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Performance Appraisal Practices and Teacher Performance in Public Secondary Schools in Kenya: A Case of Busia County

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Abstract

Purpose: The purpose of the study was to investigate the relationship between performance appraisal practices and teacher performance in Busia County, Kenya. The Systems theory and the Ability-Motivation-Opportunity (AMO) theory informed this study.

Methodology: The study was anchored on a pragmatic paradigm and adopted a mixed methods approach. The study targeted 185 public secondary schools in Busia County. The study categorized respondents into 3 strata: Principals, Mathematics Head of Department (HODs) and County Director of Education (CDE). Simple random sampling was then utilized to select samples from each stratum. Schools were clustered based on 7 Sub- Counties in Busia County. The sample size of the study was 126 HODs, 19 Principals and 1 CDE. Questionnaires and interview schedules were used to collect data. Piloting was conducted in 37 schools to refine instruments. Thematic analysis was applied in the analysis of qualitative data. Data analysis and interpretation was based on descriptive statistics such as frequencies, percentages, mean, standard deviation and inferential statistics such as correlation and regressions.

Findings: The findings of the study was that there is a statistically significant relationship between performance appraisal and teacher performance ($r = 0.440$, $p<0.05$), hence the study rejected the null hypothesis. The study concluded that a unit improvement in performance appraisal is likely to result to an improvement in the teacher performance by 44% ($\beta = 0.440$, $t= 0.855$, $p<0.05$). The study holds substantial academic and policy implications.

Unique Contribution to Theory, Practice and Policy: The findings contribute to the understanding of the complex relationships between performance appraisal practices and teacher performance. The study provides actionable insights for education managers, empowering them to take strategic measures to address performance gaps and improve teaching standards in the unique setting of public secondary schools in Kenya. By understanding the dynamics between performance appraisal practices and teacher performance, educational institutions can tailor strategies to optimize the effectiveness of their teaching staff in Science, Technology, Engineering and Mathematics STEM subjects.

Keywords: *Performance Appraisal, Teacher Performance, Target Setting, Performance Gaps, Teaching Standards*

1. Introduction

Performance appraisals have emerged in the recent past as one of the strategic tools that can be utilized to support performance management system in any organization whether public or private (Choong et al., 2020;Lovell, 2022). Performance appraisal practices involves setting goals, evaluating employee's effectiveness against set standards, providing feedback about job performance and addressing performance gaps of each employee. Effective performance appraisal practices make employees feel valued within an organization, increase engagement, boost performance and improve retention rates (Al-Jedaia et al., 2020; Alsuwaidi et al., 2020). In addition, continuous performance appraisals, with real- time feedback, regular review meetings and discussions help management to identify training and development needs of employees and guide the development of training programs. Furthermore, performance appraisals create a feedback-driven culture that empowers employees to enhance their performance, leading to improved productivity levels. (Kamble et al., 2020). In education sector like other organizations, performance appraisal practices play a pivotal role as a tool to increase teacher effectiveness in achieve better student learning outcomes (Brown et al., 2020). Performance appraisal can also help to increase the focus on teachers' professional learning. Teachers need feedback on their performance to help them identify how to improve their teaching practice and to develop schools as professional learning communities that offer professional guidance and support. Performance appraisal can further help teachers to progress in their career and to take on new roles and responsibilities based on effective evaluation of their performance (Smith & Johnson, 2018). When used effectively, performance appraisal can positively influence teachers' attitudes, motivation and classroom practices and, through this, help to improve students' learning outcomes (Anderson & Clark, 2019). In addition, Nwaka & Ofojebe (2020) opined that teachers are perceived as critical human resources for the effective implementation of educational goals and objectives. Therefore, understanding the impact of performance appraisal practices on teacher performance, is crucial in the current study

Globally, decline in teachers' performance has been observed in a number of countries in Western world, Asia and substantial portions of Sub Saharan Africa, especially in public schools (Clarke, 2022). The challenge of declining teacher performance is perceived to be a shared concern in regions that encompass diverse cultures, economies, and educational systems. The challenge may be attributed to changing dynamics in the teaching service largely contributed by globalization, technological changes and other social disruptions. In addition, insufficient co-ordination framework for teacher professional development programs, lack of clear framework to address performance gaps and providing relevant training opportunities that can equip employees with the tools and knowledge necessary to excel in their roles, may result in deficits in the pedagogical knowledge and skills could lead to low teacher performance (Abakunda et al, 2023). In the United States, in response to this global phenomenon, various strategies have been devised to tackle the issue of diminishing teacher performance. For instance, teacher work performance has become a

subject of intense political debate, leading to policy changes such as the abolition of teacher tenure and the extension of the waiting period for tenure eligibility in several states. Similarly, the United Kingdom experienced low teacher morale, prompting the implementation of annual performance reviews as a measure to address the issue (Al-Mahdi & Purinto, 2022)

In Africa, challenges of declining teacher performance are more pronounced. For instance, South Africa has high number of dysfunctional public schools, because of underperforming teachers (Clarke, 2022). In addition, based on the United Nations Educational, Scientific and Cultural Organization UNESCO (2016) report, classroom observation in six countries in Sub- Saharan Africa: such as Kenya, Mozambique, Nigeria, Tanzania, Togo and Uganda, found that few public school teachers are able to assess learners' abilities and evaluate student progress. In East Africa, these challenges of declining teacher performance undermine the quality of education, more particularly with repercussions on students' academic achievements. This calls for the implementation of strategies that can improve teacher motivation, provide professional support and establish mechanisms that promote accountability for learning outcomes. Moreover, professional development opportunities, training, and mentorship programs can play a pivotal role in equipping teachers experiencing performance gaps with the requisite skills and knowledge for effective service delivery United Nations Children's Fund (UNICEF, 2018).

In Kenya, much like other East African countries, the educational landscape faces challenges. According to Kenya National Examination Council KNEC (2023) report, only 19.62% of candidates attained the minimum entry qualification grade C+ and above in 2022 Kenya Certificate of Secondary Education exams (KCSE). In addition, more than 50 % of candidates scored grades D and E in Mathematics in 2022 Kenya Certificate of Secondary Education exams (KCSE). Similarly, an analysis report carried out by Ministry of Education in 2023 revealed that only 22% of Kenyan University students pursue courses in Science, Technology, Engineering and mathematics (STEM) subjects compared to 70% in Asian Countries like southern Korea and Singapore (MOEST, 2023). Since the Teacher Service Commission (TSC) considers declining learner achievement in national examinations for a consecutive period of three years as one of the areas of poor teacher performance, this is an indicator that teachers in Kenya could be experiencing educational challenges (UNESCO, 2018; KUCCPS, 2022. The Kenya government through the Teacher Service Commission (TSC) and Ministry of education, have undertaken steps to improve teacher performance in Science, Technology, Engineering and Mathematics (STEM) subjects (TSC, 2020); TSC, 2018). Some initiatives, to address low mean scores in STEM subjects include; rolling out performance appraisal in all public schools to review and improve teaching standards through a systemic appraisal approach, with a view to evaluate teachers' performance and promote professional development for enhanced learning outcomes (TSC Act, 2012). However, the teachers are still experience challenges in getting timely feedback about the performance gaps from the appraisal reports at school levels. The delayed feedback makes it difficult for teachers develop individualized professional development plan to address performance gaps (TSC, 2020).

The current study sought to determine the influence of effective performance appraisal practices on teacher performance in public secondary schools.

2. Statement of the problem

Improving the performance of teachers is at the forefront of concern among educators and policy makers in Kenya (TSC, 2018). Based on the Sustainable Development Goals (SDG) number 4, the government of Kenya in collaboration with the Global Partnership for Education (GPE) and World Bank and through the Ministry of Education and TSC, is focused on improving quality education in all public schools. According to the TSC Act (2012), quality education revolves around effective teacher management practices. Despite the Kenyan government's efforts to equip teachers in STEM subjects, with relevant professional skills, a report from Busia County Education Office (2023) revealed that Mathematics KCSE subject mean scores have been persistently below average (6 out of 12) for the past five years from 2018 to 2022 (2.03, 2.30, 2.67, 2.93 & 3.07) respectively. Such dismal performance in mathematics has serious consequences on the future economy of the country (MOEST, 2023). The STEM subjects hold the promise of driving the country, towards achieving sustainable development goals SGDs and 2030 agenda of economic growth. In addition, KUCCPS and other professional regulatory agencies such as the (Council for Legal Education, Nursing Council, Clinical Officers Council, TSC and Medical Practitioners and Dentists' Council) have placed stringent rules, on those aspiring to join the respective profession. It is clear that Mathematics lies at the centre of any career choice. Students with such low mean scores in Mathematics might not qualify for enrolment in competitive professional courses of their choice and might lose opportunities for upward mobility both socially and economically (UNESCO, 2018).

The foregoing studies such as Nyongesa (2018), Kamau (2019) and Tumusiime et al (2021) opine that performance appraisal practices may influence teacher performance in term of increased efficiency and commitment in service delivery. It is upon this background that the current study sought to establish whether performance appraisal practices in schools in terms of goal setting, constructive feedback and addressing performance gaps can improve teacher performance in terms of improved teaching standards. The current study not only sought to enhance academic understanding but also offered actionable insights for educational institutions and policymakers striving to optimize teacher performance through effective performance appraisal practices.

3. Methodology

The study was anchored on pragmatic paradigm and adopted a mixed methods approach to address the research questions. The study targeted 185 Principals, 185 Heads of departments in 185 public secondary schools in Busia County and the County Director of Education. A sample size of 126 Heads of Departments, 19 Principals and the County Director of Education were selected through stratified random sampling. The strata included County Director of Education, Principals and Heads of Departments. Questionnaires and interview schedules were used to collect primary data.

The Cronbach alpha coefficient for all factors was above 0.7 minimum threshold indicating acceptable levels of internal consistence. The KMO results for all factors was above 0.5 minimum threshold, indicated acceptable degree of sampling adequacy for all factors. Construct validity was tested using the (AVE) Average Variance Extracted and Max(R)H Maximum Shared Variance as a measure of convergent validity and discriminant validity. All factor loading for AVE and MaxR(H) values were above 0.5 a minimum thresh hold established (Santos & Cirillo, 2021). Therefore, the constructs in the study have acceptable degree of discriminant validity and convergent validity. Content validity was established by expert judgement. Thematic analysis was applied in the analysis of qualitative data. Data analysis and interpretation was based on descriptive statistics such as frequencies, percentages, mean, standard deviation and inferential statistics such as correlation and regressions. The study used the Statistical Package of Social Science (SPSS) version 26.0 moment structures (AMOS) statistical software to analyze data. The study findings were presented using APA tables.

4. Research Findings and Discussions

The objective of the study was to establish the relationship between performance appraisal practices and teacher performance in public secondary schools. To achieve this, the study subjected the respondents to similar questions on questionnaires on a five point likert scale of 1- Strongly disagree, 2- Disgree, 3- Moderate, 4- Agree, 5= Strongly Agree. The results were obtained in frequencies, percentages, mean and standard deviation. Results of descriptive statistics are presented in table 4.1 and 4.2 Further analysis was done and results of correlation and regression are presented in Figure 1, table 4.1, table 4.2, table 4.3 and table 4.4

Table 4.1: Teacher Performance

	1		2		3		4		5			
Teacher Performance	**Count**	**Row N %**	**Count**	**Row N %**	**Count**	**Row N %**	**Count**	**Row N %**	**Count**	**Row N %**	**Mean**	**Std Deviation**
The teacher demonstrate high subject mean scores for the past five years	12	9.6%	77	61.1%	13	10.4%	9	7.2%	14	11.2%	2.51	1.144
Teacher demonstrate high lesson attendance rating	7	5.6%	8	6.4%	10	8%	21	16.8%	79	63.2%	4.27	1.169
The teacher demonstrate mastery of subject content knowledge in the classroom	20	16%	7	5.6%	78	62.4%	11	8.8%	9	7.2%	2.95	0.875
The teacher carry out learner assessment and provides regular feedback on learner progress	10	8%	83	66.4%	15	12%	9	7.2%	8	6.4%	2.37	0.968
Teacher demonstrate ability to use learner centered teaching and learning methodologies	18	14.4%	64	51.2%	25	20%	8	6.4%	10	8%	2.43	1.069
Teacher demonstrate ability to prepare and maintain of professional records based on the syllabus	8	6.4%	16	12.8%	16	12.8%	70	56%	15	12%	3.56	1.070
Teacher demonstrate ability to diversify instruction methodologies to meet needs of learners	9	7.2%	12	9.6%	81	64.1%	15	12%	8	6.4%	1.83	1.284
Teachers demonstrates high rating on lesson observation tool	14	11.2%	8	6.4%	14	11.2%	79	63.2%	10	8%	3.05	0.911

Source (Field Data, 2023)

From table 4.1 it was observed that 12(9.6%) respondents strongly disagree that mathematics teachers demonstrate high subject mean scores, for the past five years, while 77(61.1% respondents disagree, 13(10.4%) respondents neither agree nor disagree, 9(7.2%) respondents agree and 14(11.2%) respondents strongly agree. On average (Mean=2.51; Std. Dev. =1.144); this indicates that majority of mathematics teachers in Busia County have been experiencing dismal mathematics mean scores for the past five years.

It was observed that 7(5.6%) respondents strongly disagree that mathematics teachers demonstrate high lesson attendance rating for the past five years, while 8(6.4%) respondents disagree, 10(8%) respondents neither agree nor disagree, 21(16.8%) respondents agree and 79(63.2%) respondents strongly agree. On average (Mean=4.27; Std. Dev. =1.169); this indicates that majority of mathematics teachers in Busia County have high lesson attendance rating for the past five years.

It was observed that 20(16%) respondents strongly disagree that mathematics teachers demonstrate mastery of subject content knowledge in the classroom, while 7(5.6%) respondents disagree, 78(62.4%) respondents neither agree nor disagree, 11(8.8%) respondents agree and 9(7.2%) respondents strongly agree. On average (Mean=2.95; Std. Dev. = 0.875); this indicates that majority of mathematics teachers in Busia County have high mastery of subject matter knowledge in the classroom for the past five years

It was observed that 10(8%) respondents strongly disagree that mathematics teacher carry out learner assessment and provides regular feedback on learner progress, while 83(66.4%) respondents disagree, 15(12%) respondents neither agree nor disagree, 9 (7.2%) respondents agree and 8(6.4%) respondents strongly agree. On average (Mean=2.37; Std. Dev. = 0.968); this indicates that majority of mathematics teachers in Busia County have low ability to carry out learner assessment and provides regular feedback on learner progress, for the past five years

It was observed that 18(14.4%) respondents strongly disagree that mathematics teacher demonstrate ability to use learner centered teaching and learning methodologies, while 64(51.2%) respondents disagree, 25(20%) respondents neither agree nor disagree, 8(6.4%) respondents agree and 10(8%) respondents strongly agree. On average (Mean=2.43; Std. Dev. = 1.069) this indicates that majority of mathematics teachers in Busia County are experiencing challenges in the use learner centered teaching and learning methodologies for the past five years.

It was observed that 8(6.4%) respondents strongly disagree that mathematics teacher demonstrate ability to prepare and maintain of professional records based on the syllabus, while 16(12.8%) respondents disagree, 16(12.8%) respondents neither agree nor disagree, 70(56%) respondents agree and 16(12%) respondents strongly agree. On average (Mean=3.56; Std. Dev. = 1.070) this indicates that majority of mathematics teachers in Busia County have high ability to prepare and maintain of professional records based on the syllabus for the past five years.

It was observed that 9(7.2%) respondents strongly disagree that mathematics teacher demonstrate ability to diversify instruction methodologies to meet needs of learners, while 12(9.6%) respondents disagree, 81(64.1%) respondents neither agree nor disagree, 15(12%) respondents agree and 8(6.4%) respondents strongly agree. On average (Mean=1.83; Std. Dev.= 1.284); this indicated that majority of mathematics teachers in Busia County have inadequate ability to diversify instruction methodologies to meet needs of learners for the past five years.

It was observed that 14(11.2%) respondents strongly disagree that mathematics teachers demonstrates high rating on lesson observation tool, while 8(6.4) disagree, 14(11.2%) neither

agree nor disagree, 79(63.2%) agree and 10(8%) strongly agree. On average (Mean=3.05; Std. Dev.= 0.911); this indicate that majority of mathematics teachers in Busia County record high rating on lesson observation tool for the past five years.

The researcher sought more information from key informants (Principals and CDE) about the status of teacher performance in schools. When respondents we asked about the reasons why majority of school records high lesson attendance and high lesson observation ratings yet the subject mean scores for mathematics for the past five years were low. The following are some of the responses after conducting interviews.

"The County is committed to ensuring compliance with teaching standards and continuously monitor, evaluate teacher performance. This is because performance of teachers is critical in the implementation of the curriculum and in enhancing the quality of education outcomes in schools. However, most teachers in mathematics subjects based on TPAD report at the County level, face challenges in terms of inadequate pedagogical knowledge and skills"

"Most teachers in mathematics subjects lack creativity and innovation in making and using locally available teaching and learning aids based on lesson observations. The teachers often make requisitions for purchase of commercial models, when finances are limited in school, they resort teacher centered methodologies in teaching and learning mathematics"

The researcher sought information on performance appraisal practices. The respondents were expected to respond to a variety of questions. Their views were measured on a five point likert scale which was given in numerical values; (1–Strongly Disagree, 2- Disagree, 3- Neutral. 4 – Agree, 5–Strongly Agree). The analysis is shown in table 4.2

Table 4.2: Performance Appraisal

	1		2		3		4		5			
Performance Appraisal	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row %	N Mean	Std. Deviation
The school develops calendar of activities to guide teachers in performance appraisal process	6	4.8%	16	12.8%	14	11.2%	10	8%	79	63.2%	4.10	1.317
The school set targets based on consultative and participatory of the teacher and appraiser	9	7.2%	5	4%	15	12%	82	65.6%	14	11.2%	3.92	1.080
The school analyze appraisal reports to identify performance gaps	74	59.2%	13	10.4%	21	16.8%	10	8%	7	5.6%	2.54	1.021
The school provide timely feedback on individual performance gaps	8	6.4%	7	5.6%	84	67.2%	14	11.2%	12	9.6%	3.47	0.954
The school involve curriculum support officers to provide professional guidance based on identified performance gaps	12	9.6%	82	65.6%	8	6.4%	10	8%	12	9.6%	2.62	0.988

Source (Field Data, 2023)

From table 4.2, it was observed that 6(4.8%) respondents strongly disagree that the school develops appraisal calendar of activities to guide mathematics teachers in appraisal process, while 16(12.8%) disagree, 14(11.2%) neither agree nor disagree, 10(8%) agree and 79(63.2%) strongly agree. On average (Mean=4.10; Std. Dev.=1.317); this indicates that majority of schools in Busia County develop appraisal calendar of activities to guide mathematics teachers in appraisal process for the past five years.

It was observed that 9(7.2%) respondents strongly disagree that the school set targets based on consultative and participatory of the mathematics teacher and appraiser, while 5(4%) disagree, 15(12%) neither agree nor disagree, 82(65.6%) agree and 14(11.2%) strongly agree. On average (Mean=3.92; Std. Dev. = 1.080); this indicates that majority of schools in Busia County set targets

based on consultative and participatory of the mathematics teacher and appraiser for the past five years.

It was observed that 74(59.2%) respondents strongly disagree that the school analyze performance appraisal reports of mathematics teachers to identify performance gaps, while 13(10.4%) disagree, 21(16.8%) neither agree nor disagree, 10(8%) agree and 7(5.6%) strongly agree. On average (Mean=2.54; Std. Dev. = 1.021); this indicates that majority of schools in Busia County are making very little effort in analyzing performance appraisal reports of teachers to identify performance gaps for the past five years

It was observed that 8(6.4%) respondents strongly disagree that the school provide timely feedback on individual performance gaps, while 7(5.6%) disagree, 84(67.2%) neither agree nor disagree, 14(11.2%) agree and 12(9.6%) strongly agree. On average (Mean=3.47; Std. Dev. = 0.954) this indicates that majority of schools in Busia County are delaying to provide feedback on individual performance gaps of mathematics teachers.

It was observed that 12(9.6%) respondents, strongly disagree that the school involve curriculum support officers to provide professional guidance based on identified performance gaps, while 82(65.6%) disagree, 8(6.4%) neither agree nor disagree, 10(8%) agree and 12(9.6%) strongly agree. On average (Mean=2.62; Std. Dev. = 0.988); this indicates that majority of schools in Busia County have made very little efforts to involve curriculum support officers to provide professional guidance to mathematics teachers experiencing performance gaps.

Based on the information provided by HODs in Busia County on the aspect of performance appraisal, it is clear that teachers have complied with TSC directive on the performance appraisal process. This can be observed by calendar of activities put in place to guide teachers in the performance appraisal process and adherence to prescribed standards on consultative and participatory target setting. However, majority of schools are experiencing challenges in analyzing performance appraisal reports in order to provide timely feedback on performance gaps. Consequently, majority of schools in Busia County have not actively involved curriculum support officers to guide teachers experiencing performance gaps in mathematics.

The researcher sought more information from key informants (Principals and CDE) about implementation of performance appraisal practices in schools. When respondents we asked about the reasons why the school had no adequately addressed individual performance gaps of teachers effectively. The following were the findings of in-depth interview of principals and CDE.

“The County has fully complied with the TSC policy on performance management systems such as the (PC) and (TPAD) to strengthen supervision and to continuously monitor teacher performance. However, strategies that insure instant and consistent feedback on teacher performance gaps emanating from TPAD monitoring reports is yet to be implemented effectively”

"The performance gaps identified during performance appraisal process, still remains a grey area where no clear policy to address teacher performance gaps. The TSC has put the burden on the teacher to prepare individualized education program to address gaps; by enrolment in teacher professional development courses (TPD modules or select relevant training to address gaps. Teachers are constrained financially and have high workloads to address their individual performance gaps".

Therefore, based on information provided by the key informants on performance appraisal, indicate that majority of schools in Busia County have made little efforts to effectively implement strategies that insure instant and consistent feedback on professional gaps emanating from TPAD monitoring reports. The schools have put the burden on the teacher to prepare individualized education program to address gaps; by enrolment in teacher professional development courses (TPD modules). However, teachers are constrained financially and have high workloads to address their individual performance gaps. There is need for the schools to develop more proactive strategies to address professional gaps of teachers in order to realize quality education in schools.

Correlation Analysis

The study sought to understand the strength and direction of the relationship between performance appraisal and teacher performance. Therefore, Pearson moment correlation coefficient was adopted to determine if these variables were correlating. The correlation co- efficient (r) ranges between -1 and +1. A positive relationship means when performance appraisal practices improves then teacher performance improves. Correlation also tests whether (r) is significant ($p < 0.05$). The findings were as shown in table 4.3

Table 4.3: Correlation between Performance Appraisal and Teacher Performance

		Performance Appraisal	Teacher Performance
Performance Appraisal	**Pearson Correlation**	1	.440
	Sig. (2-tailed)		.0394
	N	125	125
Teacher Performance	**Pearson Correlation**	.440	1
	Sig. (2-tailed)	.0394	
	N	125	125

From table 4.3, the findings of Pearson Correlation analysis (r = 0.440) an indication that there is a positive relationship between performance appraisal and teacher performance. The study tested

whether the obtained correlation coefficient was significant. It was found that ($p<0.05$) implying that there is a significant relationship between performance appraisal and teacher Performance.

Testing Hypothesis

H_{01} There is no statistically significant relationship between performance appraisal and teacher performance.

Structural Equation model was used to test hypothesis in order establish the relationship between performance appraisal and teacher performance. Structural Equation model was also used to test whether independent variable predicts the dependent variable. The model is illustrated in Figure 1. The findings were as shown in table 4.4, table 4.5 and table 4.6

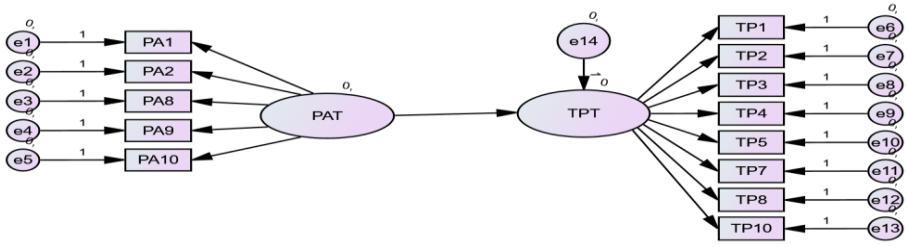

Figure 1 SEM Model: Performance Appraisal and Teacher Performance

(Field Data, 2023)

The Figure 4.4 represents a structural equation model illustrating the relationship between performance appraisal and teacher performance

Table 4.4 Model Summary: Performance Appraisal and Teacher Performance

Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.440[a]	.1936	.20 04	3.05185

a. Predictors: (Constant), Performance Appraisal

From the table 4.4, it can be observed that adjusted R square value of 0.204 implying that performance appraisal accounted to near 20.4% of the total variation in teacher performance. In

order to determine whether linear regression model provides a better fit to the data, F- test of overall significance was computed and results are shown in table 4.5

Table 4.5 ANOVA: Performance Appraisal and Teacher Performance

Model	Sum of Squares	df.	Mean Square	F	Sig.
Regression	6.807	1	6.807	.731	.0394[b]
Residual	1154.907	124	9.314		
Total	1161.714	125			

a. **Dependent Variable: Teacher Performance**
b. **Predictors: (Constant), Performance Appraisal**

From table 4.5, the ANOVA test results were (F (1,124) =0.731, P<0.05); an indicator that the model is a good fit to the study dataset.

Table 4.6 Coefficients[a] : Performance Appraisal and Teacher Performance

		Unstandardized Coefficients		Standardized Coefficients		
Model		**β**	**Std. Error**	**Beta**	**t**	**Sig.**
1	**(Constant)**	21.818	1.355		16.107	.000
	PA	.115	.134	.440	.855	.0394

a. **Dependent Variable: Teacher Performance**

The coefficient results in table 4.6 show that (β = 0.440, t= 0.855, p<0.05); implying that performance appraisal statistically and significantly predicted teacher performance hence the study rejected the null hypothesis. In addition, β= 0.440 indicates that a unit improvement in performance appraisal is likely to result to an improvement in the teacher performance by 44%.

The rejection of the null hypothesis in the current study, indicating a significant relationship between performance appraisal and teacher performance, aligns with existing research emphasizing the impact of structured performance appraisal systems on teacher outcomes. Smith & Johnson (2018) conducted a meta-analysis that provided substantial evidence supporting a positive association between well-designed performance appraisal processes and improvements in teacher performance. Their findings underscored the role of constructive feedback and goal-setting within performance appraisal frameworks as key contributors to enhanced teaching effectiveness. Furthermore, Brown et al. (2020) conducted a longitudinal study across diverse school settings, reporting a significant and positive relationship between performance appraisal practices and subsequent improvements in teacher performance over time. The current study's results reinforce this body of literature, contributing additional empirical support to the understanding of the

significant impact of performance appraisal on teacher performance. In contrast to the present study, there are researchers who have reported mixed or inconclusive findings regarding the relationship between performance appraisal and teacher performance. Anderson & Clark (2019) conducted a comprehensive investigation, revealing that the effectiveness of performance appraisal systems may vary based on contextual factors and the specific elements included in the appraisal process.

In the East African context, the rejection of the null hypothesis, indicating a significant relationship between Performance Appraisal and Teacher Performance, resonates with a growing body of research in the region. A study by Kagiri & Wambugu (2017) in Kenya found that structured performance appraisal systems positively influenced teacher performance, emphasizing the importance of clear evaluation criteria and feedback mechanisms. Additionally, research conducted by Mushi & Madzorera (2019) in Tanzania reported a significant association between performance appraisal practices and enhanced teacher effectiveness, underlining the role of appraisal processes in shaping teaching quality. Further research, such as that conducted by Nkurunziza & Musinguzi (2018) in Rwanda, has explored how the implementation of performance appraisal is shaped by local contextual factors, providing insights into the diverse landscape of teacher evaluation practices in the region. In the East African context, the relationship between performance appraisal and teacher performance is an evolving area of study, and future research should continue to investigate the contextual nuances that contribute to the effectiveness of appraisal systems in improving teaching outcomes.

This variability in outcomes suggests that the impact of performance appraisal on teacher performance may be contingent on factors such as the clarity of evaluation criteria, the fairness of the appraisal process, and the incorporation of targeted professional development strategies.

The current study's rejection of the null hypothesis contributes to the ongoing discourse by providing additional empirical evidence for the significant relationship between performance appraisal and teacher performance while acknowledging the need for further investigation into the nuanced aspects influencing this association. The current study's findings contribute to this regional literature, reinforcing the notion that effective performance appraisal systems are key drivers of improved teacher performance in East Africa. However, it is essential to note that the application and impact of performance appraisal systems in East Africa may vary across countries and educational contexts. While the current study supports the rejection of the null hypothesis, it is crucial to consider the nuanced differences in educational policies, cultural factors, and administrative practices that might influence the effectiveness of performance appraisal in different East African nations.

5. Conclusion

It was found that performance appraisal accounted to near 20.4% of the total variation in teacher performance (adjusted R square value of 0.204). It was also found that (β = 0.440, t= 0.855,

p<0.05); indicating that a unit improvement in performance appraisal is likely to result to an improvement in the teacher performance by 44%. In addition, performance appraisal statistically and significantly predicted teacher performance hence the study rejected the null hypothesis. The study concluded that there is a positive significant relationship between performance appraisal and teacher performance (r = 0.440, p<0.05). This means that effective implementation of performance appraisal practices is likely to improve teacher performance.

6. Recommendations

Based on the study findings and analysis, the following were the recommendations: The TSC should actively engage curriculum support officers at Sub County and County levels to guide mathematics teachers on effective curriculum delivery and improvement of pedagogical knowledge and skills. In addition, the school management in Busia County needs to proactively facilitate mathematics teachers to attend relevant seminars and workshops to improve creativity in preparation of relevant teaching and learning materials. Furthermore, the appraisers should provide more consistent, instant and objective feedback to teachers during performance appraisal process to help teachers effectively use learner centered methodologies with use of locally available materials that stimulate critical thinking.

References.

Abakunda, J. Ungwu, J. N. Kule, J., Silaji, T. & Kamami, W. (2023). Navigating Global Challenges in Teacher Performance: Strategies and implications. INOSR Arts and Humanities 9(2): 1-9 https://Kiu.ac.ug

Al-Jedaia, Y., & Mehrez, A. (2020). The effect of performance appraisal on job performance in governmental sector: The mediating role of motivation. Management Science Letters, 10(9), 2077- 2088.

Al- Mahdi, O. Purinto, T. (2022). Global perspective on Teacher Performance Improvement. Advance in Higher Education and Professional Development. Nytrykk IGI. Global 2022 ISBN 1799892808-302 sider

Alsuwaidi, M., Alshurideh, M., Kurdi, B. A., & Salloum, S. A. (2020). Performance appraisal on employees' motivation: A comprehensive analysis. In International Conference on Advanced Intelligent Systems and Informatics (pp. 681-693). Springer, Cham.

Anderson, J., & Clark, A. (2019). An investigation into the impact of performance appraisal on teacher competencies. *Educational Psychology Review*, *32*(4), 489-504.

Bertalanyffy, L. Von. (1956). General Systems Theory and Psychiatry: In S. Arieti (Ed.). American Hand book of Psychiatry, Vol. 3. New York, NY: Basic books.

Bergman, M. M. (2008). Advances in Mixed Methods Research. Continuum. (Ed.)

Best, J. W. & Khan, J. V. (2006). Research in Education .10th ed. Boston; Pearson Education Inc

Biddle, C., & Schafft, K. A. (2015). Axiology and anomaly in the practice of mixed methods work: Pragmatism, valuation, and the transformative paradigm. Journal of Mixed Methods Research, 9, 320-334

Breweton, P. & Millward, L. (2001). Organizational Research Methods. London, England: Sage.

Brown, C., O'Kane, P. & McCracken, M. (2020). Longitudinal study on performance appraisal and teacher competencies. *Journal of Educational Leadership, 38*(2), 176-192.

Busia County Education Office (2023). Task Force Annual Report on Analysis of County KCSE National Examinations results and analysis from 2018 -2022. Unpublished Report. Ministry of Education, Kenya

Choong, K. K., & Islam, S. M. (2020). A new approach to performance measurement using standards: a case of translating strategy to operations. Operations Management Research, 13(3), 137-170.

Clarke, P. (2022). Education Reform and the Learning Crisis in Developing Countries: Cambridge University Press

Cochran, W. G. (1963). Sampling Techniques, 2nd Ed. New York. John Wiley and Sons. Inc.

Collier, J. E. (2020). Applied structural equation modeling using AMOS: Basic to advanced techniques. Routledge.

Creswell, J. W. & Clark, P. (2011). Designing and Conducting Mixed Methods Research, 2nd ed. Thousand Oaks: Sage

Creswell, J. W. (2014). Research design: Qualitative, Qantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage publications

Engellant, K. Holland, D. & Pipe, R. (2016). Assessing Convergent and Discriminant Validity of the motivation Construct for the technology integration Education (TIE) Model. Journal of Higher Education Theory and Practice vol. 16 pp 37-50

Guest, G. Bunce, A. & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. Field Methods, 18 (10, 59 – 82

Hall, R. F. (2013). Mixed methods: In search of a paradigm. In T. Le, & Q. Le (Eds.), Conducting research in a changing and challenging world (pp. 71-78). New York: Nova Science Publishers Inc

Henseler, J. (2017). Partial Least Squares Path Modeling. (Eds), Advanced Methods for Modeling Markets, Springer, Hedelberg, Germany pp. 361- 381

Johnson, B., & Christensen, L. (2012). Educational research: quantitative, qualitative, and mixed approaches (4th ed.). Thousand Oaks, CA: Sage publications

Kagiri & Wambugu (2017). Performance Appraisal Frameworks and Teacher Performance: Insights from Kenyan Schools. Journal of Educational Administration and Leadership.

Kamau, L. N. (2019). Impact of Teacher Performance Appraisal on Teaching and Learning in Secondary Schools in Maara Sub County Tharaka Nithi County, Kenya. Unpublished Masters of Educational Management, Chuka University

Kamble, S. S., Gunasekaran, A., Ghadge, A., & Raut, R. (2020). A performance measurement system for industry 4.0 enabled smart manufacturing system in SMMEs-A review and empirical investigation. International journal of production economics, 229, 107853.

KNEC (2023). Kenya National Examination Council. The year 2023 Kenya Certificate of Secondary Education examination report, Nairobi, Kenya.

Krejcie, R. V. & Morgan D. W. (1970). Determining sample size for research activities. Educational and Pyschological Measurement vol 30; pp 607- 610.

KUCCPS (2022). The essential Career Guidance: Making an informed Choice. Nairobi; Kenya Literature Bureau

Lohse, S. (2017). Pragmatism, ontology, and philosophy of the social sciences in practice. Philosophy of the Social Sciences, 47, 3-27

Lovell, C. A. K. (2022). Productivity Measurement: Past, Present, and Future. In Advances in Economic Measurement (pp. 3-103). Palgrave Macmillan, Singapore.

Martin, J. (2018). UNICEF Think Piece. Education Series: Teacher Performance. UNICEF Eastern and Southern Africa Regional Office, Nairobi

MOEST, (2023). Ministry of Education Science and Technology. Basic Education Statistical Booklet. The Republic of Kenya. The Government Printer. Nairobi, Kenya.

Molina-Azorin, J. F. (2016). Mixed methods research: An opportunity to improve our studies and our research skills. European Journal of Management and Business Economics, 25, 37-38.

Morgan, D. L. (2014). Pragmatism as a paradigm for Social Research. Qualitative Inquiry vol. 20 pp 1045- 1053

Morgan, D. L. (2014). Integrating Qualitative and Quantitative Methods. A Pragmatic Approach. Thousand Oaks: Sage

Mushi & Madzorera (2019). Performance Appraisal Practices and Teacher Performance: A Case Study in Tanzania. International Journal of Educational Management

Nkurunziza & Musinguzi (2018). Contextual Factors Shaping the Implementation and Impact of Performance Appraisal on Teacher Performance in Rwanda. Journal of Education Policy

Nwaka, N.G. & Ofojebe, W. N (2020). Strategies for coping with Shortage of Resources in Primary School Administration in Anambra State. Journal of Education Leadership,1 (1), 29-36.

Sack, H. (2020). Rensis likert and the likert scale Method. Scitti Blog. Retrieved from https://scihi.org/resisis-likert.

Santos, P. M. & Cirillo , M. A. (2021). Construction of Avarage Variance Extracted Index for Construct Validation in Structural Equation Models with adaptive Regressions. Communication in Statistics- Simulation and Computation, 52 (40, 1639- 1650. DOI: http/doi.org/10.1080/036109118.2021.1888122

Shannon-Baker, P. (2016). Making paradigms meaningful in mixed methods research. Journal of Mixed Methods Research, 10, 319-334

Shorten, a. & Smith, J. (2017). Mixed Method Research: Expanding the evidence the evidence base. Evid Based Nurs, vol 20, pp 74 – 75

Smith, J., & Johnson, R. (2018). "Performance Appraisal and Teacher Competencies: A Comprehensive Meta-Analysis." Journal of Educational Administration, 36(4), 431-450.

TSC Act (2012). The Republic of Kenya. TSC Act No. 20. Nairobi: Government Printer.

TSC (2020). Teacher Performance Appraisal and Development Report for Consultancy Contract No. MOE/GPE/CQS/01/2020/2021. Submitted by University of Nairobi Enterprise and Service Limited. Nairobi, Kenya.

TSC (2018). The Republic of Kenya. Performance, Recognition, Reward and Sanction Policy Framework for Teaching Service. Nairobi. Government Printer

Tumusiime, P., Mwalw'a, S. & Okemasisi, K. (2021). Principals' Implementation of Teacher Performance Appraisal and Development (Tpad) Tool and Teachers' Performance In Public Secondary Schools In Kikuyu Constituency. African Journal of Emerging Issues 3(4) 1- 22

UNESCO (2018). Education for All global monitoring report: Teaching and Learning, achieving quality for all. Paris: UNESCO

UNESCO (2016). Education for People and Planet: Creating Sustainable Future for all. UNESCO

UNICEF (2018). Think Piece Education Series. Improving Quality Education and Children's Learning Outcomes and Effective practices in the Eastern and Southern Africa Region, Nairobi.

Yamane, T. (1967). Elementary Sampling Theory. Prentice Inc. Englewood Cliffs. NS, USA Vol. 1, 371- 3