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Influence of Teamwork on Organizational Performance in Nigerian Public Sector: A Study of Benue State Civil Service, Nigeria

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ABSTRACT
This study examined the influence of teamwork on organizational performance in Nigerian Public Sector: A study of Benue State Civil Service, Nigeria. Convenience sampling was used to gather primary sources of information from the respondents in the study area. Data was collected using questionnaire and analyzed using inferential statistics such as simple linear regression analysis. The hypotheses of the study were tested using the probability values of the estimates. The first model of the study shows that teamwork has a positive effect on the Performance of Benue State Civil Service proxies by service delivery and the effect is statistically significant ($p<0.05$). Teamwork has a positive effect on the performance of Benue State Civil Service proxies by turnaround time but the effect is not statistically significant ($p>0.05$) but in line with a priori expectation. This means that a unit increases in Teamwork will result to a corresponding increase in turnaround time in Benue State Civil Service by margin of 27.3%. Teamwork has a positive effect on the performance of Benue State Civil Service proxies by operational efficiency and the effect is statistically significant ($p<0.05$) and in line with a priori expectation. This means that a unit increases in teamwork will result to a corresponding increase in operational efficiency in Benue State Civil Service by margin of 49.6%. It was concluded that teamwork, is an essential element for the development and function of an organization or institution. It was recommended among others that government of Benue State should incentivize employees who work as a team as this has been shown to improve performance.

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Introduction

Teamwork has been described as the actions of individuals, brought together for a common purpose or goal, which reduces the needs of the individual to the need of the group. In essence, each person on the team put aside his or her individual needs to work towards organizational objectives. The interaction among the members and the work they complete is what is described as teamwork. Effective teamwork is essential to the success of any organization or business enterprises. The positive effects of productive teamwork can rejuvenate the whole organization to higher performance, just like the negative effect of a lack of team work can cripple any organization. An essential ingredient to effective teamwork is attracting and keeping the right team members that would facilitate productivity in an organization. As such most human resource approaches lay so much emphasis on teamwork due to its importance to organizational productivity. Hence, the need to conduct an extended essay on the impact of teamwork on organizational productivity.

It has been noted that teamwork is as old as mankind, and many organizations use the term teamwork in either one sense or the other, such as in the service industry, production, marketing processes and other work related processes. Management team, production team or an entire organization can be referred as a team. There is a growing consensus among scholars that organizations may be getting works done through individuals, but his super achievement lies in the attainment of set goals through teams (Murray and Stewart) [5].

It is a well-known fact that teamwork is not only the foundation of all successful managements, but the means of improving overall results in organizational performance outcome. Gupta and Asf, described teamwork as an idea of working together in a group to achieve the same goals and objectives for the good of the service users and organizations in order to deliver a good quality of service. Employees' teamwork is seen as constituting a larger group of people than what job position describes. The essence of teamwork is that workload is reduced and broken into pieces of work for everyone to take part [3].

The influence of teamwork on organizational performance involves both the inside and outside factors which bring about an increase in performance within the organization. The inside factors have to do with team norms, ground rules, interpersonal and rational skills or qualities that determines how individual's teams will function while the outside factors are the organizational culture, systems and structures within which all teams perform determines

the level of teamwork within an organization.

Previous studies conducted show that employees working within the team can exceed the expectation than when employees work as individual. This is as a result of a study conducted by Mulika, on the impact of teamwork on employee performance in strategic management and the performance improvement. Further study on effectiveness of teamwork showed that individuals have the tendency of hiding inside a group. As results, this has necessitated the importance of investigating the factors that impact on the effectiveness of teamwork on productivity in sales and marketing department of Nairobi Bottlers Limited. Ooko and Odundo [6], concluded that, in order for organization to improve on turnaround time and its productivity, effective teamwork is necessary across all the departments [4].

Agarwal and Adjirackor assessed the impact of teamwork on organizational productivity on the staff members of Kwashieman Anglican Basic School of the Accra Metropolitan Assembly, Omanjor M/A Basic School under the Ga-West Assembly and Ablekuma Anglican Basic School in the Ga-Central Assembly of the Greater-Accra Region. The study utilized quantitative techniques to analyze the relationship between the variables that is Teamwork, Esprit de corps (Team Spirit), team trust, recognition and rewards and organizational productivity. The study shows that there is a significant positive impact of the predictors on the response variable with an adjusted R2 of 70.5%. The study recommends that teamwork activities have to be adopted in order to enhance Organizational Productivity [1].

Chege examined the effect of teamwork on productivity in sales and marketing departments: a case study of Nairobi Bottlers Limited. The study adopted the descriptive research design. The target population of the study was 420 team members in the sales and marketing work in the selling territory. Using the random sampling technique, a sample representative of 80 team members participated in the study. Both Primary and Secondary data were used in making factual decisions. The questionnaire was used to collect the Primary data. Data analysis was done using the Statistical Package for Social Sciences (SPSS) Version 20.1 Data was analyzed by using descriptive statistical methods like the mean, averages and percentages. Data was presented using tables, figures, bar graphs and pie charts. The study concluded that all the four independent variables influence team productivity. Communication, leadership, employees' compensation and cohesiveness positively impact the team productivity in the sales and marketing department of Nairobi Bottlers [2].

Wu and Chen carried out a factor analysis on teamwork performance - an empirical study of inter-instituted collaboration. The sample of this study was 178 professors, involving collaboration projects from twenty vocational institutes at the higher-education level. Methods: The collected data were statistically analyzed using SPSS 17.0 for Windows and LISREL 8.70 for Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). Also, the study undertook the Maximum Likelihood Estimation to analyze the linear relationships among the three major variables. The statistical analysis result indicated that knowledge-sharing created a positive effect on team performance. On the other hand, team conflict caused a negative effect on team performance. Emotional intelligence did not have any significant direct effect on team performance but played a moderating role. This study concluded that vocational institutes are academic organizations where knowledge-sharing is a crucial mission and where strategies are put into place to fulfill that mission; team conflict should be avoided for better team performance [8].

Shouvik and Mohammed examined the Impact of Teamwork on Work Performance of Employees: A Study of Faculty Members in Dhofar University. The descriptive research approach was used. A sample size of 100 respondents was drawn from the population of faculty members in Dhofar University. Correlation and ANOVA were used to find the relationship between the independent and dependent variables and the impact of the independent variables on the dependent variable i.e., employee performance. The results reveal that is a strong and significant connection between the independent variables viz. teamwork, climate of trust, leadership and structure, performance evaluation and rewards and the performance of the faculty members of Dhofar University in Sultanate of Oman [7].

The Benue State Civil Services operate a unified personnel system based on the concept of a unified Civil Service. The pattern of administrative system in Benue State provides that the activities of the government are carried out by Ministries. Operationally, the Ministry is composed of four groups of employees, namely, administrative, the executive, the clerical, the professional and technical groups. The grouping is based on the type of work and the level of responsibility involved, and the group at which an applicant enters is contingent upon his educational background. Therefore, the rank inheres in the person rather than in the office he holds. To be able to achieve the aim of government in the smooth running of its operation, the role of teamwork is essential. Over the years, they have been an abysmal outcome in the performance of the Benue State Civil Service which has resulted to low level of performance in executing the developmental initiates of the government's overtime in the State. The researcher is of the opinion that this could be as a result of the inability of the employees of government to work as a team to achieve their set goals. It is based on this that the researcher is set to examine the influence of teamwork on the performance in the Nigerian public sector with a particular reference to Benue State Civil Service. The specific objectives of the study are to; examine the influence of teamwork on service delivery of Benue State Civil Service, ascertain the influence of teamwork on turnaround time of in Benue State Civil Service and to determine the influence of teamwork on quality of operational efficiency in Benue State Civil Service.

Materials and Methods
In this study, a survey research design was used where a sample of two hundred and twenty (220) respondents were drawn from staff of the Benue State Civil Service which are made up of both senior and junior staff. Convenience sampling was used to pick these respondents for the study due to the low probability of getting all the respondents in one place. The data for the study was collected using questionnaire, coded and analyzed using computer-based Statistical Package for Social Sciences (SPSS) version 21.0. The validity and the reliability of the instrument was established using confirmatory factor analysis and Cronbach Alpha statistics. In order to determine the validity and reliability of the instrument used for the data analysis, a pilot test using thirty percent (30) of the study sample was carried out and the result used to in the computation as shown below:

Table 1: Kaiser-Meyer-Olkin and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.940
Approx. Chi-Square	4.121
Bartlett's Test of Sphericity df	6
Sig.	.028

Source: SPSS Result, 2020

The result of the pilot test conducted were subjected to exploratory factor analysis to investigate whether the constructs as described in the literature fits the factors derived from the factor analysis. From Table 1, factor analysis indicates that the KMO (Kaiser-Meyer-Olkin) measure for the study's three independent variable items is 0.940 with Barlett's Test of Sphericity (BTS) value to be 6 at a level of significance p = 0.028. Our KMO result in this analysis surpasses the threshold value of 0.50. Therefore, we are confident that our sample and data are adequate for this study.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	% of Variance
1	1.413	35.324	35.324	1.413	35.324	35.324	1.404	35.094	35.094
2	1.130	28.256	63.580	1.130	28.256	63.580	1.139	28.486	63.580
3	.929	23.232	86.813						
4	.527	13.187	100.000						

Extraction Method: Principal Component Analysis.

The Total Variance Explained Table shows how the variance is divided among the 4 possible factors. Two factors have Eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalue is less than 1.0 the factor explains less information than a single item would have explained. Table 2 shows that the Eigenvalues are 1.413 and 1.130 are all greater than 1. Component one gave a variance of 35.094, Component 2 gave the variance of 28.486. The cumulative of the rotated sum of squared loadings section indicates that two components i.e component 1 and 2 accounts for 63.580% of the variance of the whole variables of the study. This shows that the variables have strong construct validity.

Table 3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.880	.970	4

Source: SPSS Result, 2020

As shown by the individual Cronbach Alpha Coefficient the entire construct above falls within an acceptable range for a reliable research instrument of 0.70. The Cronbach Alpha for the individual variables is 0.880 and is found to be above the limit of acceptable degree of reliability for research instrument.

Table 4: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SDL	113.0500	242.366	.640	.109	.443
TRT	109.1000	306.937	.385	.122	.749
OPE	112.1500	292.976	.802	.092	.622
TMW	114.2000	225.642	.619	.168	.598

Source: SPSS Result, 2020

As shown in Table 4, an item-total correlation test is performed to check if any item in the set of tests is inconsistent with the averaged behaviour of the others, and thus can be discarded. A reliability analysis was carried out on the variables of the study values scale comprising four (4) items. Cronbach's Alpha showed the questionnaire to reach acceptable reliability, $\alpha = 0.880$. All items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. There is no exception to this in all the variables of the study as none of the items if deleted will improve the overall Cronbach alpha statistics. As such, none of the variables was removed. A correlation value less than 0.2 or 0.3 indicates that the corresponding item does not correlate very well with the scale overall and, thus, it may be dropped.

Models Specification

The functional relationship between the variables of the study, the model is expressed in implicit and explicit function as shown below:

$$SDL = f(TMW) \quad ------ (1)$$
$$TRT = f(TMW) \quad ------ (2)$$
$$OPE = f(TMW) \quad ------ (3)$$

Where,
SDL = Service delivery
TRT = Turnaround time
OPE = Operational efficiency.
TMW = Teamwork

In explicit form, the functional relationship between the variables of the study can be shown below:
$$SDL = b0 + b1TMW + Ut \quad ------ (4)$$
$$TRT = b0 + b1TMW + Ut \quad ------ (5)$$
$$OPE = b0 + b1TMW + Ut \quad ------ (6)$$

Where,
b0 = Regression constant

b1 = coefficients of independent variable.
Ut is the error term
A priori expectations

(X_1) = Teamwork; *a priori* expected to have a positive influence performance

Multiple regression analysis was used to assess the nature and degree of relationship between the dependent variable and a set of independent or predictor variables. However, the probability value of the regression estimates was used to test the hypotheses of the study. Decision rule: The following *decision rules* were adopted for accepting or rejecting hypotheses: *If the probability value of b_i [p (b_i) > critical value] we accept the null hypothesis*, that is, we accept that the estimate bi is not statistically significant at the 5% level of significance. *If the probability value of b_i [p (b_i) < critical value] we reject the null hypothesis*, in other words, that is, we accept that the estimate b_1 is statistically significant at the 5% level of significance.

Results and Discussion

The relationship between the variables of the study was modeled using three simple linear regression models I -III. The results of the study is presented in this following subsections as shown below:

Regression Model I: Service Delivery
Table 5: Statistical Significance of model I
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.045	1	31.045	.357	.026b
	Residual	1563.905	18	86.884		
	Total	1594.950				

a. Dependent Variable: SDL
b. Predictors: (Constant), TMW

Source: SPSS 20.0 Result Output, 2020

The result of the statistical significance of the model is presented in Table 5. The F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable F (1, 18) = 0.357, p =0.026b (i.e., the regression model is a good fit of the data).

Table 6: Model summary I

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.952[a]	.895	.750	9.32114

a. Predictors: (Constant), TMW
b. Dependent Variable: SDL
Source: SPSS 20.0 Result Output, 2020

Table 6 shows the model summary. The coefficient of determination R^2 for the study is 0.895 or 89.5%. This indicates that 89.5% of the variations in the model can be explained by the explanatory variables of the model while 20.20% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square and R^2 show a negligible penalty (75.0%) for the explanatory variables introduced by the researcher.

Table 7: Regression coefficients I

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	32.272	7.294		4.425	.000		
TMW	.718	.198	.540	3.626	.004	1.000	1.000

a. Dependent Variable: SDL

Source: SPSS 20.0 Result Output, 2020

Teamwork (TMW) has a positive effect on the Performance of Benue State Civil Service proxied by Service Delivery (SDL) and the effect is statistically significant (p<0.05) and in line with a priori expectation. This means that a unit increases in Teamwork (TMW) will result to a corresponding increase in Service Delivery (SDL) in Benue State Civil Service by margin of 54.0%. Using the probability value of the estimate, p (b1) < critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b1 is statistically significant at the 5% level of significance. This implies that Teamwork has a significant effect on Service Delivery in Benue State Civil Service. This finding is in line with that of Chege who examined the effect of teamwork on productivity in sales and marketing departments: a case study of Nairobi Bottlers Limited and found similar results [2].

Model Two: Turnaround Time
Table 8: Statistical Significance of model II
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	65.706	1	65.706	1.455	.024b
	Residual	813.094	18	45.172		
	Total	878.800	19			

a. Dependent Variable: TRT
b. Predictors: (Constant), TMW

Source: SPSS 20.0 Result Output, 2020

The result of the statistical significance of the model is presented in Table 8. The F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable $F (1, 18) = 1.455$, p =0.026b (i.e., the regression model is a good fit of the data).

Table 9: Model summary II

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734a	.675	.423	6.72100

a. Predictors: (Constant), TMW
b. Dependent Variable: TRT
Source: SPSS 20.0 Result Output, 2020

Table 9 shows the model summary. The coefficient of determination R^2 for the study is 0.675 or 67.5%. This indicates that 67.5% of the variations in the model can be explained by the explanatory variables of the model while 32.5% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square and R^2 show a negligible penalty (42.3%) for the explanatory variables introduced by the researcher.

Table 10: Regression coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	34.322	5.259		6.526	.000		
TMW	.172	.143	.273	1.206	.243	1.000	1.000

a. Dependent Variable: TRT

Source: SPSS 20.0 Result Output, 2020

Teamwork (TMW) has a positive effect on the Performance of Benue State Civil Service proxied by Turnaround time (TRT) but the effect is not statistically significant (p>0.05) but in line with a priori expectation. This means that a unit increases in Teamwork (TMW) will result to a corresponding increase in Turnaround Time (TRT) in Benue State Civil Service by margin of 27.3%. Using the probability value of the estimate, p (b2) > critical value at 0.05 confidence level. Thus, we accept the null hypothesis. That is, we accept that the estimate b2 is not statistically significant at the 5% level of significance. This implies that Teamwork has no significant effect on Turnaround Time in Benue State Civil Service. This finding contradicts that of Mulika whose studies show that employees working within the team can exceed the expectation than when employees work as individual as turnaround time is improved within the organization [4].

Model III: Operational Efficiency
Table 11: Statistical Significance of model III
ANOVAª

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	92.636	1	92.636	.959	.034b
Residual	1737.914	18	96.551		
Total	1830.550	19			

a. Dependent Variable: OPE
b. Predictors: (Constant), TMW
Source: SPSS 20.0 Result Output, 2020

The result of the statistical significance of the model is presented in Table 11. The F-ratio in the ANOVA table above tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predicts the dependent variable $F (1, 18) = 0.959$, p =0.034b (i.e., the regression model is a good fit of the data).

Table 12: Model summary III

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.700a	.506	.300	9.82603

a. Predictors: (Constant), TMW
b. Dependent Variable: OPE

Source: SPSS 20.0 Result Output, 2020

Table 12 shows the model summary. The coefficient of determination R2 for the study is 0.700 or 70.0%. This indicates that 50.6% of the variations in the model can be explained by the explanatory variables of the model while 49.4% of the variation can be attributed to unexplained variation captured by the stochastic term. The Adjusted R Square and R2 show a negligible penalty (30.0%) for the explanatory variables introduced by the researcher

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Table 7: Regression coefficients III

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Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1 (Constant)	44.567	7.689		5.797	.000	1.000	1.000
TMW	.620	.209	.496	2.968	.033		

a. Dependent Variable: OPE

Source: SPSS 20.0 Result Output, 2020

Teamwork (TMW) has a positive effect on the Performance of Benue State Civil Service proxies by Operational Efficiency (OPE) and the effect is statistically significant (p<0.05) and in line with a priori expectation. This means that a unit increases in Teamwork (TMW) will result to a corresponding increase in Operational Efficiency (OPE) in Benue State Civil Service by margin of 49.6%. Using the probability value of the estimate, $p\,(b_3)$ < critical value at 0.05 confidence level. Thus, we reject the null hypothesis. That is, we accept that the estimate b_3 is statistically significant at the 5% level of significance. This implies that Teamwork has a significant effect on Operational Efficiency in Benue State Civil Service. This finding is in tandem with that of Ooko and Odundo, who found similar results [6].

Conclusion and Recommendations
This study examined the influence of teamwork on the Performance of Nigerian Public Service with reference to Benue State Civil Service. The study concluded that the independent variable teamwork has a positive influence on all the three dependent variables of performance namely; service delivery, turnaround time and operational efficiency with the effect on service delivery and operational efficiency being statistically significant. Thus, there is no doubt that team have a powerful impact on the performance of an organization and its ability to implement the programs and agendas of government which they serve. These findings have shown that various measures of performance studied have been positively influenced as a result of individual staff being more productive as he works in a team. The team in effect enhances the beneficial occupational skills through unlimited learning, cooperating, and exchanging thoughts and various experiences. Teamwork thus, is an essential element for the development and function of an organization or institution. It is recommended that i) Government of Benue State should incentivize employees who work as a team as this has been shown to improve performance, ii) The government should create task which will engage the staff and require them to work in a team to achieve a higher goal. It is recommended that finally, frequent seminars and conferences should be organized for the staff of the Benue State Civil Service so that proper enlightenment will be provided to them on the importance of teamwork in the service.

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