenced by social and psychological factors in addition to job-related factors like task difficulty and job satisfaction. This study paved the way for further investigation into the link between job happiness and worker productivity.

According to several research studies, there is a link between job satisfaction and employee performance. For instance, a study by [Skaalvik and Skaalvik \[53\]](#) discovered a favourable relationship between teachers' teaching effectiveness and

their job happiness. Similarly, a study found a positive correlation between job satisfaction and job performance [34] while another study contends that there exists a robust relationship between employee performance and job satisfaction Chan [44]. Firth, et al. [54] found that organizational commitment acted as a mediator in the link between work satisfaction and job performance. It can be learned that nurturing job satisfaction through supportive leadership, equitable compensation, avenues for professional advancement and fostering a positive workplace atmosphere can lead to improved employee performance and organizational achievements.

**4. Hypothesis**

The study was guided by the following hypothesis:

*H<sub>1</sub>*: Motivation has a direct positive relationship with employee performance.

*H<sub>2</sub>*: Participative leadership style has a direct positive relationship with employee performance.

*H<sub>3</sub>*: Job satisfaction positively mediates the relationship between motivation and employee performance.

*H<sub>4</sub>*: Job satisfaction positively mediates the relationship between participative leadership style and employee performance.

**5. Methodology**

*5.1. Design*

A quantitative research method was adopted for this study. The quantitative research method is a systematic empirical approach to investigating phenomena through the collection, analysis and interpretation of numerical data [55]. This type of research design typically begins with the formulation of a clear research question or hypothesis. Researchers design their studies to collect data that can be quantified such as through surveys and questionnaires.

*5.2. Participants*

The researchers are interested in studying and drawing conclusions about administrative workers at public universities in Ghana. Hence, a cluster sampling approach was employed to select six universities from distinct geographical zones: northern, middle and southern. Within each university, 50 employees were randomly chosen using simple random sampling methods. Again, cluster sampling techniques was used to select an administrative secretary from each university, perceived as capable of providing the requisite data. The total sample size for the study was 306. The researchers used the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy which was 0.858 (85.8%) to test for the adequacy of the sample. Therefore, the sample was representative and adequate for the study as it satisfied the KMO test of 0.7 and above. Other studies that adopted the KMO test to achieve their objectives include Alharbi [56], Lin, et al. [57] and Anwar and Tariq [58].

*5.3. Instrument*

Structural questionnaires can be rapidly and easily administered to large groups of individuals by guaranteeing that all respondents are asked the same set of questions in the same fashion, hence eliminating any bias or variability in the data [59, 60]. This instrument allowed the researchers to convert the data into a measured value for accurate analysis. The questionnaire consisted of five sections. Section 1 considered the demographic information of the respondents; section 2 considered the measurement items of motivation; section 3 participative leadership styles; section 4 considered job satisfaction and section 5 considered questions on employee performance. Job satisfaction (4 items) is adapted from Bamfo, et al. [61]. All the measuring items for the various constructs were measured using the Likert five-point scaling technique thus, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5= strongly agree . The Structural Equation Model (SEM) was used to determine the relationship between the variables and to test the stated hypothesis as per the model fit indices to analyze the collected data.

*5.4. Validity and Reliability of the Data*

Validity refers to the extent to which an instrument effectively captures and measures the intended construct or concept it seeks to assess [62]. The researchers gave it to three experts in the field of management to determine the validity of the instrument. The experts checked for grammatical errors and the content of the items and offered suggestions for modification. The instrument was modified as per the experts' suggestions and was further subjected to its reliability. In this light, the Cronbach alpha reliability test was run in SPSS (V21) to determine the extent of consistency of the measurement. The instrument was reliable as it recorded a reliability coefficient of 0.7 and above as shown in Table 1.

**Table 1**  
Determining the reliability and validity of data using Cronbach alpha.

<b>Variables</b>	<b>Cronbach's alpha</b>	<b>Number of items</b>
Motivation	0.90	3
Participative leadership style	0.792	8
Job satisfaction	0.795	3
Employee performance	0.916	3

### 5.5. Data Collection

The researchers sought permission from the universities to distribute the questionnaires to the participants as part of the data collection process. The researchers prioritized the protection of human rights, welfare and dignity of the participants for the sake of ethical consideration. Therefore, names and personal questions were avoided. The questionnaires were collected after three days with a 97% return rate. The questionnaires that were not attempted were withdrawn.

### 5.6. Data Analysis

The collected data were subjected to quantitative analysis using the Structural Equation Model (SEM) to examine the provided hypothesis. Various statistical measures were employed to evaluate the goodness of fit of the SEM. In statistical notation, asterisks serve as indicators of the level of statistical significance. Generally, a greater number of asterisks (\*) corresponds to a higher level of significance. This notation is commonly associated with a p-value of less than 0.005, suggesting very strong statistical evidence supporting the relationship between the variables analyzed.

## 6. Results

**Table 2** summarizes the results of the field survey and tests the stated hypothesis (path analysis). The table presents the path and indicates the authenticity of each hypothesis by its coefficients and significance value.

**Table 2.**

The results of the path analysis.

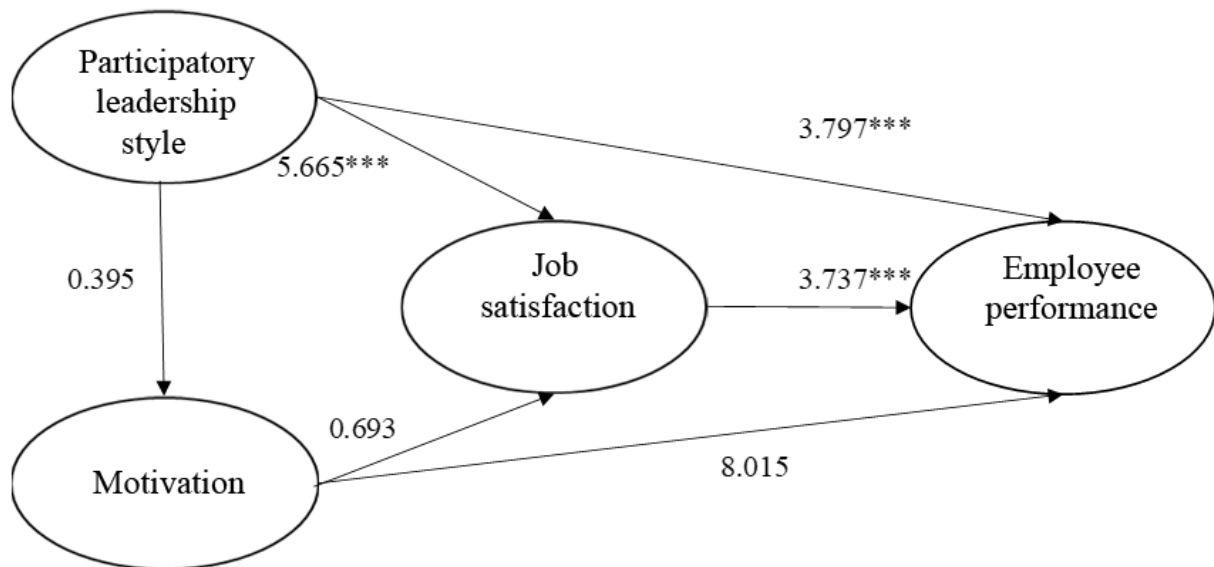
Hypothesis	Estimates	Standard error	Critical value
M → JS	0.019	0.049	0.693
PL → JS	0.562	0.099	5.665***
M → EP	0.480	0.060	8.015***
PL → EP	0.412	0.109	3.797***
M → PL	0.013	0.036	0.395
JS → EP	0.333	0.089	3.737***
M → JS → EP	(0.019×0.480)	1.4768	(0.395×3.737)
PL → JS → EP	(0.562×480)	21.1558	(5.665×3.737***)

**Note:** The asterisk "\*\*\*\*" indicates the level of statistical significance.

The analyses of the hypotheses concerning the relationships between various factors in the study have been presented in **Table 2**. Hypothesis 1 examined the connection between motivation (M) and employee performance (EP). The critical value for this path at 8.015\*\*\* exceeded the threshold of 1.96. This indicates a significant relationship between motivation and employee performance supporting the acceptance of this hypothesis. The second hypothesis evaluated the relationship between employee performance (EP) and participatory leadership (PL) within the context of an organization. This hypothesis yielded a critical value of 3.797\*\*\* which also surpassed the threshold of 1.96 indicating a significant relationship between participative leadership and employee performance.

Considering the path analysis, it can be observed that path 1 examined the link between motivation (M) and participative leadership (PL) revealing a critical value of 0.395 which falls below the threshold of 1.96. This suggests that there is an insignificant relationship between motivation and participative leadership indicating that hypothesis 1 does not extend to this relationship. Finally, path 2 explored the relationship between job satisfaction (JS) and employee performance (EP) revealing a critical value of 3.737\*\*\*. This critical value is greater than 1.96 demonstrating a significant relationship between job satisfaction and employee performance.

Regarding the hypotheses of indirect impact specifically hypothesis 3 which explores the mediating role of job satisfaction in the connection between M and EP, no mediating effect was observed as the critical value fell below the threshold of 1.96. Conversely, in the direct path (path 1) linking M and EP, a substantial and statistically significant effect was evident with a coefficient of (8.015\*\*\*). Additionally, hypothesis 4 which posits that job satisfaction (JS) serves as a positive mediator in the relationship between PL and EP yielded a statistically significant result with a coefficient of (3.797\*\*\*). This outcome underscores the significance of this path at a 95 per cent confidence level. For a visual representation of the structural equation model, please refer to **Figure 1** while **Table 3** briefly summarizes the status of hypothesis acceptance.



**Figure 1.**  
Represents the estimated coefficient for the study’s variable.  
**Note:** The asterisks "\*\*\*" indicates the level of statistical significance.

**Table 3.**  
State of hypothesis.

Hypothesis	State
H1	Accepted
H2	Accepted
H3	Not accepted
H4	Accepted

The model fit indices were further used to determine the compatibility of the SEM model. Therefore, specific criteria were followed. The criteria include a Chi-square minimum (CMIN/DF) of less than 3, a Goodness of Fit Index (GFI) exceeding 0.8, Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) both surpassing 0.9, Root Mean Square Error of Approximation (RMSEA) and Root Mean Square Residual (RMR) both above 0.08 and a P-value below 0.05. A comprehensive overview of the model's specifics is presented in Table 4.

**Table 4.**  
Model fit indices.

Measure of fit	CMIN/DF	GFI	CFI	TLI	RMSEA	RMR	P-value
	≤3	≥0.8	≥0.9	≥0.9	≤0.08	≤0.08	≤0.05
Structural equation model	1.721	0.931	0.973	0.966	0.047	0.059	0.684

Table 4 presents statistical measures used to assess the fit of a Structural Equation Model (SEM). One of these metrics is the Comparative Fit Index (CFI), a common gauge of how well the model aligns with the data. In this instance, the CFI value stands at ≥0.9 signifying that the model's fit is acceptable meeting the threshold of 0.9 or higher. Similarly, the Tucker-Lewis Index (TLI) also assesses model fit and here a value of ≥0.9 is reported indicating that the model's fit is good by this criterion as well. Furthermore, the Root Mean Square Error of Approximation (RMSEA) is provided with a value of ≤0.08. RMSEA quantifies the differences between the model and observed data and a value below 0.08 suggests that the model reasonably approximates the data. The Relative Mean Residual (RMR) serves as another fit index and in this case is reported as ≤0.08 signifying that the model's residual (discrepancies between observed and predicted values) are relatively small.

Additionally, the P-value is documented as ≤0.05 indicating that the model is statistically significant at the 0.05 significance level. This underscores that the observed data aligns well with the model's predictions, a critical criterion for evaluating the model's performance. Finally, the Chi-Square Minimum over Degrees of Freedom (CMIN/DF) is reported with a value of 1.721. CMIN/DF evaluates how well the model fits the data and a value of ≤3 is typically indicative of a good fit. In this case, the CMIN/DF ratio surpasses 3, possibly suggesting some degree of misfit. Nevertheless, it's essential to consider other fit indices in conjunction with this measure for a comprehensive assessment of the model's performance.

**7. Discussion**

It can be established that when motivation was high, employee performance increased based on the first proposed hypothesis. This suggests that motivation influences employee performance in a positive way. This is consistent with Katebi, et al. [34] that motivation was a crucial factor influencing employee behaviour, attitudes and performance at work. Utete [48] agrees that highly motivated employees are more likely to exert extra effort and persevere in their duties

resulting in greater performance. Furthermore, Nyaboga and Muathe [63] posit that there is a link between motivation and employee performance among healthcare personnel. Similarly, Sandhu, et al. [64] found a substantial association between motivation and job performance across diverse vocations and industries in a meta-analysis. These findings collectively emphasize the universal importance of fostering motivation among employees as a means of enhancing organizational effectiveness and productivity regardless of the specific context or sector in which they operate.

Findings related to the second proposed hypothesis were significant and had a positive relationship. Thus, the higher the level of participative leadership, the higher their performance. This further implies that leadership styles that encourage the active participation of team members in decision-making processes would result in better performance outcomes. This means that if employees were given recognition in the institution, they were likely to expend their effort. This finding is supported by MacGregor's [65] Transformational Leadership Theory (TLT) in 1978 and the social learning theory of Bandura. These theories emphasize that if employees were given a learning environment with a leader who listens more than speaks, they would increase their performance. Similarly, a study conducted by Zhang, et al. [66] found that participative leadership positively affected employee performance in a sample of Chinese organizations. The finding further agrees with Nouri, et al. [67] that participative leadership has a positive impact on employee innovation behaviour.

The third hypothesis was not accepted as the result was insignificant. This implies that job satisfaction played an insignificant role in moderating the link between motivation and employee performance. It is critical to recognize that motivation is not the sole factor influencing job success. Other alternative factors that might also influence job satisfaction include employee's talents, experience and working environment [68, 69]. Furthermore, various employees may be motivated by different factors; therefore employers must understand and satisfy the motivational requirements of individual employees. However, the finding was not consistent with Judge, et al. [28] who argued that worker performance was influenced by motivating factors such as task identity, task relevance and skill variety through the medium of job satisfaction. The differences in the findings could be attributed to different research settings which should be taken up by future researchers who may be interested in this area.

The fourth proposed hypothesis was accepted. This suggests that job satisfaction played a mediation function in the connection between employee motivation and performance. It was demonstrated that job satisfaction could serve as a bridge between employee motivation and performance. Institutions must concentrate on developing a work environment that promotes both motivation and job satisfaction to enhance employee performance. A similar finding was achieved by Riggio, et al. [70] emphasizing the importance of aligning individual, team and organizational factors to create an environment that fosters intrinsic motivation, engagement, and commitment among employees. Therefore, employers should create a work environment that supports job happiness as this could improve employee motivation and job performance because job satisfaction plays a significant role in the motivation of employees leading to job performance.

## 8. Conclusion

The impact of motivation and participative leadership styles on employee performance is an important factor that institutions must not overlook. The study sought to investigate how these parameters connect to job satisfaction and how job satisfaction acts as a moderator in this relationship. Motivation and a participative leadership style have been demonstrated to have a major beneficial effect on staff performance which is supported by Herzberg's two-factor theory.

Motivated employees perform better at work because they are more inventive, active and dedicated to their job. All of which were driven by the social exchange theory. In contrast, participative leadership fosters a collaborative and inclusive work environment in which employees feel valued and appreciated. Such an environment could raise staff morale and lead to better performance.

It was further shown that job satisfaction served as a mediator in the connection between employee performance, participative leadership style and motivation. Therefore, if workers were happy in their jobs, they would be devoted, motivated, and productive leading to an improved performance level. It can be suggested that institutions, organizations, and other sectors should focus on employee motivation and embrace a participative leadership style to increase employee work satisfaction and, eventually, their performance. Management and leadership should establish a culture of trust, open communication and employee involvement to further achieve greater results. Lastly, giving employees regular admiration and appreciation can also increase their motivation level and job satisfaction.

## 9. Implications

The following implications could be drawn for best practices based on the findings:

1. Employers in public universities must enhance employee motivation and engagement. This can be done by fostering a work environment characterized by supportive leadership, opportunities for growth and development and cultivating a culture that emphasizes appreciation and acknowledgment of performance.
2. Employers should provide competitive pay and benefits to their employees. Offering competitive remuneration and benefits packages might help to motivate employees and incentivize them to perform effectively.
3. The management of public universities should set up clear expectations and goals for employees to help them become motivated and focused on obtaining the desired results. Regular communication and feedback on progress towards these goals can help staff stay motivated and on track.
4. Management should provide opportunities for training, coaching and mentoring that can help employees gain new skills and competencies, enhancing their motivation and confidence in their ability to operate at a high level.



5. Employees should be assisted in understanding the purpose and impact of their jobs to boost motivation and dedication to their role and the organization as a whole. This can be accomplished by communicating regularly about the organization's objectives and values as well as emphasizing the importance of individual contributions.
6. Public universities should encourage a participative leadership style to increase staff engagement and work satisfaction which will lead to enhance institutional performance.

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