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RESULT ORIENTED PERFORMANCE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE

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ABSTRACT

Researches show mixed results of the effects of performance management on organizational performance. Since performance management is a multidimensional construct that incorporates several components, this study investigates separately the effect of the key components of performance management on organizational performance, taking the public sector organizations in Ethiopia as a case. Multiple linear regression analysis based on 184 responses to the questionnaire survey, finds that collectively, elements of performance management has a positive effect on organizational performance, but when the elements of performance management is individually analyzed, only the effects of performance evaluation, performance information use and performance based accountability were statistically significant. In contrast, performance based reward, participation in performance target setting and performance indicator quality did not reach a significance level to predict organizational performance. The study advances knowledge of the driver of success that contribute to sustainable development by identifying components of performance management that have a positive linkage with organizational performance.

Keywords: Performance Management, Result Oriented Performance Management, Organizational Performance, Public Sector Performance Management, Effects of Performance Management, Components Of Performance Management

INTRODUCTION

Performance management as a multidimensional construct incorporates several components with improvement of organizational performance a single terminal objective. It comprises a 'range of practices' an organization engages in to ultimately improve organizational performance (De Nisi & Gonzalez, 2000). These performance management practices include deciding organizational goals (which in public organizations often involves multiple goals on various dimensions), selecting measures or indicators, measuring organizational performance (which often means measuring outcomes or satisfaction for individual users), evaluating the data, and deciding on how to prioritize efforts before starting a new cycle of evaluation (Andersen & Nielsen, 2020). Lee and Kim (2007) describe performance management as activities that comprise setting and communicating clear performance goals, performance monitoring and measurement, and linking performance with rewards and accountability. Likewise, this study adapts a common model of organizational performance management that involves goal setting, performance measurement and use of performance information in decision-making.

Goal setting is an essential element of the process of performance management (Eneanya, 2018) and a means of motivating employees for better performance (Holloway & Thorpe, 2008). Goals are cascaded down from organizational level to units and individual level, to link individual or team performance targets to organizational goals. Using clearly defined performance targets and performance indicators, managers constantly engage in monitoring and measuring the performance of organization and use the performance information from this process for administrative decisions such as on rewards and accountability (Lee & Kim, 2007). Performance measurement against the targets determines whether organizational performance is good or bad.

In the era of New Public Management (NPM) reform, public sector organizations focus on performance management practices as potential means of improving their performance and demonstrating accountability. Contrary to the traditional approach, the result oriented performance management approach set performance standard, measure actual performance and links performance with pay and accountability. Indeed, Armstrong (2009) finds performance management is one of the ways of getting better results from the organization in an agreed framework of planned goals and standards. Governments around the world have actively taken the idea that adopting and using appropriate performance management system can improve public sector performance (Ammons, 1996; Greimer, 1996). Despite acceptance of such idea and wide application of performance management reforms, there is however, wide gap in meeting performance expectations. For instance, the study by West & Blackman (2015) indicate, long years of performance management within the public sector have not yet materialized the expected improvements in performance outcomes such as accountability, quality of service and value for money.

Inference from this paradox gives an idea that the way performance management improves the organizational performance is yet inconclusive. The existing literature on performance management predominantly focuses on its adoption and design, while research on performance implications of performance management is scarce (Gao, 2015). Apart from some documented best practice, there is little evidence on whether performance management

actually contributes to performance (Van Dooren et al., 2010). Additionally, Epstein (2004) specifically indicates that prior studies failed to establish the linkages between the result-orientated performance management (clear goals aligned with performance measurement and reward systems) and organizational performance. Though the linkage between the result orientation of performance management and organizational performance has accepted widely, Epstein (2004) argues, it was validated very little.

Since, the determining factors of the public sector organization performance need to be well understood (Kassahun, 2012), conducting a research on performance management is essential to understand and to explain the link between performance management and organizational performance. Indeed, given the importance of public services and their impact on the everyday lives of citizens, much more research work is required to identify determinants of organizational performance on service delivery (Hodgkinson et al., 2017). Thus, far more research on performance management is crucial to advance knowledge of the drivers and measures of success in performance, and to provide guidance as what actions managers should take to achieve superior organizational performance.

How the components of performance management process do affect organizational performance? To address this research question the study aimed at investigating the effects of key components of performance management process on organizational performance, taking evidences from Ethiopia. Andersen and Nielsen (2020) have observed mixed research results on the effects of performance management on organizational performance; and they argue that the cause of mixed results may be any of the steps involved in the process as well as effects of interactions between components of performance management. Furthermore, they suggested as a way out, study of the key components of performance management separately. Accordingly, this study identified as key components of performance management: participation in target setting, performance indicator quality, evaluation of organizational performance, use of performance information, performance based reward, and performance based accountability to analyze their effects on performance management.

PERFORMANCE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE: THEORETICAL FRAMEWORK

Most organizations recognize the value of performance management in improving both individual and organizational performance (Whitford & Coetsee, 2006). DeNisi and Gonzalez (2000) defined performance management as practices an organization engages in ultimately to improve organizational performance. Likewise, Whitford and Coetsee (2006) show the agreement of many authors (Newton, 1998; Brown & Armstrong, 1999; and Armstrong, 2000) on the fact that the purpose of performance management is performance improvement. With the initiation of NPM movements around the world since the 1980s, various methods of performance management have eventually become significant political tools for improving the performance of public organizations and the quality of public services. It is assumed that among others, high performance is achieved though the adoption of an appropriate system of performance management. According to the result-oriented performance management doctrine, the traditional forms of public organizations perform poorly because they lack explicit standards, managers are not held accountable for the achievement of goals, and managers are too hamstrung by red tape to perform well (Wholey, 1999).

Many studies indicated performance management has a positive contribution to improving organizational results. In an effective performance management system, achieving results and continuous improvement based on performance information is central to the management process (Binnendijk, 2000). Likewise, Ma (2017) holds the view that performance management is an effective instrument to improve government performance and to raise citizen satisfaction. Similarly, Gao (2015) argues, performance measurement is an effective way to make government work better and cost less. Ma (2017) analyzes the effects of multiple performance management components on citizens' perceptions of government performance across 19 major cities in China. The results of the analysis reveal components of performance management such as citizen participation, performance feedback and accountability, and information openness have positive impacts on citizen satisfaction along various performance dimensions in different magnitudes. Therefore, Ma (2017) argues that taking account of and mitigating its unintended consequences, it is still promising for public organizations to implement performance management. A similar result was shown by the study of Performance management in Ghana and Zambia by Williams and Yecalo-Tecle (2019) that indicate the mere acts of discussing responsibilities, setting targets, and assessing performance help organizations do their jobs better; even without the associated carrots and sticks, but by letting go of the idea that they should be linked to incentives.

In contrast, Andersen and Nielsen (2020) observed the substantial variation across studies on effects of performance management with some studies pointing to positive effects, whereas others find outright negative and unintended effects. The mixed results of existing performance management systems may be caused by any of the steps involved in the process as well as the effects of interactions between them. Therefore, they proposed that one way forward is to study the different components of performance management separately to enhance our theoretical understanding of how each component may contribute to performance improvements. The subsequent paragraphs review the literature to show the relationship between the key components of performance management and organizational performance and to develop the research hypotheses.

Goal setting is one of the key components of the performance management process that likely has an impact on organizational performance. At the strategic level, performance management deals with the achievement of organizational objectives. According to this notion, a system that achieves its purpose is considered a system that "performs" as planned (Brudan, 2010). Empirical evidence increasingly suggests the likely success of goal setting, together with strategic planning and other elements of performance management, in improving organizational performance (Walker et al., 2010). Holloway and Thorpe (2008) argue setting performance goals and targets can be one means of stimulating better performance by those who deliver services. Sathornkich (2010) investigates the way the public sector at the provincial level makes sense of the performance management system and his study finds that performance agreement has a crucial role in improving performance.

The success of goal setting in improving organizational performance management depends on the characteristics of the goals and participation in target setting. For instance, literature documents challenging goals enforce radical changes in way of doing things. The findings of research by Verbeetn (2008) show the definition of clear and measurable goals is positively associated with quantity performance as well as quality performance. Moreover,

Ingraham and Moynihan (2001) suggest effective performance management requires that performance goals be quantifiable and oriented to outputs and outcomes; communicated to employees, the public and other stakeholders; and linked to responsibilities. Organizations practicing result-oriented performance management model, specifically define goals in measurable terms to compare ex-post performance to ex-ante targets. Similarly, short-term goals are set consistently with the long-term strategic plans of the organization.

Hypothesis 1 Participative target setting has a positive effect on organizational performance

For managing performance, organizations must know about the performance indicators. The benefits of indicators come from their measurability and their direct derivation from performance objectives. Indicators specifically link inputs and activities with quantified measures of expected outputs and impact. If designed and used correctly, indicators meet the specific information needs and scope of authority of all the concerned parties. Performance indicators inform planning, monitoring, and evaluating performance. Van Looy and Shafagatova (2016) argue that measuring the performance of business processes has become a central issue and the choice of performance indicators is organization-dependent. Their study documents an extended list of 140 process-related performance indicators, which implies that organizations are required to choose the right indicators.

Ishaq et al. (2014) has identified 11 commonly used performance indicators such as cost, financial return, quality, time, flexibility, delivery reliability, safety, customer satisfaction, employees' satisfaction and social performance indicators. Furthermore, they confirmed that performance indicators have a positive significant impact on the overall organization's performance. The literature documents the importance of determining performance indicators related to organizational success factors and measuring performance dimensions that are strategically relevant to the organization. The study by Ishaq et al. (2014) indicates using performance indicators, other than the cost has a positive significant correlation with the overall performance index. Hence, this study assumes that the quality of performance indicators determine the effect of performance indicator on organizational performance.

Hypothesis 2 Performance indicator quality has a positive effect on organizational performance.

With the recognition of the importance of public sector performance, performance measurement has become a central issue for business and academics. The recognition of the role of performance measurement has been expressed by proverbs like "what gets measured gets managed" and "you get what you inspect not what you expect" (Zeppou & Sotirakou, 2004). Moreover, the result-oriented approach considers a commitment to performance measurement as a commitment to rationality. Likewise, Van Dooren et al., (2015) indicate the importance of performance measurement by saying 'In God, we trust, the rest we audit'.

The review of annual performance is one of the key pillars of performance management. While the annual review has its shortcomings, organizations continue using it to increase accuracy and to get comprehensive and balanced feedback about organizational performance (Ahmed et al., 2010). Researches document that feedback improves employee performance significantly. A study by Ahmed et al., (2010) supported positive outcomes of performance review and as the dissatisfaction with the performance appraisal process negatively affect job performance. Failure

to set goals and provide ongoing feedback and summary evaluations generally result in employees becoming dissatisfied and resulting in reduced performance (Ahmed et al., 2010). A study conducted in China by Ma (2017) concludes components of performance management including performance measurement and feedback are positively associated with citizen satisfaction along various performance dimensions in different magnitudes.

Hypothesis 3 Evaluation of organizational performance has a positive effect on organizational performance.

The idea that intrinsic and extrinsic rewards are the core factor of performance has been widely taken by NPM. In this regard, Niven (2002) considers linking performance to rewards in the BSC system as an added bonus because performance-based reward completes a true win-win arrangement by providing employees both intrinsic and extrinsic rewards. Performance management systems are supposed to create a self-reinforcing cycle of meaningful target-setting, objective assessment, and differentiated incentives that reward good performers and sanction bad performers (Williams & Yecalo-Tecle, 2019). Verbeetn (2008) investigates the effects of performance management practices on the performance of public sector organizations and his research concludes the use of incentives is positively associated with quantity performance yet not related to quality performance.

Hypothesis 4 Performance-based reward has a positive effect on organizational performance

The performance information (from both performance measurement and evaluation sources) serves to provide continuous feedback about the results achieved, which helps to improve performance. Both theoretical and empirical work has begun to focus on situations in which performance management may facilitate internal organizational learning (Andersen & Nielsen, 2020). Lessons from experience can help to improve performance and to formulate better policies and strategies. Nevertheless, years of research on performance management practice have generally concluded that public managers seldom purposefully used performance information and therefore, performance information does not improve performance as intended (Andersen & Nielsen, 2020).

Hypothesis 5 Use of performance information has a positive effect on organizational performance

Although a direct and clear positive relationship between accountability and improved public organizational performance has not been widely explored, proponents of public-sector reforms based on performance measurement assume modern applications of accountability will improve government performance (Dubnick & Frederickson, 2011). Graham and Hughes (1994) argue the exercise of accountability in the public sector is important to prevent public officials from abusing coercive power and to ensure performance standards that meet the public expectations. Accountability promotes responsiveness to the public interest and the efficient use of public resources. Aucoin and Heintzman (2000) argue improving accountability arrangements does not necessarily improve performance, but the proposition that there can be improved performance in the absence of improved accountability is a proposition that cannot be sustained. Based on this argument, we can understand that accountability alone may not be sufficient to bring performance improvement, but it is a necessary condition; hence, we hypothesized a positive link between accountability and performance.

Hypothesis 6 Performance-based accountability has a positive effect on organizational performance.

DATA AND METHODS

This cross-sectional study employed a survey conducted for PhD dissertation from February to April 2021. Considering the structure of the Ethiopian Federal set-up, the study involved organizations that have mandates to guide and supervise the performance management system of the public sector organizations at the federal and regional levels. These organizations are the Civil Service Commission/Bureaus of the Federal Democratic Republic of Ethiopia, the regional state government of Oromia, the regional state government of Afar, and the city government of Addis Ababa. It has been observed from the preliminary discussions that held with organizations' officials, directors, team leaders, and senior experts engage in performance management activities. Thus, employees at the rank of these levels were included in the study to overcome the chance of occurrence of sample bias in surveying informants from only one organizational level. Regarding the sample size, this research applied a formula developed by Cochran (1977), which determines the appropriate sample size to be 208 respondents. The Cochran formula is widely used to determine representative sample size, as it provides a mathematical solution to the problem of determining sample size. Due 14 percent of non-responses, finally, the analysis used 184 correctly filled and returned questionnaires.

This research involves the measurement of components of performance management and organizational performance. The major components of performance management in this context include performance target setting and performance indicator selection, evaluation of organizational performance, use of performance information for decision making, performance-based reward and performance-based accountability. The dependent variable is organizational performance. Some writers understand performance as the action or behavior (process), while others understand performance as result (outputs or outcomes). Nevertheless, since behaviors and results are inseparable and they are interdependent, this paper views performance as a concept that comprises both behavior and result. Many researchers (Otley, 1999; John, 2000; and Van de Walle & Bouckaert, 2003) define performance as comprising both behavior and results.

To ensure the content validity of the measurement, the survey items were developed based on an extensive review of the literature. After the questionnaire was developed, the reliability and validity of the instrument were tested using Cronbach alpha and factor analysis. Taherdoost (2016) indicates that Cronbach alpha is the most appropriate measure of reliability when making use of Likert scales. Besides, Kassahun (2012) recommends calculating Cronbach's Alpha for each construct separately in a situation where research involves several constructs. Accordingly, Cronbach's Alpha for each construct was calculated using 18 questionnaires collected from respondents for a purpose of the pilot test and the results show Cronbach’s Alpha values were found within the range between 0.79 and 0.95.

Table 1. Cronbach's Alpha of variables

Construct or Latent Variables	No. of items	Scale Measures	Cronbach's Alpha
Participation in performance target setting	3	5 points measurement scale from no extent to a very great extent	.793
Performance indicator Quality	3	5 points measurement scale from completely disagree to completely agree	.907
Evaluation of Performance	6	5 points measurement scale from no extent to a very great extent	.945
Use of performance information in decision making	7	5 points measurement scale from no extent to a very great extent	.936
Performance Based Reward	4	5 points measurement scale from completely disagree to completely agree	.899
Performance Based Accountability	3	5 points measurement scale from completely disagree to completely agree	.945
Organizational performance	6	5 points measurement scale from very low to very high	.941

Source: reliability test on pilot survey 2021

This research combined several survey items into a single index for analysis of data pertaining to each construct. The composite measures allow for a greater range of possible scores, and they are more sensitive than a single-item scale (Chawla & Sondhi 2015). Such an overall index would provide a better measurement tool than a single indicator (Kothari, 2004). The combination of scores on several items to represent each construct (so-called latent variables) however, requires performing factor analysis to provide evidence that the items truly represent the same construct. The result of factor analysis establishes factorial validity and provides evidence that the retained items truly represent the same construct.

In the current research, factor analysis was conducted to reduce a data set to a more manageable size while retaining as much of the original information as possible and to solve multicollinearity in multiple regression by combining collinear variables. This study ensured convergent validity of the instrument by using items with factor loading values of above 0.50 and cross-loadings below 0.4. Hair et al. (2006) state that discriminant validity could be established by correlating one construct to another. According to their suggestion, if the correlation value of constructs is lower than 0.85, it means that the discriminant validity exists. Applying Hair et al. (2006) suggestion, this research conducted a factor analysis and checked that the correlation value of each pair of constructs is lower than 0.85 in Factor Correlation Matrix.

Moreover, factor analysis offers the possibility of using the output in subsequent analyses. As argued by Kootstra (2004) and Field (2009), it is useful to use the scores on the underlying variable (factor) instead of all the scores of the original variables. After identification of the variables and their associated factors, we computed factor scores by averaging the raw scores of the original variables. Thus, the regression analyses used the values of computed factor

scores. Field (2009) notes that by using uncorrelated factor scores as predictors in the regression we can overcome the problem of multicollinearity.

RESULTS AND ANALYSIS

This section presents the analysis of the relationships between performance management elements and organizational performance. The performance management elements included in the regression analysis are participation in target setting, evaluation of organizational performance, use of performance information, performance-based reward and performance-based accountability. The descriptive statistics shows the mean and standard deviation of each variable and the number of sample respondents. The mean values indicate only participation in target setting and use of performance information were rated above 3 on a scale ranging from 1-5 and the standard deviation less than 1 in all cases indicates less variation of agreements among respondents of the survey. The mean values further indicate the majority of respondents disagreed on the presence of performance-based rewards and performance-based accountability.

Table 2. Descriptive Statistics

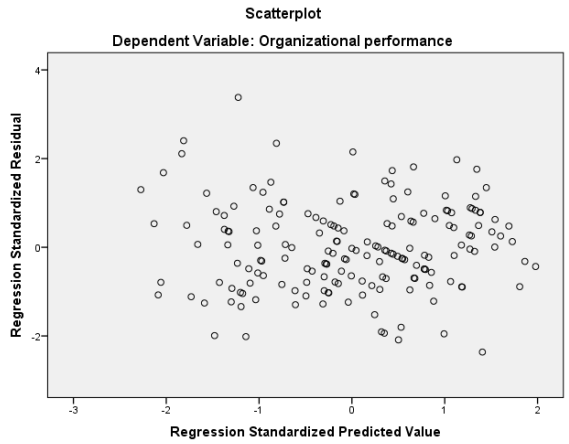
	Mean	Std. Deviation	N
Organizational performance	2.8475	.74596	176
Performance based Reward	1.9702	.80100	176
Performance based Accountability	2.2348	.90313	176
Performance indicator quality	2.7784	.82931	176
Participation in performance target setting	3.0625	.86366	176
Use of performance information	3.0162	.89532	176
Evaluation of organizational performance	2.6761	.80882	176

Table 3. Correlations

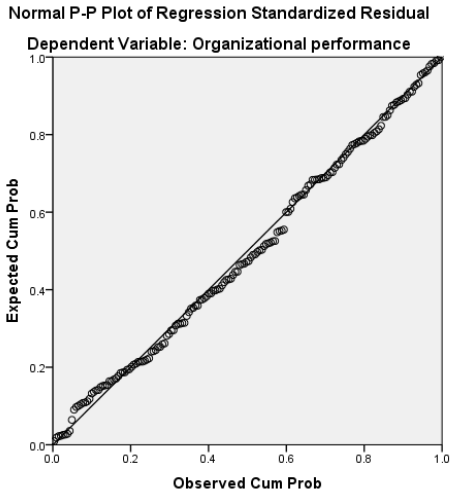
		1	2	3	4	5	6	7
Pearson Correlation	Organizational performance	1.000						
	Performance based Reward	.508	1.000					
	Performance based Accountability	.547	.783	1.000				
	Performance indicator quality	.536	.491	.466	1.000			
	Participation in performance target setting	.488	.295	.277	.566	1.000		
	Use of performance information	.540	.342	.461	.475	.485	1.000	
	Evaluation of organizational performance	.564	.444	.458	.521	.516	.499	1.000
Sig. (1-tailed)	Organizational performance	.	.000	.000	.000	.000	.000	.000
N		176	176	176	176	176	176	176

The sign and magnitudes of Pearson Correlation coefficients in the correlation table show that the relationships between each of the independent variables and the dependent variable is positive and moderately strong; while the Sig. (1-tailed) verifies the associations between the variables are statistically significant. Before performing regression analyses to identify factors affecting organizational performance, this study checked the fulfillment of important assumptions of the linear regression model. Checking the satisfactions of regression assumptions is necessary to assure the validity of the results of the regression analysis.

In this multiple linear regression analysis, the dependent variable is a construct that combined several items into a single index. Since indexes are often measured at the interval or ratio level, this regression model satisfies the requirement of a continuous measure of the dependent variable. Then, we checked homoscedasticity, which refers to whether the residuals are equally distributed, or whether they tend to bunch together at some values and spread far apart at other values. Data is said to be homoscedastic if it looks somewhat like a shotgun blast of randomly distributed data. We checked the homoscedasticity assumption by plotting the predicted values and residuals on a scatterplot. The scatterplot shows that the points on the scatterplot are equally distributed above and below zero on the X-axis, and to the left and right of zero on the Y-axis, indicating that the data is homoscedastic.



In order to make valid inferences from regression analysis, the residuals of the regression should follow a normal distribution. The residuals are simply the error terms or the differences between the observed value of the dependent variable and the predicted value. We examined a normal Predicted Probability (P-P) plot, to determine if the residuals are normally distributed. The normal P-P plot shows the little circles follow the normality line therefore; we concluded the data is normally distributed.



Multicollinearity refers to a situation when predictor variables are highly correlated with each other. Multicollinearity makes the regression model unable to accurately associate variance in outcome variable with the correct predictor variable, leading to muddled results and incorrect inferences. As this regression is, multiple linear regression with multiple predictor variables multicollinearity assumption is relevant. We checked multicollinearity in two ways: correlation coefficients and variance inflation factor (VIF) values. The correlation coefficient with magnitudes of 0.80 or higher indicates the occurrence of multicollinearity. In this case, however, the highest correlation coefficient is 0.773, implying that multicollinearity did not occur. Additionally, we checked multicollinearity using VIF values. The regression coefficient table indicates that the highest VIF value is 2.957, which is well below the threshold VIF value of 10.

The independence of observations is another assumption that must be satisfied for a regression test to produce a valid result. In this regression analysis, the independence of observations was checked by application of the Durbin-Watson statistic. Karadimitriou et al., (2018) indicate that if there is no autocorrelation (where subsequent observations are related) and observations are independent, the Durbin-Watson statistic falls between 1.5 and 2.5. Applying this rule to test the independence of observations in this regression analysis, the Durbin-Watson statistic was found to be 1.831 (see model summary table). Durbin-Watson statistic falls within the range between 1.5 and 2.5, therefore, we concluded the data is not autocorrelated and observations are independent.

The model summary table provides the R, R^2, adjusted R^2, and the standard error of the estimate, which was used to determine how well a regression model fits the data. The "R" column represents the multiple correlation coefficients that can be one measure of the quality of the prediction of the dependent variable. The value of R 0.712 indicates a strong association between the key components of performance management and organizational performance. The "R Square" indicates the proportion of variance in the dependent variable that can be explained by the independent variables (Dhakal, 2018). The value 0.506 in the model summary implies 50.6 percent of changes in organizational performance can be attributed to changes in the variables included in the model, while the remaining 49.4 percent changes in the organizational performance is due to factors not included in the model. We concluded that the value

of R square shows the model adequately fits the data, but it also indicates the need for more research on other factors that affect organizational performance, as no way to include all factors in a single model.

To accurately report the regression results, it is important to interpret the "Adjusted R Square" too; because a level of discrepancy between the values of R square and Adjusted R Square indicates a poor fit of the model (Dhakal, 2018). R square shows how well data points fit a regression line assuming every single variable explains the variation in the dependent variable which is not true. Whereas, adjusted R Square tells how well the data points fit a regression line showing the percentage of variation explained only by the independent variables that affect the dependent variable. The adjusted R Square is intended to "control for" overestimates of the R square resulting from small samples, high collinearity, or small subject/variable ratios. The low discrepancy between the values of R square and Adjusted R Square in the current model indicates a good fit of the model. The F-ratio in the ANOVA Table tests whether the overall regression model is a good fit for the data (Dhakal, 2018). The table shows F (6, 169) = 28.903, Sig. (.000) $<\alpha = 0.05$, which implies the independent variables statistically significantly predict the dependent variable. Therefore, the regression model is a good fit for the data.

Regression

Table 4. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.712[a]	.506	.489	.53328	1.831

a. Predictors: (Constant), Evaluation of organizational performance in redesigned organizations, Performance based Reward, Use of performance information, Participation in performance target setting, Performance indicator quality, Performance based Accountability
b. Dependent Variable: Organizational performance

Table 5. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.319	6	8.220	28.903	.000[b]
	Residual	48.062	169	.284		
	Total	97.381	175			

a. Dependent Variable: Organizational performance
b. Predictors: (Constant), Evaluation of organizational performance in redesigned organizations, Performance based Reward, Use of performance information, Participation in performance target setting, Performance indicator quality, Performance based Accountability

The coefficient table shows the statistical significance of each of the independent variables. The null hypothesis and the alternative hypothesis for each of the coefficients states, H0: $\beta = 0$ versus Ha: $\beta \neq 0$ is conducted. If p-value < 0.05, the coefficients are statistically significantly different from 0 (zero). Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held

constant. The regression coefficient provides the expected change in the dependent variable for a one-unit increase in the independent variable. These tests of significance are useful to investigate if each explanatory variable needs to be in the model, given that the others are already there (Dhakal, 2018).

Table 6. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.657	.178		3.691	.000		
	Performance based Reward	.097	.084	.105	1.154	.250	.356	2.807
	Performance based Accountability	.157	.077	.190	2.041	.043	.338	2.957
	Performance indicator quality	.111	.067	.123	1.654	.100	.526	1.902
	Participation in performance target setting	.120	.062	.139	1.951	.053	.573	1.744
	Use of performance information	.160	.058	.192	2.750	.007	.598	1.671
	Evaluation of organizational performance	.183	.066	.198	2.775	.006	.572	1.748

a. Dependent Variable: Organizational performance

This multiple regression was performed to predict organizational performance from participation in target setting, performance indicator quality, evaluation of organizational performance, use of performance information, performance-based reward and performance-based accountability. The model statistically significantly predicted organizational performance (P-value = 0.000 < .05 at 5 degree of freedom. The coefficient table shows performance-based reward (P-value 0.25 > 0.05, at 5 degree of freedom), performance indicator quality (P-value 0.1 > 0.05, at 5 degree of freedom), participation in performance target setting (P-value 0.053 > 0.05, at 5 degree of freedom) were not statistically significant to predict organizational performance. Whereas, evaluation of organizational performance use of performance information, and performance-based accountability were statistically significant at a level of 0.05 to predict organizational performance. The Beta coefficient shows for one unit increase in the evaluation of organizational performance, organizational performance increases by 0.066; for one unit increase in the use of performance information, organizational performance increases by 0.058; and for one unit increase in performance-based accountability organizational performance increases by 0.077.

Standardized coefficients measure how much the dependent variable increases, in standard deviation, when the independent variable is increased by one standard deviation assuming other variables in the model are held constant. These are useful measures to rank the independent variables based on their contribution (irrespective of sign) in explaining the dependent variable (Dhakal, 2018). Accordingly, Standardized coefficients in this regression indicate:

evaluation of organizational performance stands first with Beta 0.198, followed by use of performance information (B = 0.192) and performance-based accountability (B = 0.190).

DISCUSSIONS AND CONCLUSION

This employed multiple regression to predict organizational performance from participation in target setting, performance indicator quality, evaluation of organizational performance, use of performance information, performance-based reward, and performance-based accountability. The finding of this study revealed that overall performance management has a positive influence on organizational performance. This result supports earlier research findings (such as Ammons, 1996; Greimer, 1996; Armstrong, 2009; Whitford & Coetsee, 2006). Many authors (Gao, 2015; Ma, 2017 and Binnendijk, 2000) agreed that performance management is an effective instrument for the improvement of organizational performance. The study by Wholey (1999) and Yecalo-Tecle (2019) also indicated the positive contribution of performance management for improving organizational performance.

Though the collective influence of elements of performance management on organizational performance is positive, only the effects of performance evaluation, performance information use and performance-based accountability were found statistically significant to predict organizational performance. The finding of this research revealed the effects of some elements of performance management on organizational performance were not statistically significant. These are participation in performance target setting, performance indicator quality and performance-based reward. The positive influences of performance measurement and use of performance information on performance were expected, as measurement provides information that helps managers to make appropriate decisions. Measurement and use of performance information also allow providing positive feedback that recognizes achievement. It also allows improving performance by setting goals and agreeing upon suitable actions to achieve goals (Whitford & Coetsee, 2006). The positive influence of accountability on performance did not support prior researches, which reported no effect of accountability on performance. For instance, Shin (2010) analyzes changes in institutional performance following the adoption of performance-based accountability, but his finding indicates that adopted performance-based accountability in the United States did not see a noticeable increase in institutional performance. Likewise, Imbaruddin (2003) explores the relationship between the relative degree of accountability and performance of local government agencies in Indonesia and he concludes that the degree of accountability does not have a significant impact on organizational performance.

THE WAY FORWARD

Given the importance of the public sector and the role of performance management in improving the performance of public sector organizations, it is practically useful to identify the elements of performance management that have a significant influence on organizational performance. Accordingly, this study advances knowledge of the driver of success by identifying components of performance management that have a positive linkage with organizational

performance. Furthermore, offering ideas for the improvement of management also contributes to the improvement of organizational performance and then to sustainable development. Moreover, this research adds the context of developing countries to the literature of performance management by taking cases from the Ethiopian public sector organizations. Finally, this research suggests a study on the intervening variables between participation in performance target setting and performance as well as between performance indicator quality and performance. Similarly, the Ethiopian public sector organizations reward employees not based on performance. Nevertheless, in other systems where the reward is based on performance, the reward may affect organizational performance. Therefore, the relationship between reward and performance in different systems is an important avenue for future research in the emerging field of performance management.

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