IS SCHOOL CATEGORY A PREDICTOR OF PERFORMANCE CONTRACTING TARGETS IN PUBLIC SECONDARY SCHOOLS IN KAKAMEGA COUNTY, KENYA?

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ABSTRACT

In order to improve the quality education in Kenya, Teachers Service Commission (TSC) embraced Result Based Management Approach, which involves Performance contracting for heads of primary and secondary schools. This study sought to establish the effect of school category on attainment of Performance Contracting targets by secondary school principals in Kakamega County. The study used descriptive survey research design. The study population comprised of 358 principals of public secondary schools in Kakamega County. Stratified, proportionate and random sampling techniques were used to select a sample of 126 respondents. Data was collected using a questionnaire form the school principals. Research instruments were validated using face and content validity while reliability was determined using spilt-half test technique at r= 0.8. Data was analyzed descriptively using means and percentages; and inferentially using multiple linear regression by aid of Stata version 12. Inferences were made at 0.05 level of significance on a two-tailed test. Data was analyzed and presented inform of tables. The findings of the study showed a statistically significant relationship between school category and in particular day schools with mean attainment of performance contracting targets in public secondary schools in Kakamega County. Day schools predicted – 5.475 points low in mean attainment of performance contracting targets. The findings conclude that school category affect the attainment of performance contracting targets.

Key Words: Performance contracting targets, School category, Day schools.

1. INTRODUCTION

Performance contracts has its origin from realization that the performance and discharge of duty in the public service had been going down from what is expected by the public. This fall in performance was linked to duplication of work, poor management style, and wastage of resources (Kemboi, 2015). Therefore, performance contract was brought in to fill the void and capacitate the workers to be productive and industrious in order to lift their levels of job satisfaction and commitment. Public organizations that undertook performance related pay stood to benefit through optimal use of their human resource because they were now in position to adjust the workers activities and the organizational goals which leads to better coordination (Kemboi, 2015).

In the Education system, New Zealand, England, the USA, Finland, Sweden, and Singapore are examples of nations that have introduced the PC in Education. For Example, in United States of
America, the PC has been institutionalized in the system of Education in all the states and the school boards serve as the PC managers. Assessment on the National Education done by the USA Department of Education in 2010 showed that 36 states provide a form of work-related pay for the teachers. The performance contract programs started to get public acknowledgement in the early 1970s (Muriithi, 2014).

In Kenya, recent developments in the educational sector have been of great concern. Issues of relevance, quality, and the effectiveness of our system of education has generated a lot of discussions which has led to a deeper look in reforms in education sector and innovativeness (Muriithi, 2014). The introduction of the free primary education and free secondary education has led the rapid growth of both primary and secondary schools in the country. The emphasis is now shifting to quality of education that is offered in both the primary and secondary schools from just provision of education for all. A lot of studies have been done to assess the outcomes of learning in Kenyan schools at various levels, and the outcomes indicate that a high number of graduates could not speak or write proper English. A report released by Uwezo East Africa in 2014 showed that only one out of three children could read at the required standard in class two. Again, the issue of increasing costs in the education sector led the government and the public to demand accountability from the teachers and schools (Muriithi, 2014).

The Teachers Service Commission (TSC) has initiated major changes in connection with the government reform agenda on public service. Key emphasis are on the improvement on service delivery. In order to facilitate this reform strategy, the teacher employer has embraced a performance improvement strategy which involves an introduction of performance contract to schools, strategic planning, and other well intended results-based management strategies. Teachers Service Commission chief executive officer Dr. Macharia in an article in Daily Nation of 25th April 2017 said the reforms are designed to cultivate a performance culture within the teaching fraternity and also to instil accountability in teachers in all the public primary and secondary schools (Jonyo & Owour, 2017).

It is upon this premise that the study seeks to establish the effects of school category on attainment of performance contracting targets in public secondary schools. Since all the head of institutions have signed a performance contract with the government of Kenya, this study was carried out to establish the effect of school category on the attainment of performance contracting targets.

2. SCHOOL CATEGORY AND PERFORMANCE
School category puts schools into two groups: boarding schools and day schools, there are also some schools that provide both boarding and day services especially in rural set ups. Kakamega County has day and boarding schools as well as schools that are partly boarding for those who can pay and partly day school. The two national schools in the county are boarding schools, this is the same for the extra county and top county schools. Many of the day schools in the county fall in the category of sub county schools and many of the day schools are also mixed schools. In most boarding schools in the county there is a school schedule or routine which manages all the students time in school and most of the time under prefects’ and teachers’ supervision. In the day schools the school routine begins at around 7 am and end at around five in the evening where students are released.
Several studies have been conducted to determine the impact of school category on performance. Study conducted by Ngeno et al. 2013 noted that academic performance differs between day and boarding secondary schools each year. According to the Standard Newspaper (2009), the trend continues in secondary schooling where performance in the Kenya Certificate of Secondary Education is dominated by boarding students. Previous ranking from the Kenya National Examinations Council show year after year, about 75 percent of the 150 top schools in Kenya Certificate of Secondary Examination are boarding Schools.

It has been observed that domestic chores affect academic achievement of day scholars, for example, fetching firewood and water, taking care of younger siblings, helping in parents or guardians’ business, and tending of livestock disengages students from focus on academic work. The distance the day scholars have to cover from home to school and from school to home also affects academic achievement due to fatigue and distraction (Ngeno et al., 2013).

Oloo (2014) in Migori District, Kenya, found that many of day secondary school students do not perform well in Kenya Certificate of Secondary Education examination compared to their boarding peers. School levies was found to have a negative effect on academic performance of day students. This is based on the fact that parents of students in day schools do not pay up these levies citing government policy of The Basic Education Act 2013, Free Tuition secondary education and the constitution of Kenya 2010 which prohibits parents from paying any school fees.

Amukowa and Karue (2013) observed that day scholar’s engagements at home show that they had little time to concentrate on their school work. Among the activities they engaged in, which negatively affected their performance in Kenya Certificate of Secondary Education included doing odd jobs like riding motorbikes to supplement the family income, herding cattle, general cleaning, taking care of their younger siblings in the absence of their parents while a few others idled. Amukowa and Karue (2013) found out that chores expected of a day student by guardians and parents are too much to an extent that they can be referred to as exploitation. This does not in any way help in improving performance at national examinations or any other examination.

Amukowa and Karue in 2013 further observed that other problems day scholars go through included lack of reading materials and lack of someone to consult in relation to their studies in their relatively poor backgrounds and homes. Most of the day scholars’ parents cannot afford school text books, reference materials, and supplementary materials to assist them in their school work. Some schools for instance, it was noted that they do not have enough resources sufficient for students, hence the poor students suffered both at home and in school. Together with many other problems for example, interference, poor lighting systems, lack of reading company and societal attitudes, a lot of noise in their environments, and such other pecuniary like hunger, all these made it very difficult for day students to excel in the Kenya Certificate of Secondary Education.

Amukowa and Karue (2013) noted that teachers who teach in day secondary schools also experience certain problems which are similar to those faced by their students. Not any of the day secondary schools provided any kind of housing for their teachers and that all teachers including their heads commute to school. A number of teachers live in rented rooms in market places near the schools and many others walk for quite some distances to and from school leading to much
fatigue as their students go through every day. This therefore, results to their inability to maximize on their school work as would be expected of if they had they been provided with habitable housing as found in schools that offer boarding facilities.

A study carried out in Embu District in 2013 found out that teachers in day schools in Embu District suffer from high transport costs to and from school, adverse weather conditions which result to their reporting to school late and others find it difficult to feed well. These problems lead to poor performance in Kenya Certificate of Secondary Education in day secondary schools in Embu District (Amukowa and Karue 2013). The report stressed on the point of admission of weak students to day secondary schools. Many of the students who scored high marks in Kenya Certificate of Primary Education were admitted to boarding secondary schools. Day secondary schools’ selection for form one students was limited to primary schools within the vicinity which more often recorde poor performance at K.C.P.E.

Indeed the average student admission score had a high relation with performance.

This study therefore seeks to examine how school category affects the attainment of performance contracting targets in public secondary schools in Kakamega County.

3. METHODOLOGY
This study was anchored on descriptive survey research design. The study was conducted in Kakamega County. The unit of analysis was at the school level. The universe of this study comprised of all of the 358 public secondary schools in the county representing the consumers. This study used purposive, stratified, and simple random sampling techniques to derive the study sample of 133 public secondary schools comprising of 2 national schools, 13 Extra County schools, 19 County schools, and 99 Sub County schools. A total of 126 participants were selected for the study. Questionnaires was used to collect data from the school principals.

4. DATA ANALYSIS, RESULTS AND DISCUSSION
The null hypothesis tested was that school category has no statistically significant effect on mean attainment of performance contracting targets in public secondary schools in Kakamega County. This study therefore modelled the effect of school category on mean attainment of performance contracting targets in public secondary schools in Kakamega County using multiple linear regression analysis. The significance of the relationship was tested at $p = 0.05$ on a two tailed test. To be able to fit the multiple regression model, first, the study ran a pair-wise correlation to establish which explanatory variables were correlated with the outcome variable. Only the covariates that were statistically significant at $p=0.05$ were pursued in the multiple regression model. Consequently, the study used two models to establish the effect of school category on attainment of performance contracting targets in public secondary schools in Kakamega County. In model 1, the study assesses the effect of school category on mean attainment of performance contracting targets in public secondary schools in Kakamega County. In model 2, the study assesses the effect of school category on mean attainment of performance contracting targets in public secondary schools in Kakamega County while controlling for school resources, principal characteristics, and teacher characteristics variables. The result of the multiple regression model is presented in Table 1.
Table 1: Multiple Linear Regression for the Association between School Category and Attainment of Performance Contracting Target (2017)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Label</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attained target</td>
<td>Coef. ($p$)</td>
<td>Coef. ($p$)</td>
</tr>
<tr>
<td></td>
<td>Attained target</td>
<td>(p)</td>
<td>(p)</td>
</tr>
<tr>
<td>School Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a32</td>
<td>Boarding school (Ref)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a31</td>
<td>Day school</td>
<td>-5.475*  (0.010)</td>
<td>-4.411** * (0.020)</td>
</tr>
<tr>
<td>Enrolment</td>
<td>Year of Enrolment</td>
<td>0.000990 (0.909)</td>
<td>0.0330 (0.710)</td>
</tr>
<tr>
<td>Registration</td>
<td>Age of the school</td>
<td>2.228** (0.036)</td>
<td>0.0559 (0.904)</td>
</tr>
<tr>
<td>Mean</td>
<td>School mean score 2017</td>
<td>0.189 (0.870)</td>
<td>1.616** (0.023)</td>
</tr>
<tr>
<td>Classes</td>
<td>Number of classes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labs</td>
<td>Number of labs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC training</td>
<td>Number of PC trainings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male teachers</td>
<td>Male teachers</td>
<td>0.235 (0.702)</td>
<td>0.328 (0.647)</td>
</tr>
<tr>
<td>Female teachers</td>
<td>Female teachers</td>
<td>0.328 (0.647)</td>
<td>0.00945 (0.852)</td>
</tr>
<tr>
<td>Masters</td>
<td>Teachers with masters</td>
<td>0.0188 (0.649)</td>
<td>0.00278 (0.952)</td>
</tr>
<tr>
<td>Bachelors</td>
<td>Teachers with bachelors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>Teachers with diploma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>71.01*** (0.000)</td>
<td>50.26*** (0.000)</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>R-sq</td>
<td></td>
<td>0.193</td>
<td>0.444</td>
</tr>
<tr>
<td>adj-R-sq</td>
<td></td>
<td>0.180</td>
<td>0.379</td>
</tr>
</tbody>
</table>

Note. Standard errors in parentheses  $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Field Data, 2020

The results model 2 in Table 1 when other variables are controlled indicate that in reference to boarding secondary schools; day schools were predicted to score -4.411 points lower in mean attainment of performance contracting targets than boarding secondary schools. The results indicate that school category, in particular the day schools are important in explaining variations in mean attainment of performance contracting targets with boarding schools poised to attain higher means in performance contracting targets than day schools. This can be explained by the fact that boarding schools have extra time for teaching and learning and that students enrolled are rarely affected by home factors while at school. These indicators play an important role in attainment of performance contracting targets.

This findings concur with the findings of Ngeno et al, 2013 who observed that household chores and errands have an impact on the achievement of day students, example of such errands include cooking, cleaning, fetching water and firewood, taking care of younger siblings, helping in parents and guardians business, and looking after animals distracts the learners from their studies. The distance the day scholars have to cover to go to school and back home also negatively impacts their performance due a lot distraction and fatigue. Amukowe and Karue in 2013 also noted that day scholar’s performance was greatly affected by home based activities unlike their boarding counterparts.
Further, 2 control variables namely; School mean performance in national exams and the number of trainings principals have had in PC were found to be statistically significant. For instance, with regards to school performance in national exams the study established that KCSE in 2017 predicted 2.228 points increase in mean attainment of performance contracting targets. The results show that better performance in schools KCSE mean score predict higher attainment of school mean performance contracting target. The findings point to the fact that teaching, learning, and assessment as well as student progression and achievement are among the core indicator in the PC tool for school principals. As such, schools that perform well in KCSE are poised to get better scores in the PC score tool hence higher scores than schools that perform poorly in KCSE examinations. This perhaps suggests that schools in Kakamega County should be encouraged to perform well in national examinations in order to improve in performance contracting.

With regards to the number of training the principals had in performance contracting, the study established that one day extra training in performance contracting by the principals predicted 1.616 points increase in mean attainment of performance contracting targets. The results suggest that more training in performance contracting predict higher mean attainment of performance contracting target in public secondary schools in Kakamega County. This is expected given that performance contracting training equips school principals with necessary skills and competencies in executing the implementation of performance contracting besides transmitting the same to the junior officers. Besides, the findings point to the suggest that the more the trainings of school principal in PC the higher the likelihood of understanding the PC. The school principals are therefore able to implement PCs at the school level, set achievable targets, and work towards achieving the set targets. This finding also highlights the need of continuous PC training for the school principals and other school managers. The findings of this study concur with those of Muriithi (2019), which observed that training influences implementation of performance contract in public secondary schools in Igembe south. The study observed that level of training, duration of training, seminars, and communication skills greatly affect the implementation of performance contract in public secondary schools.

The study fits a multiple linear regression model with \( k \) independent predictor variables \( x_1, \ldots, x_k \) and one response/ outcome variable \( y \). The model was fitted as;

\[
AT = 54.67 - 4.411X_1 + 2.228X_2 + 1.616X_3 + e
\]

Where \( AT \) is the performance contracting target score attained, 54.67 is the constant of regression, \( X_1 \) is the public day school, \( X_2 \) is the school mean performance in KCSE in 2017, and \( X_3 \) is the number of performance contracting trainings by the school principals while \( e \) is the error term emanating from the unexplained variables.

This study further tested the overall effect of the individual proxies of school category on mean attainment of performance contracting targets in public secondary schools in Kakamega County controlling for school resources, principal characteristics, and teacher characteristics variables. The null hypothesis tested was that school category has no statistically significant effect on mean attainment of performance contracting targets in public secondary schools in Kakamega County. The results \( F(1, 124) = 2.29, p = 0.0323 \) and controlling for the other covariates in the model 2,
(the school mean performance in KCSE in 2017 ($p=0.0364$), and the number of performance contracting trainings ($p=0.0238$) are statistically significant. The hypothesis test for all the 2 explanatory variables in the hypothesis test suggest that at least one variable is statistically significant ($p=0.0323$). Therefore, this study rejects the null hypothesis that school category has no statistically significant effect on mean attainment of performance contracting targets in public secondary schools in Kakamega County. Indeed, the results suggest that school category is important in explaining variations in mean attainment of performance contracting targets in public secondary schools in Kakamega County.

5. CONCLUSION
It was concluded that variations in mean attainment of performance contracting targets are associated with school category, in this case day schools were predicted to score -4.411 points lower in mean attainment of performance contracting targets than boarding secondary schools. It can therefore be concluded that school category, in particular the day schools are important in explaining variations in mean attainment of performance contracting targets with boarding schools poised to attain higher means in performance contracting targets than day schools. It was concluded that the school mean performance in national examinations and principals’ number of trainings in PC are also associated with mean attainment of performance contracting targets.

6. RECOMMENDATIONS
It is recommended that the Ministry of Education and policy makers in Education should increase funding to day schools to improve their infrastructure and learning resources so that they can improve in their academic performance to positively compete with their boarding counterparts. This will in turn improve their PC target scores.

It is recommended that school category should be factored in the measurement of performance.

REFERENCES