

The Influence of Supervisors' Role on the Effectiveness of Open Performance Appraisals: Evidence from Public Health Institutions in Tanzania

Lilian Sanga, Miraji Kitigwa, Chacha Matoka

Abstract— *Effective performance appraisal systems are crucial for improving public sector service delivery. In Tanzania, the Open Performance Review and Appraisal System (OPRAS) has been implemented to enhance accountability, yet its effectiveness in the public health sector remains inconsistent, often attributed to supervisors' roles. This study examines the influence of specific supervisory actions—objective setting, commitment, and the administration of reward systems—on the effectiveness of OPRAS. An explanatory research design was employed, and data were collected via a structured questionnaire from a stratified sample of 310 employees across six major public health institutions in Tanzania. Data were analyzed using multiple linear regression. The results indicate that supervisors' commitment ($\beta = 0.298, p < 0.001$) and reward systems ($\beta = 0.348, p < 0.001$) have a strong, statistically significant positive effect on appraisal effectiveness. Conversely, the effect of objective setting was positive but statistically insignificant ($\beta = 0.124, p = 0.077$). This suggests that while clear goals are beneficial, the active engagement of supervisors and the tangible recognition of performance are far more critical levers for enhancing the appraisal system's impact. The study concludes that for OPRAS to achieve its intended goals in Tanzanian public health institutions, policy interventions should prioritize strengthening supervisory commitment and ensuring the timely and fair distribution of rewards. The findings underscore the need to move beyond bureaucratic compliance with objective-setting and focus on the motivational aspects of performance management led by dedicated supervisors.*

Keywords: Open Performance Appraisal; Supervisor Commitment; Reward Systems; Objective Setting; Public Health Sector; Tanzania; OPRAS.

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INTRODUCTION

Performance appraisal systems are globally recognized as vital tools for enhancing accountability, transparency, and efficiency in public service delivery. In developed economies, these systems are well-integrated into human resource management, effectively linking employee performance to organizational goals, rewards, and development opportunities (Aguinis, 2019; Ayibam, 2022; Ayibam, 2024a; Ayibam, 2024b). However, in many African contexts, the implementation of such systems has been challenging. Despite being adopted as part of public sector reforms, they often face obstacles including inadequate training, resource constraints, and resistance to change, which undermine their potential to improve motivation and service delivery (Mureithi et al., 2021).

In Tanzania, the government introduced the Open Performance Review and Appraisal System (OPRAS) in 2004 to instill a performance-oriented culture within the public service. OPRAS is designed as a participatory process involving objective setting, continuous monitoring, and feedback between supervisors and employees (Kira & Ewana, 2022). More recently, the government has sought to address implementation challenges through digitalization, launching the Public Employee Performance Management Information System (PEPMIS) to streamline the appraisal process. Despite these efforts, the effectiveness of OPRAS, particularly in critical sectors like public health, remains inconsistent.

A critical factor influencing the success of any performance appraisal system is the role of the supervisor. Supervisors are the linchpins of the process, responsible for setting clear objectives, providing timely feedback, and ensuring that employee efforts are recognized and rewarded. Yet, within the Tanzanian public health sector, supervisors often lack the necessary training, resources, or motivation to fulfill these roles effectively. This shortfall can lead to a disconnect between the system's formal structure and its practical impact, resulting in low employee engagement, diminished trust in the appraisal process, and ultimately, compromised healthcare service quality (Moses et al., 2023). While challenges such as inadequate infrastructure are often cited, the specific influence of supervisory actions on OPRAS effectiveness remains underexplored.

Existing empirical studies on OPRAS in Tanzania have primarily focused on local government authorities (e.g., Mbukwin & Matoka, 2023; Mtasigazy, 2021) or the education sector (e.g., Chimazi, 2018), highlighting issues like poor communication and lack of training. However, there is a scarcity of research specifically investigating the supervisory role within the unique, high-pressure environment of public health institutions. Furthermore, the interaction between supervisory practices and new digital tools like PEPMIS is not well understood.

To address this gap, this study empirically assesses the influence of three key supervisory functions; objective setting, commitment, and the administration of reward systems—on the effectiveness of the Open Performance Appraisal system in Tanzanian public health institutions. By examining these relationships, this research aims to provide evidence-based insights that can help refine performance management policies and practices, ensuring that supervisors are equipped to leverage OPRAS and related tools to enhance both employee performance and the overall effectiveness of the public health sector.

LITERATURE REVIEW

Theoretical Literature Review

This study is grounded in two complementary motivational theories: Goal-Setting Theory (Locke & Latham, 1990) and Expectancy Theory (Vroom, 1964). These theories provide a robust framework for understanding the mechanisms through which supervisors influence employee motivation and, consequently, the effectiveness of performance appraisal systems.

Goal-Setting Theory

Proposed by Edwin Locke, Goal-Setting Theory has become one of the most influential theories in organizational psychology. Its core premise is that specific, challenging goals lead to significantly higher performance than easy or vague goals. The theory's robustness is supported by over four decades of research confirming its validity across diverse cultures and tasks (Locke & Latham, 2002). The theory outlines five key principles for maximizing performance: clarity, challenge, commitment, feedback, and task complexity.

In the context of a performance appraisal system like Tanzania's OPRAS, the role of the supervisor is critical in operationalizing these principles. Firstly, supervisors are responsible for ensuring goal clarity by collaborating with employees to set Specific, Measurable, Achievable, Relevant, and Time-bound (SMART) objectives. This reduces role ambiguity and provides a clear roadmap for performance (Doran, 1981). Secondly, goals must be challenging; when objectives are too easily attainable, they fail to motivate, leading to complacency. However, the theory also warns of the need to manage task complexity; overly complex goals should be broken down into manageable sub-goals to prevent overwhelm and maintain motivation.

Perhaps the most critical principle in the Tanzanian public sector context is commitment. Locke and Latham (1990) emphasize that goal setting is ineffective without the employee's psychological buy-in. Supervisors foster commitment by ensuring goals are perceived as fair, involving employees in the goal-setting process, and demonstrating their own belief in the process. Finally, the provision of

regular feedback is essential. Feedback allows employees to track their progress relative to goals and make necessary adjustments. Without consistent feedback from supervisors, the appraisal becomes a meaningless annual ritual rather than a dynamic tool for performance management. Therefore, this theory directly informs the investigation of supervisor-led objective setting and supervisor commitment in this study.

Expectancy Theory

While Goal-Setting Theory explains how to structure tasks, Expectancy Theory (Vroom, 1964) explains the cognitive process of motivation. It is a process theory that posits motivation is a conscious choice based on three key beliefs:

1. **Expectancy:** The belief that one's effort (E) will lead to the desired performance level (P). This is influenced by having the necessary skills, resources, and support (E → P).
2. **Instrumentality:** The belief that successful performance (P) will lead to a specific outcome or reward (R) (P → R).
3. **Valence:** The value or importance the individual places on the expected reward.

For a performance appraisal system to be motivating, all three components must be strong. Supervisors are pivotal in strengthening these beliefs. They influence expectancy by providing the resources, training, and support needed for employees to believe they can achieve their goals (relating back to their commitment). Most importantly for this study, supervisors directly control instrumentality. They must create a clear, trustworthy link between performance ratings and subsequent rewards. If employees believe that high performance will not be recognized or rewarded—or that rewards are based on favoritism rather than merit—their motivation to engage sincerely with the appraisal process diminishes significantly (Poon, 2004). The valence of rewards is also crucial; rewards must be tailored to what employees value, which may include intrinsic rewards like recognition and career development opportunities, not just extrinsic financial rewards. Expectancy Theory, therefore, provides the theoretical underpinning for examining the reward system variable.

Theoretical Integration

These theories are highly complementary. Goal-Setting Theory provides the "how-to" for structuring performance (e.g., set clear goals), while Expectancy Theory explains the "why" of employee motivation (e.g., I will strive for these goals because I believe it will lead to a valued reward). A supervisor who sets clear goals (applying Goal-Setting Theory) but fails to deliver on promised rewards (violating Expectancy Theory) will likely see initial effort wane. Thus, the integrated framework suggests that effective

appraisal systems require supervisors to be proficient in both goal-setting techniques and in managing the psychological contract around performance and rewards.

EMPIRICAL LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Effect of Supervisors' Objective Setting on OPA Effectiveness

The empirical literature consistently underscores the importance of effective objective setting as the cornerstone of any performance management system. In the Tanzanian context, findings have been mixed, highlighting a gap between policy and practice. Mbukwin and Matoka (2023), in their study of Mtwara Municipal Council, found a positive correlation between the accuracy and objectivity of OPRAS targets and employee performance. This suggests that when goals are well-defined, they can function as intended. However, other studies point to systemic failures in implementation. Mtasigazya (2021) discovered that in Kinondoni Municipal Council, OPRAS was largely ineffective because employees were not adequately communicated with about its goals, and insufficient training was provided. This lack of communication and training directly inhibits the goal clarity principle of Goal-Setting Theory. Further supporting this, Chimazi's (2018) research on teachers in Arusha found that the failure of supervisors to include teachers in goal-setting discussions was a primary cause of the system's inefficiency. This exclusion undermines goal commitment, a critical element for success.

Beyond Tanzania, the literature reinforces these findings. A study by Kuvaas (2006) in a Western context found that the perceived fairness and constructiveness of the feedback following goal setting were more important for intrinsic motivation than the goals themselves. This indicates that objective setting is not a one-time event but an ongoing process requiring supervisory engagement. The challenges in the Tanzanian public sector—such as high workloads, resource constraints, and bureaucratic inertia—can make collaborative goal-setting particularly difficult. Therefore, while objective setting is theoretically fundamental, its effectiveness in this specific context is contingent on how it is executed by supervisors.

Based on the strong theoretical foundation and the empirical evidence indicating its potential when properly implemented, we hypothesize:

H1: Supervisors' objective setting has a significant positive effect on the effectiveness of Open Performance Appraisal.

The Effect of Supervisor's Commitment on the Effectiveness of OPA

Supervisor commitment refers to the degree to which supervisors actively champion, believe in, and consistently engage with the appraisal process. It manifests through actions such as prioritizing appraisal meetings, providing timely and

constructive feedback, and advocating for resources to support employee development. Empirical evidence strongly positions supervisory commitment as a critical success factor. In the educational sector, Cintrón and Flaniken (2019) found that strong leadership support was the most significant predictor of a successful appraisal process in colleges and universities. Similarly, Mussime's (2018) study at the Bank of Uganda concluded that managerial practices and organizational support were vital for appraisal effectiveness, directly linking leadership engagement to system outcomes. In a different cultural context, Iqbal et al. (2019) demonstrated in Pakistan's telecom sector that supervisor dedication boosted appraisal effectiveness by building trust and credibility, which in turn increased employee acceptance of feedback.

This concept of commitment is deeply intertwined with organizational support theory (Eisenberger et al., 1986). When employees perceive that their supervisor is committed to the appraisal system, they view it as a sign that the organization values their contribution. This perceived organizational support increases their own commitment to the organization and their engagement with the process. Conversely, when supervisors are apathetic or hostile towards OPRAS, treating it as a mere paperwork exercise, employees quickly recognize this dissonance, leading to cynicism and disengagement (Meyer & Smith, 2017). In the Tanzanian public health sector, where supervisors may be overburdened with clinical or administrative duties, their commitment to a robust appraisal process is a true test of the system's priority. Given the overwhelming evidence highlighting its pivotal role, we hypothesize:

H2: Supervisors' commitment has a significant positive effect on the effectiveness of Open Performance Appraisal.

The Effect of Supervisors' Reward on the Effectiveness of OPA

The "line of sight" between performance and reward is a fundamental motivator. Expectancy Theory asserts that without a strong belief in instrumentality (P->R), motivation will falter. The empirical literature, however, often reveals a significant gap in this linkage within public sector contexts.

Research in various settings confirms the importance of rewards. Hee and Jing (2018) found in Malaysian manufacturing that performance appraisal, as a mechanism for determining rewards, significantly affected employee performance. Nicholas and Hilary (2019), studying Nigerian security personnel, highlighted that the absence of meaningful rewards led to poor performance and low dedication. Idowu (2017) also confirmed that performance reviews are motivational when clearly linked to rewards. However, the challenge in many public sectors, including Tanzania, is the perception and reality of reward distribution. Adams and Ama (2024) found that employees often

felt rewards were not distributed fairly, undermining the system's credibility. This is a critical issue.

Poon (2004) emphasizes that for a performance appraisal system to be perceived as fair (procedural and distributive justice), rewards must be consistently and transparently linked to performance ratings. In the context of OPRAS, supervisors often have limited direct control over financial rewards like pay rises, which are governed by centralized civil service rules. However, they do have influence over other crucial rewards, such as recognition, recommendations for training and career advancement, and intrinsic feedback. When supervisors fail to utilize these available levers to recognize high performers, the instrumentality belief is broken. Therefore, the supervisor's role in administering both formal and informal rewards is paramount. Based on this, we hypothesize:

H3: The reward system administered by supervisors has a significant positive effect on the effectiveness of Open Performance Appraisal.

METHODS AND DATA

Research Design

This study employed an explanatory research design. This design is appropriate for establishing cause-and-effect relationships between variables, as it allows researchers to test hypotheses about how an independent variable influences a dependent variable (Carter et al., 2023). The primary objective of this study is to explain the influence of specific supervisory roles (independent variables) on the effectiveness of the Open Performance Appraisal (OPA) system (dependent variable), making the explanatory design the most suitable choice. With regard to research strategy, a cross-sectional survey was adopted. This strategy involves collecting data from a sample of a population at a single point in time using standardized questionnaires (Zikmund et al., 2013). The survey strategy was deemed optimal for this study as it facilitates the efficient collection of quantitative data from a large sample, enabling statistical generalization to the broader population of public health institution employees in Tanzania (Braun et al., 2021).

Area of the Study

The study was conducted in Dar es Salaam and Dodoma regions. These two regions were purposively selected because they host the national headquarters of all major public health institutions in Tanzania. By focusing on the headquarters, the study targeted employees who are most directly involved with and affected by the centralized policies and implementation of the OPRAS system. The study covered six key public health institutions under the Ministry of Health:

1. Medical Stores Department (MSD)
2. National Health Insurance Fund (NHIF)
3. Government Chemistry Laboratory Authority (GCLA)
4. National Institute for Medical Research (NIMR)
5. Tanzania Food and Nutrition Centre (TFNC)
6. Tanzania Medicines and Medical Devices Authority (TMDA)

Including all these institutions ensured a high degree of representativeness and reduced the risk of selection bias, providing a comprehensive view of OPA effectiveness across the public health sector.

Population and Sample

The target population for this study consisted of all 2,404 permanent employees of the six public health institutions listed in Table 1.

Table 1 Number of Employees at Government Health Institutions

SN	Government Health Institution	Total Number of Staff
1	Medical Stores Department (MSD)	592
2	National Health Insurance Fund (NHIF),	694
3	Government Chemistry Laboratory Authority (GCLA),	287
4	National Institute for Medical Research (NIMR),	407
5	Tanzania Food and Nutrition Centre (TFNC),	120
6	Tanzania Medicines and Medical Devices Authority (TMDA).	304
Total Population		2,404

Source: MSD, NHIF, GCLA, NIMR, TFNC, TMDA (2023)

Since it is a known population, the researcher is using Yamane's formula (Yamane, 1967) to calculate the minimum sample size.

$$\begin{aligned}
 \text{Sample Size} &= N / (1 + Ne^2) \\
 &= 2,404 / (1 + 2,404 \times 0.052) \\
 &= 2,404 / 7.01 \\
 &= 342
 \end{aligned}$$

To ensure proportional representation from each institution, a stratified random sampling technique was used. The population was divided into six strata (each institution), and the sample size of 343 was distributed proportionally based on the number of employees in each stratum, as shown in Table 2.

Table 2 Sampling and Sample Size Distribution

Population	Sampling Frame	Percentage	Sample
Medical Stores Department (MSD)	592	25	86
National Health Insurance Fund (NHIF),	694	29	99
Government Chemistry Laboratory Authority (GCLA),	287	12	41
National Institute for Medical Research (NIMR),	407	17	58
Tanzania Food and Nutrition Centre (TFNC),	120	5	17
Tanzania Medicines and Medical Devices Authority (TMDA).	304	12	41
Total	2,404	100%	342

Source: MSD, NHIF, GCLA, NIMR, TFNC, TMDA (2023)

Data Collection Instrument and Measurement

The primary instrument for data collection was a structured self-administered questionnaire. The questionnaire was developed based on a comprehensive review of the literature (see Table 3) to ensure content validity. It was divided into seven sections:

- **Section A:** Demographic information of respondents (gender, age, education level, work experience).
- **Section B:** Objective Setting (5 items)
- **Section C:** Supervisor Commitment (5 items)
- **Section D:** Reward System (5 items)
- **Section E:** Effectiveness of Open Performance Appraisal (5 items)

All items in sections B through E were measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The questionnaire was first drafted in English, then translated into Kiswahili to enhance comprehension, and finally back-translated to English to check for consistency. A pilot study was conducted with 30 employees from a public health institution not included in the main study. The pilot test confirmed the clarity, relevance, and reliability of the instrument. The reliability of the scales was confirmed using Cronbach's Alpha, with all constructs scoring above the acceptable threshold of 0.7, as detailed in Table 3.

Variables and Measurements

Table 3 indicates how variables of the study were measured;

Table 3. Variable Measurements

Variable	Measurements	Measurement Source Scale
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Objective Setting	Specific Measurable Attainable Realistic Time bound	5-Point Likert Scale	Edwin (1968); Decenzo and Robbins (2003); Mayse 2015)
Commitment	Open set goals Communication Self-set goals Self-drive Follow-ups	5-Point Likert Scale	Edwin, (1968); Armstrong (2006); Indeed, (2021).
Reward Mechanism	Pay rise Promotion Recognition Career advancement Training and Development	5-Point Likert Scale	Vroom, et al, 1983), Karuhanga (2010) and Ogunyomi 2011).
Effective Employee Appraisal	Clear appraisal objectives Well defines performance criteria Less time consuming Accurate and reliable data Appraisal Communication	5-Point Likert Scale	Kondrasuk, (2011) and Mwaipungu, (2019).

Data Analysis Techniques

The collected data were screened for completeness and missing values. The clean data were then coded and entered into the Statistical Package for the Social Sciences (SPSS version 26) for analysis. The analysis proceeded in two stages:

1. **Descriptive Analysis:** Frequencies, percentages, means, and standard deviations were used to summarize the demographic characteristics of the respondents and the central tendencies of the main study variables.
2. **Inferential Analysis:** To test the hypotheses and examine the relationship between the independent variables (Objective Setting, Supervisor Commitment, Reward System) and the dependent variable (OPA Effectiveness), Multiple Linear Regression Analysis was employed. The following model was used:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where:

- Y = Effectiveness of Open Performance Appraisal
- β_0 = Constant (the intercept)
- $\beta_1, \beta_2, \beta_3$ = Regression coefficients of the independent variables

- X_1 = Objective Setting
- X_2 = Supervisor Commitment
- X_3 = Reward System
- ε = Error term

Prior to the regression analysis, key assumptions—including normality, linearity, multicollinearity (using Variance Inflation Factor - VIF), and homoscedasticity—were tested and confirmed to be within acceptable limits, ensuring the validity of the regression results.

FINDINGS

Descriptive Statistics of the Sample

A total of 310 respondents from six public health institutions successfully completed the questionnaire. The demographic profile of the respondents is summarized in Table 4. The sample was predominantly male (59.7%) and highly educated, with 70.6% of respondents holding a Bachelor's degree or higher. The majority of respondents were in the prime of their careers, with 74.8% aged between 28 and 47 years. Furthermore, a significant proportion (47.1%) had over seven years of work experience, indicating a workforce with substantial institutional knowledge capable of providing informed perspectives on the performance appraisal system.

Table 4: Demographic Profile of Respondents (N=310)

Variable	Category	Frequency	Percentage (%)
Gender	Male	185	59.7
	Female	125	40.3
Age	18 – 27 Years	23	7.4
	28 – 37 Years	116	37.4
	38 – 47 Years	116	37.4
	48 Years and Above	55	17.7
Education Level	Secondary Education	9	2.9

Variable	Category	Frequency	Percentage (%)
Work Experience	Certificate	18	5.8
	Diploma	64	20.6
	Bachelor's Degree and Above	219	70.6
	Less than 1 Year	34	11.0
	1 – 3 Years	44	14.2
	4 – 6 Years	86	27.7
	7 Years and Above	146	47.1

Prior to hypothesis testing, descriptive statistics (mean and standard deviation) were computed for the main study variables to understand respondents' general perceptions. The results, presented in Table 5, indicate that respondents, on average, perceived the effectiveness of the OPA system moderately (Mean = 3.21). Among the independent variables, Supervisor Commitment received the highest average rating (Mean = 3.45), while the Reward System was perceived least favorably (Mean = 2.89), suggesting a potential area of concern.

Table 5 Respondents Demographic Information

Variable	Category	Frequency	Percentage
Gender	Male	185	59.7
	Female	125	40.3
Age	18 – 27 Years	23	7.4
	28 – 37 Years	116	37.4
	38 – 47 Years	116	37.4
	48 Years and Above	55	17.7
Education Level	Secondary Education	9	2.9
	Certificate Level	18	5.8
	Diploma Level	64	20.6
	Bachelor's Degree and Above	219	70.6

Work Experience	Less than a Year	34	11.0
	1 – 3 Years	44	14.2
	4 – 6 Years	86	27.7
	7 Years and above	146	47.1

MULTIPLE REGRESSIONS ANALYSIS

Model Fitness ANOVA Test

The ANOVA table (Table 6) offers information about the overall significance of the regression model that looks at how different predictors, including INS, OS, RS, COM, and FB, affect the efficacy of OPA. The variability in OPA effectiveness that the five predictors account for is represented by the regression sum of squares, 81.014. With a residual sum of squares of 99.205, the model cannot account for the variation in OPA effectiveness. The overall variability in the dependent variable, OPA effectiveness, is represented by the sum of squares, which comes to 180.219. With a significance level (p-value) of 0.000 and an F-value of 49.652, the model is below the conventional alpha threshold of 0.05. Given that the predictors collectively significantly impact OPA effectiveness, this suggests that the regression model is statistically significant. As stated earlier, there is a significant correlation between the effectiveness of OPA and at least one of the independent variables (INS, OS, RS, COM, FB). The significance of the p-value verifies that the model as a whole explains a sizable amount of the variance in OPA effectiveness, and the high F-value indicates a strong overall fit of the model. The study, therefore, concludes that a combination of institutional factors, organizational support, communication, feedback, and resource sufficiency influences OPA's effectiveness. More research is required to fully comprehend each predictor's significance and impact.

Table 6 ANOVA Model Fitness Test

	Sum of Square	df	Mean Square	F	Sig.
Regression	73.290	3	24.430	69.911	0.000 ^b
Residual	106.929	306	0.349		
Total	180.219	309			

Normality Test

The histogram (Figure 1) revealed a distribution that closely resembles a normal bell curve. The residuals were symmetrically distributed around the mean (approximately zero), and the shape was neither significantly skewed nor heavily tailed. This visual evidence suggests that the residuals are approximately normally distributed, which supports the suitability of the data for linear regression analysis (Ghasemi & Zahediasl, 2012). According to Field (2018), a roughly bell-shaped

histogram with residuals concentrated near the center and tapering off at both ends indicates no serious departures from normality.

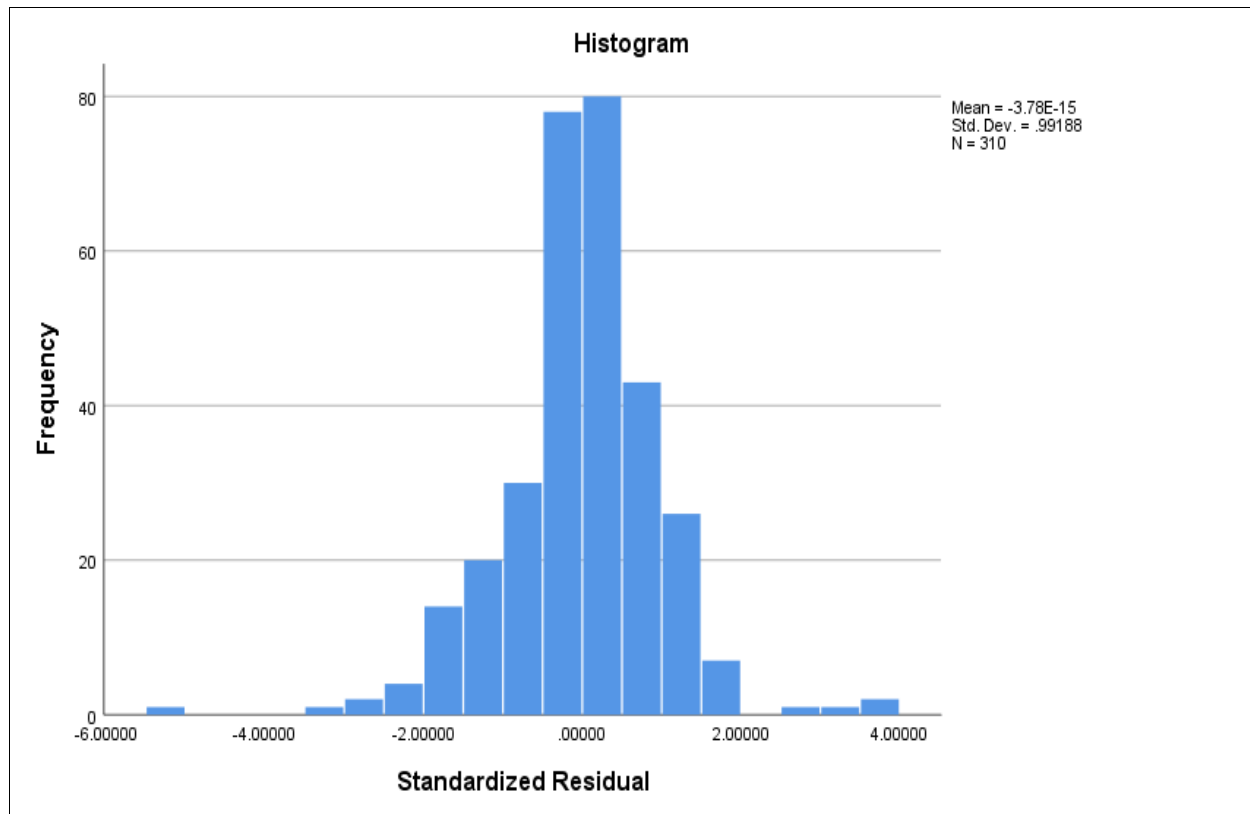


Figure 1: Histogram

Heteroskedasticity Test

This is shown from the results of heteroscedasticity in regression analysis, showing scatter plots indicating a pattern of inequality in variance of residuals within some range of independent variables. In other words, heteroscedasticity will be heteroscedasticity when residual graph plot points are more scattered on one side. Because this pattern suggests that either the variance of errors increases or decreases with the level of the independent variable, it violates one of the critical assumptions of ordinary least squares regression: that the error term has a constant variance. As Wooldridge (2019) has stated, heteroskedasticity can make estimates inefficient and hypothesis tests unreliable. It does not rule out running a multiple regression analysis, for even though the standard errors of the regression estimates may not be reliable, regression models may still be estimated. Remedies that could have been used to make this model appropriate and valid include robust standard error and variable transformation (Stock and Watson, 2020).

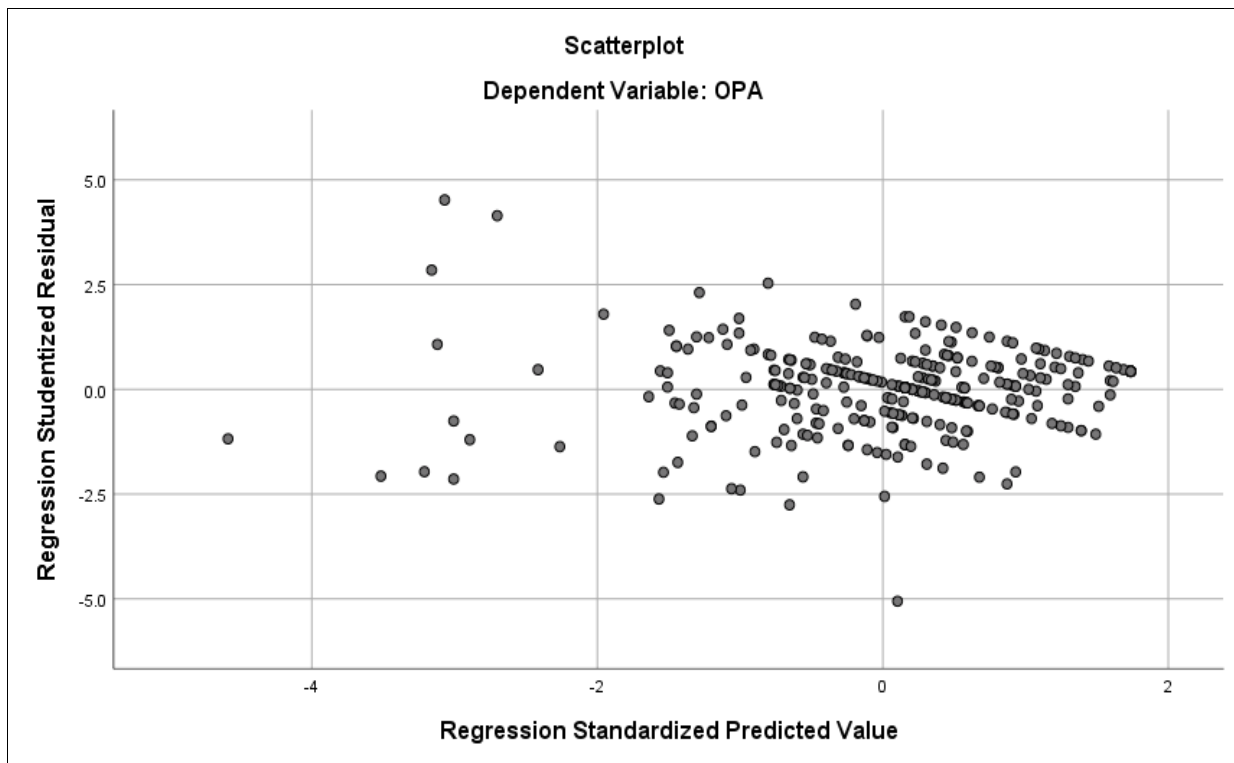


Figure 2 Heteroscedasticity Test

Multicollinearity

Using tolerance and the Variance Inflation Factor (VIF) as multicollinearity measures, Table 6 describes the collinearity statistics for three independent variables: objective setting, supervisors’ commitment and reward system. According to the results, the objective setting had a VIF of 1.921, supervisors’ commitment had a VIF of 1.905, while the reward system had a VIF of 1.542. According to Kutner et al. (2004), a VIF value between 1 and 5 typically denotes moderate multicollinearity, whereas a value above 10 is frequently thought to suggest severe multicollinearity. In this case, all of the VIF values are below 5 and, therefore, indicate no multicollinearity problem.

Table 7 Multicollinearity Test

	Collinearity Statistics	
	Tolerance	Tolerance
Objective Setting	.521	1.921
Supervisors` Commitment	.525	1.905
Reward System	.648	1.542

Model Summary

The regression analysis results are summarised in Table 9, which also shows the overall efficacy of the OPA as the dependent variable. With a correlation coefficient (R)

of 0.638, the model indicates a moderately strong relationship between the predictors and OPA effectiveness. The combined influence of these predictors can account for about 40.7% of the variation in OPA effectiveness, according to the R Square value of 0.407. The average separation between the observed values and the regression line is indicated by the standard error of the estimate (0.59114). In this instance, the standard error is fairly moderate, suggesting that although the model successfully forecasts OPA effectiveness, there is still an opportunity for improvement in the accuracy of the predictions (Aguinis, 2019).

Table 8 Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.638 ^a	0.407	0.401		0.59114

Multiple Regressions Coefficients

The findings in Table 10 indicate that objective setting has a positive but insignificant effect on the effectiveness of OPA (B=0.124, p-value=0.077). On the other hand, supervisors` commitment and reward systems have positive and significant effects on the effectiveness of OPA with regression coefficients of 0.298 and 0.348 and p-values of 0.000 and 0.000, respectively.

Table 9 Multiple Regressions Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	0.898	0.227		
Objective Setting	0.124	0.070	0.108	1.776	0.077
Supervisors` Commitment	0.298	0.071	0.253	4.170	0.000
Reward System	0.348	0.050	0.382	6.987	0.000

Dependent: OPA Effectiveness

DISCUSSION OF FINDINGS

The findings in Table 8, which show that objective setting has a positive but insignificant effect on the effectiveness of OPA (B=0.124, p-value=0.077), suggest that while establishing objectives may contribute to organizational performance, its impact alone is insufficient to produce significant results. This indicates that other factors, such as resource allocation, leadership commitment, and implementation strategies, may

substantially enhance OPA effectiveness. The positive coefficient implies that organizations with clearer objectives will likely perform better. However, the insignificance points to potential gaps in how these objectives are set, communicated, or aligned with overall strategies. These findings align with prior studies, such as those by Mbukwin & Matoka (2023) who examined how OPRAS affects Tanzanian local government employees' performance in Mtwara Municipal Council. The study found a positive correlation between OPRAS target accuracy and employee performance.

Also, Mtasigazya (2021) examined how OPRAS affects Kinondoni Municipal Council staff performance management. The findings show that OPRAS was poorly implemented because employees were not informed of its goals, no training was provided, and public servant motivations were not addressed. Similarly, Chimazi (2018) examined appraisal management to ensure the teacher performance system works. The researchers found that supervisors' failure to include supervisees in goal-setting and discussions, supervisors' and supervisees' poor comprehension of OPRAS, a lack of feedback, and a lack of training and seminars on filling out OPRAS forms caused the system's inefficiency for teachers.

The findings that supervisors' commitment has a positive and significant effect on OPA effectiveness ($B=0.298$, $p\text{-value}=0.000$) highlight the critical role of leadership in enhancing organizational performance. This aligns with existing literature emphasizing the importance of supervisors' dedication in fostering a conducive work environment, ensuring resource allocation, and motivating employees to achieve organizational goals. Different prior researchers obtained similar findings. For instance, Performance appraisal as a supervision or leadership tool was examined by Cintrón and Flaniken (2019). The study found that strong leadership support is needed to improve the appraisal process. In this study, 93.7% of respondents said their college's leadership encouraged performance appraisal. The study recommended strong leadership support for better employee appraisals. Also, Mussime (2018) examined how organisational support, communication, and managerial practices affect Bank of Uganda's performance appraisal system. The study found that organisational support, communication, and managerial practices affect performance appraisal system effectiveness. Apart from that, Iqbal et al. (2019) examined how performance appraisal (PA) goals affect short- and long-term results. The findings show that supervisor dedication boosts PA effectiveness.

The findings reveal that the reward system has a positive and significant effect on OPA effectiveness ($B=0.348$, $p\text{-value}=0.000$), indicating that well-designed reward mechanisms play a crucial role in enhancing organizational performance. This aligns with the expectancy theory of motivation, which posits that employees are likelier to exert effort when they perceive that their performance will be fairly rewarded (Vroom, 1964). Empirical evidence supports this relationship; Hee and Jing (2018) examined how

human resource management practices affect performance. Findings showed that performance appraisal and training and development significantly affected employee performance. Also, Nicholas and Hilary (2019) examined security workers' motivation and reward systems. The study found that security personnel perform poorly without these rewards and are less dedicated. Similarly, Idowu (2017) measured performance review system effectiveness and employee motivation. The study found that performance reviews motivate an organisation. Adams & Ama (2024) also examined how rewards and feedback affect employees' quantity, quality, and work efficiency. The study found that employees only received paid leave.

THEORETICAL CONTRIBUTIONS

This study enhances the theoretical comprehension of performance appraisal effectiveness by illustrating the impact of supervisors' roles on employee performance within public health institutions. It demonstrates that establishing clear and challenging objectives positively influences performance appraisal results; however, the direct impact may be constrained when organisational and individual goals are not entirely aligned. Even so, supervisors are very important for making sure that employees understand and commit to their goals, breaking them down into smaller, more manageable tasks, and giving regular feedback. This is how the principles of effective goal setting work in real-life situations.

The study also shows how important it is for supervisors to be committed and to have reward systems in place to make performance appraisals more useful. When employees think that their hard work will be noticed and rewarded, they are more likely to do their best. Supervisors who always keep their promises and make sure that promised rewards are given create a work environment that encourages employees to do their best. This shows that motivational systems and meeting employee expectations are important for turning effort into results that matter.

The study offers a nuanced comprehension of enhancing performance appraisal effectiveness by synthesising the roles of goal clarity, feedback, supervisory commitment, and reward systems. Supervisors play a crucial role in connecting structured goal-setting processes with motivational strategies, making sure that employees not only know what is expected of them but also stay interested and motivated to meet those expectations. This integrated viewpoint provides actionable recommendations for enhancing performance management systems and highlights the significance of supervisory impact in fulfilling organisational goals.

POLICY IMPLICATIONS

The results of this study have important policy implications for public health organisations. First, policymakers should stress the need for clear guidelines that help

supervisors set specific, measurable, and difficult goals for their employees. Setting up structured performance appraisal systems that include regular feedback will help make sure that employees know what is expected of them, stay interested, and can keep track of their progress during the appraisal cycle. Second, policies should require that reward and recognition systems be linked to how well employees do their jobs. Supervisors should always keep their promises of rewards, whether they are intrinsic or extrinsic. This will boost motivation and create a culture of accountability and high performance. This can also help keep people engaged and boost productivity among all staff.

Lastly, there should be permanent training and capacity-building programs for supervisors. Giving supervisors training in how to set goals, keep an eye on performance, and motivate others will help them use performance appraisal systems more effectively. By concentrating on these domains, public health organisations can elevate employee performance, enhance service delivery, and attain overarching organisational objectives, thereby ensuring alignment between human resource management policies and performance management goals.

FUTURE RESEARCH DIRECTION

While this study provides significant insights into the influence of specific supervisory roles on OPA effectiveness, it also opens several avenues for future research to build upon these findings.

First, future studies should incorporate mediating and moderating variables to deepen the understanding of the underlying mechanisms. For instance, investigating how organizational culture or employee perceptions of organizational justice mediate the relationship between supervisory actions and appraisal effectiveness could yield a more nuanced model. Similarly, factors such as leadership styles (e.g., transformational vs. transactional) or team dynamics might moderate these relationships, explaining why supervisory practices yield different outcomes across various departments or institutions.

Second, to enhance the generalizability of these findings, comparative research is recommended. Conducting similar studies in other sectors—such as private healthcare, education, or other branches of the Tanzanian civil service—would test the robustness of the current model. A cross-national comparative study within East Africa could also illuminate the influence of differing national policies and administrative cultures on the performance appraisal process.

Third, the temporal dimension of these relationships remains unexplored. A longitudinal research design would be highly valuable to track how changes in supervisory practices influence OPA effectiveness and, ultimately, employee performance over time. Such a design could establish stronger causal inferences and

reveal the long-term sustainability of interventions aimed at improving supervisor commitment and reward systems.

Finally, as the Tanzanian public service continues to digitize, a critical area for inquiry is the intersection of technology and human oversight. Future research should investigate the effectiveness of digital platforms like PEPMIS and examine how the role of the supervisor evolves in an automated appraisal environment. Key questions include how technology can augment, rather than replace, the crucial motivational functions of goal-setting, feedback, and recognition performed by supervisors.

By exploring these directions, future research can continue to develop a more comprehensive and actionable body of knowledge for improving public sector performance management.

CONCLUSION

The findings suggest that while objective setting shows a positive but insignificant influence on the effectiveness of OPA, it may not directly drive significant improvements in performance without the support of other factors. In contrast, supervisors' commitment and reward systems demonstrate strong and significant impacts, highlighting their critical roles in enhancing organizational effectiveness. These results emphasize that fostering leadership commitment and implementing effective reward mechanisms are essential for achieving desired outcomes. Meanwhile, the limited influence of objective setting indicates the need for further investigation into its integration with other organizational strategies to unlock its full potential.

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