School organizational factors as predictors of student achievement: Principals’ perspective

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Abstract
This study aimed to deepen our understanding of how school organization factors can be used to predict students’ academic performance. In particular, factors examined were leadership skills, nature of students, parental involvement and the school environment. Using stratified and simple random sampling, a total of 152 principals were selected for the study. A survey questionnaire was used to collect data whose variance and regression was analyzed using ANOVA. The findings consolidate the importance of leadership skills, nature of students, learning environment and parents in predicting students learning success. All the four aspects of school organization contributed differently to predicting students’ academic performance with the Principals’ Leadership Skills having the highest impact while parental involvement made the least contribution. Findings of this study are important to educational administrators to ensure a supportive learning environment for the students. In addition education authorities both at national and local levels should enhance field inspections to rate the learning atmosphere. The study also serves to contribute to the body of knowledge on school organizational factors in addition to triggering the need for more research in this domain.

Keywords: school organization; academic performance; learning environment; parents; students

1. Introduction
As the world keeps changing at an intense rate, institutions of learning will continue to face significant internal and external challenges (Williams, 2013). Organizations are also changing dramatically, in terms of their strategies, their structures, and their systems with the aim of meeting stakeholders’ expectations (Adserias et al., 2017). In modern times, change in educational organizations is affecting all stakeholders because it plays a significant role in enhancing human capital for any nation (Feenberg, 2012). In this regard, education is considered a vital first step in every human endeavor particularly in this age of globalization and technological disruptive revolution. It plays a critical role in the development of human capital and offers opportunities for better living (Battle & Lewis, 2002). Globally, the quality of students’ performance forms a critical priority for educators (Buhere, 2007). Learning organizations now need continuous renewal by redefining their strategic position in order to optimize their performance in response to emerging developments in their internal and external environment (Stavros et al., 2016). Schools, as organizational entities, are constantly being evaluated as to how well they attain their stated objectives (Mukherjee, 2013). Accordingly, administrators are increasingly being held accountable for the performance of schools.

Quality education is perceived differently making it difficult to measure (Wambui, 2015). This is because educational services take the form of transformation of knowledge, life skills and behavior modifications of learners which in themselves are not tangible (Tsinidou et al., 2010). The complexity of its process has increased due to changing attributes associated with different educators' and stakeholders' viewpoint in general (Blevins, 2009). The situation is even more complicated as parents demand better grades, society and government at large expect schools to effectively and yet economically prepare students to take their place in society. Education researchers have had an interest in investigating various variables impacting on the quality of performance of learners. These are varied and could be within and without the learning environment (Croson et al., 2004).

In as much as it is now a recognized fact that access to education in terms of enrollment has improved in the recent past, achievement of learning outcomes is still wanting (UNESCO, 2015). Many students do not perform well in national examinations in many countries around the world; Kenya included(Twaweza East
Africa, 2016; Mackatiani, 2017). One fundamental question that has pre-occupied researchers’ minds for decades is why some schools perform well in examinations while others consistently perform poorly. In Pakistan, results show that almost half of the students fail in secondary level examinations (Khan, 2017). Academic performance is low among senior secondary schools in many European countries (Wijsman et al., 2016). In Nigeria, reports indicate that students do not perform well in the senior secondary certificate examinations (Filgona et al., 2017). In Kenya, the situation is not any better (Waseka et al., 2016). Scrutiny of national examination results between 2013 and 2018 shows that the majority of candidates scored lower grades. Many schools attribute this occurrence to limited resources however, emerging evidence indicates poor administrative skills, chronic teacher absenteeism and student indiscipline as the cause (Wammula, 2013; Kieti, 2017). Over 5,500 secondary schools in Kenya have limited capacity in terms of staffing, physical facilities, teaching-learning resources, and parental support to prepare their students for higher education and further training (Kieti, 2017). Poor performance has raised concern and efforts have been made to find out what factors contribute to this (Hameed & Waheed, 2011).

School organizational factors are elements within a school setting that influence learning achievement. These include leadership, learning environment, parental engagement, and student factors. In this study, leadership skills are the practices or activities carried out by the principals of secondary schools that influence students’ academic performance. They include: Administrative skills, Staff improvement, Guidance, and counseling, Supervision, Monitoring, and Assessment skills (Bolanle, 2017). Student factors are the circumstances at the students’ disposal which have an effect on their academic performance (Peter, 2016). These are ambition, individual efforts, and attitude on subjects (Chepkorir et al., 2014). School environmental factors are the internal surrounding of the school. These include: teaching-learning materials, IT and Teacher support, and School climate (Ayça & Ali, 2017; Ojukwu, 2017). Parental factors are the activities or practices carried out by parents in liaison with the school to facilitate learning (Khan & Tasneem, 2015). All these factors can be considered as organizational conditions that create a conducive atmosphere for learning (Kiplagat & Mugaaisia, 2014). They form a dynamic interrelationship between organizational structure and stakeholders bound together by a common purpose (Moswela, 2014). The interconnectedness of organizational factors is clear as to who is to do what, how, why, when, and to what extent (Cummings & Worley, 2001).

Organizational factors that tend to influence academic performance has been of great concern and a subject of debate (Njagi, 2013). In reference to poor academic performance, a number of factors have been cited such as lack of facilities in schools, parental support, inadequate staffing, student discipline, unfavorable school and home environment (Ndiragu, 2007). Among factors that were identified by Andrews (2008) was the school plant, leadership styles of the principal, teacher characteristics and students’ behavior. These factors are variables that influence learning achievement.

Despite government efforts to improve the quality of education in secondary schools like employing more teachers, increasing teachers’ salaries, improving learning infrastructures through Constituency Development Funds (CDF) and provision of free textbooks, performance has largely remained low. A case in point is Migori County which has been registering a constant decline in students’ performance in national examinations (Migori County Director Education office, 2018). Evidence indicates that for the last five years, the county has continued to record low mean scores in national examinations. During the period of 2013-2016, Migori County hardly attained a mean score of 6.0 in a 12 point score thus raising concern among researchers, stakeholders, and parents. (Migori County Director Education Office, 2018). A number of researchers have focused more on influencing factors such as school leadership, environment, teachers and parents. This study seeks to establish how school organizational factors serve as predictors of student’s academic performance.

2. Literature Review
In as much as school organizations portend some element of uniqueness, there are elements of an effective organization that can be identified and analyzed across schools. Considerably, these elements are leadership, school environment, parental and student factors. Many factors have been attributed to students’ performance including Parental education and family Social-economic level (Republic of Kenya, 2016). In Kenya, factors like inadequate school facilities, lack of active participation of students in the teaching-learning process and poor overall school atmosphere were cited as being responsible for poor performance (Ttaweza East Africa, 2016). Other researchers have identified a sense of physical safety; high expectations for both academic learning and behavior (Gottfredson et al., 2005), high levels of support from administration (Petty et al., 2007) as factors that influence academic achievement.
2.1 Leadership in Education

Leadership is significant in developing effective performance measurement systems. It influences employees’ commitment to achieving targets and improving performance. These administrators understand the complexities of the school organization and know how to make schools more effective. A key responsibility of administrators is to assist students and teachers in achieving educational goals. Principals play a significant role in school performance (Sushila, 2002). The principal is the first supervisor who ensures that effective teaching-learning is taking place (Okumbe, 2001). Success of a school depends on the principal because it is the leader that makes things done and has the ability to inspire, moderate, guide, and direct (Seron, 2005). Students’ performance depends on the principals because they control resources that influence learning (Ndunda, 2002).

Amidst all these, it is important that the principal continuously evaluate the effectiveness of his school organization. Greene & Ross (2005) established that one of the best practices in improving student performance is by monitoring their perceptions of the learning environment. A study by Glanz (2000) on the role of school principals on performance indicated that the principal has the knowledge with respect to the business of the school such as teaching and learning in the context of change and the ongoing improvement in the school. The principal ensures that all functions of the school complement each other for the sake of learning achievement (Hill, 2006). Effective leadership from principals, influence teachers, staff teams and other sand is associated with better student performance (Seashore & Leithood, 2010). Sergon’s (2005) study on schools’ success indicated that a school’s success depends on principals and their management qualities. The study concluded that managing a school is like charting a ship through turbulent waters and it is through the use of right leadership skills that learning achievement can be realized. Writing on effective schools, Lezotte (2010) identified strong instructional leadership, clear and focused mission, safe and orderly schools, climate of high expectations for success, frequent monitoring of student progress, positive home-school relations, and opportunity to learn as influential factors in learning achievement. Equally, Okello et al., (2017) noted that motivating students to achieve set goals in a school is of great concern to stakeholders. Success of a school largely depends on the principal’s management practices namely; being vibrant, innovative, and being learner centered (Seashore & Leithood, 2010). Nannyonjo (2007) in Uganda established that head teachers characteristics such as; qualifications, in-service training, age, experience together with supervision strategies and administration style influences academic achievement. Twoli (2006) on the other hand found that poor performance was influenced by students’ attitudes, lack of teaching staff and students indiscipline.

2.2 Burnout Symptoms

Parents play an important role in students’ performance. They are a source of security and encouragement (Kudari, 2016). It has been established that academic performance of students largely depends on parental involvement in their academic activities. (Barnard, 2004). In USA and Britain, factors such as the socio-economic background of students is significant in explaining students’ academic performance (Page & Hansen, 2008). Initiatives such as parents attending open days, getting concerned and attending parent-teacher association meetings, and more often engaging with principals and class teachers about how their children can enhance learners’ commitments resulting in academic achievements (Jepkoech, 2002). Research has also shown that students from high social-economic families perform better than those from low levels (Garzon, 2006; Kirkup, 2008). In another study, Krashen (2005) established that students whose parents are educated score higher on standardized tests compared to those whose parents are not educated. In addition, more educated and better paid parents show greater concern for the academic progress of their children than the parents with less education and who engage in poorly paying jobs (Aduda, 2009). School management can provide guidance to parents on creating a positive home environment for improvement in learning (Marziano, 2003).

2.3 Counseling Cognitive Behavior Therapy (CBT)

Without students, learning institutes have no value. Student factors are the circumstances in a school or learning environment that are at the students’ disposal and have an effect on their academic performance (Peter, 2016). These factors include; students’ ambition, learners’ individual efforts and learners’ attitudes on subjects (Chepkorir et al., 2014). Others include learners’ competitive spirit, discipline and school attendance (Al-Musa & Al-Montashri, 2016). Students achievement plays an important role in quality education which is the backbone of a country (Grealish, 2012). Having clear rules and guidelines for students’ behavior and setting high expectations for all is often likely to result in better performance. In secondary schools, factors such as remedial classes for students, effective instructional strategies and rewarding students help to improve performance (Nyagosia, 2011). However, Griffin’s (2004) study indicates that performance depends on the students’ ability and determination to achieve. Student ability in performance cannot be ignored.
Kademyi & Kamuyu, 2006). Inability by students to dedicate quality time hinders academic performance (Chepchieng & Kiboss, 2004). Whereas Mwangi’s (2001) study on students’ achievement found that, the major problem in determining learning achievement is attitude towards examination. All these factors clearly indicate varied variables that can predict students’ academic performance.

2.4 Environment
School environmental factors are the internal surrounding of the school. These include; teaching-learning materials, infrastructure, teacher support, and school climate in general (Ayça & Ali, 2017). A conducive environment enhances growth and development. Students feel happy in a peaceful and friendly environment (Ojukwu, 2017). School environment can also refer to factors within the school that influence the teaching-learning process. It includes classrooms, library, technical workshops, teachers’ quality, teaching methods, peers, among other variables (Ajayi, 2001).

The school environment as a construct is complex and multi-dimensional (Collins & Parson, 2010). It has been described as the unwritten personality and atmosphere of a school, including its norms, values, and expectations (Petrie, 2014). It is also seen as the quality and character of school life (Cohen et al., 2009). Poor learning environment has always been identified as a key factor that leads to poor performance (UNICEF, 2003). School environment remains an important area that should be well managed to enhance student academic performance (Ajayi, 2001; Kilel, 2012). The quality of education depends on teacher performance in the effective coordination of the school environment (Aja, 2001). Most schools have insufficient facilities, poor buildings and no ventilation (Siringi, 2010). Under these conditions, the health of students and teachers may be adversely affected, which will, in turn, affect students’ performance negatively (Petty & Green, 2007).

Ministry of Education of Kenya (1993) observes that besides entry grades, what matters is what goes on inside schools including positive climate, hard work by teachers and students, discipline and effective teaching. Researchers have shown that the quality of education to a large extent is dependent on the scale of equipment/facilities and the use of which they are put. These infrastructures have direct significance in students’ academic performance (Kalogbor, 2016). Insufficient resources due to increased enrolment also affect learning (Onukwo, 2004). In Kenya, several schools suffer due to lack of or inadequacy of physical facilities and instructional materials (UNICEF, 2003). There has been increased enrolment resulting in overcrowded classrooms that make the work of teachers difficult (Chuma, 2012). Some studies have shown that most schools have deficient facilities, revolting buildings and no exposure to air (Suleman et al., 2012). In essence, this affects the health of learners and teachers which in turn affects students’ performance. Kudari (2016) observes that for learning to be successful it should be done in a favorable environment.

In addition, improved students’ relationship with teachers enhances learning and it has important implications on academic development (Nandeke et al., 2017). Teachers use resources to enhance learner's participation in in-class activities for effective learning (Klier 2005). The resources motivate and stimulate attention and sustain learning (Agosioso, 2007). Most of the students underperform due to school-related issues, insufficient services, and non-availability of instructional materials (Farooq et al., 2011). Good quality instructional materials can motivate interest, maintain concentration and make learning more meaningful (Asikia, 2010). Availability of instructional materials is the most influential factor that may explain differing performance levels in schools (Ashton, 2001). Equally important is the provision of the necessary tools and equipment for a better understanding of concepts. This is in addition to practicing appropriate management policies (Maina, 2010). Other learning environmental factors such as academic emphasis, academic optimism, and strong teacher-student relationships exert a powerful impact on academic achievement (Tschannen-Moran et al., 2006; Smith & Hoy, 2007).

It is vital that the learning environment should be characterized by discipline order with amiability and co-operation among teachers and students (Kudari, 2016). Large class size makes monitoring of students' attendance very difficult and hinders the provision of quality feedback to learners (Bascia, 2003). It is important for students to feel valued and wanted in order for them to achieve academic success (Price, 2008). Schools must foster an environment that is positive and effective (Earthman & Lemaster, 2009). Schools that do not offer the basic comforts for teachers and students deter effective learning (Earthman & Lemaster, 2009). When the environment is safe, teachers and students feel comfortable and focus more on learning (Earthman & Lemasters, 2009). The atmosphere of a school has to be one that is supportive and caring (Littky & Grabelle, 2004). The school environment, therefore, must morph into places where everyone is safe, valued, and desire to attain academic growth.

3. Materials and Methods
Descriptive survey research design was used to explore and determine how school organizational factors predict students’ academic performance in public secondary schools. The design was appropriate in
capturing opinions of principals and students (Creswell, 2014). The study focused on public secondary schools in Migori County which has been posting relatively low grades in the Kenya Certificate of Secondary Education results. Population was composed of 245 principals. Mukherjee (2013) notes that Principals carry out a lot of tasks that directly impact performance. These tasks include monitoring of students and teachers, execution of students’ assessment, delegation of duties and responsibilities, incorporating guidance and counseling programs in schools, uniting teaching and non-teaching staff (Akinola & Obafermi, 2013), and supervisory and discipline (Micheal et al., 2016). The Principal is the main link between parents and the school and the way he/she performs in this capacity largely influences the attitudes of the parents and students towards the school (Seashore & Leithood, 2010).

Schools were organized according to sub-counties following the records obtained from the Teachers Service Commission, Migori County director’s office, 2018. A sample of 152 principals making 62 percent of the population was considered adequate based on a table designed by Krcjie and Morgan (1970). Simple random sampling was then used to get principals who participated in the study. Principals were considered important respondents in this study because they are the custodian of school information and the implementers of government policies. Most of the data gathered in this study were documentary at the purview of principals who are the only legal authority in providing school information. Principals are able to account for records about students’ performance, parental engagement as captured in the parent journals, and school performance in general.

A five-point Likert scale questionnaire was used to gather information regarding how best leadership skills, student factors, school environmental factors, and parental factors predict students’ academic performance. The questionnaire was structured according to principles advanced for questionnaires construction by (Fraenkel & Wallen, 2009). Characteristics of variables that informed the questionnaire were drawn from the literature review. Principal’s leadership skills include administrative skills, staff improvement, guidance and counseling and supervision (Onyara, 2013; Modo et al., 2013). Aspects of student factors such as students’ focus and attitude, discipline and drug abuse, and involvement in co-curricular activities were studied (Peter, 2015; Chepkorir et al., 2014). School environmental factors were; teaching and learning materials, use of Educational Technology and school climate (Ayça & Ali, 2017; Ojukwu, 2017). Parental factors such as education level, Parental involvement/follow-up, and Parental socio-economic status were considered (Chowa et al., 2013; Khan & Tasneem, 2015).

Consequently, the questionnaire was ideal because it facilitated large coverage and collection of data after establishing its validity and reliability. Face and content validity is defined as the subjective agreement amongst professionals that a scale logically seems to reflect accurately what it purports to measure (Bryman, 2012). In this case face and content validity were determined by presenting the questionnaire to three experts in Educational Administration for scrutiny and advice. They evaluated the relevance of the content of all items in the questionnaire in reference to the central research question and revised the final version.

To ensure internal consistency, the reliability coefficient of the questionnaire was obtained by computing Cronbach’s alpha using Statistical Package for Social Sciences (SPSS). A Cronbach’s alpha coefficient of 0.86, was obtained from a consideration of internal consistency of the four sub-scales which were principals’ leadership skills, student-based factors, school environmental factors, and parental involvement. This measure was important because it provides information about the relationships between individual items in the scale (Oso & Onen, 2009). A 5-point rating scale of 1=very low influence = 2=Low influence, 3 = Moderate influence, 4 = High influence, 5 = Very high influence was used. Scores obtained on a given aspect were totaled to give the aggregate score per item before calculating the means. The mean ratings were then interpreted in agreement with Cheruiyot & Simatwa (2016) classification, using intervals as follows: 1.00-1.44 = very low, 1.45 – 2.44 = low, 2.45 – 3.44 = moderate, 3.45 – 4.44 = high and 4.45 – 5.00 = very high.

In measuring each component, questionnaire items were combined as follows to compute numeric values: Principal’s leadership skills had 12 items which included: Students and teachers monitoring; execution of students’ assessment; delegation of duties and responsibilities; incorporating guidance and counseling programs in schools; uniting teaching and non-teaching staff; initiating teamwork among the teaching staff; monitoring teachers’ discipline; quality improvement measures; communication and listening skills; mobilizing of adequate staffing; Coordination, supervision, and training on managerial skills. Student factors had 10 items including students’ ambition; learners’ individual effort; learners’ attitude on subjects; learners’ competitive spirit; learners’ own set targets; students’ unrest and absenteeism from school; Students’ discipline in school and Participation in co-curricular activities. School environmental factors comprised 10 items consisting of Peer influence; School security; Presence of internets and other electronics; trained and experienced teachers; teachers’ financial motivation; library; laboratory and instructional materials. Lastly, Parental factors had 7 items, comprising of the education level of parents; communication between parents and teachers; regular checks by parents on academic performance; the attitude of parents.
towards their children; parental homework support; parental investment of financial resources in their children’s education and parental academic socialization.

In the analysis, linear regression was used to measure or ascertain how much independent variables influenced the dependent variable. ANOVA was used to show whether the independent variable was a significant predictor of the dependent variable. Finally multiple regressions were used to establish a linear model in order to investigate how well the set of the independent variables were able to predict academic performance. It was also important in interpreting the relative contribution of each of the variables and in establishing how much unique variance in the dependent variable was occasioned by the independent variables. All tests of significance were computed at $\alpha = 0.05$.

4. Results and Discussion

Normality and dependence of the data

Normality of the data was tested by the use of formal test using Kolmogorov-Smirnov and Shapiro-Wilk tests, as shown in Table 1.0.

|   | Kolmogorov-Smirnov | Shapiro-Wilk |
|---|-------------------|--------------|
|   | Statistics | df | Sig. | Statistic | Df | Sig. |
| Principals' Leadership Skills | .084 | 116 | .044 | .963 | 116 | .063* |
| Students' Factors | .098 | 116 | .068* | .979 | 116 | .070 |
| School Environmental Factors | .119 | 116 | .090* | .981 | 116 | .094* |
| Parental Involvement | .122 | 116 | .070* | .933 | 116 | .080* |
| Students' Academic Performance | .116 | 116 | .041 | .956 | 116 | .051 |

* This is a lower bound of the true significance.

a. Lilliefors SignificanceCorrection

The table shows both Kolmogorov-Smirnov (K-S) and Shapiro-Wilk test results. In the interpretation, a significantly ($p < .05$) smaller $W$ than 1 means that the normality is not met. Hence, the data is normal when Shapiro-Wilk ($W$) is significantly greater than .05. It is evident from Table 1.0 that all the variables met the normality condition (P > .05); there were no statistically significant differences noted in any of the variables with their corresponding normal scores. Durbin Watson test was used to investigate whether observations were independent as one of the assumptions of multiple regression as shown in Table 2.0.

|   | Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|-------|---|----------|-------------------|--------------------------|---------------|
| 1 | .584* | .341 | .317 | 1.37734 | 1.641 |

a. Predictors: (Constant), Parental Involvement, Principals’ Leadership Skills, Students’ Factors, School Environmental Factors

Based on Marquardt (2012), if there is no autocorrelation, then the subsequent observations are related, the Durbin-Watson statistic should be between 1.5 and 2.5. Table 2.0 shows that the Durbin-Watson statistic was 1.641 which is between 1.5 and 2.5, denoting that the data was not auto-correlated, meaning the assumption of independence was not violated.

4.1 Multiple Regression Analysis

The study sought to establish a linear model that could be used to describe the optimal level of students’ academic performance inputting school-related factors. This was done by use of standard multiple regression analysis, where all the independent variables which had statistically a significant contribution to the model were factored in the regression at once. The multiple regressions helped to investigate how well the set of independent variables was able to predict the level of students’ academic performance and it provided information about the relative contribution of each of the variables that make up the model. Equally, each independent variable was evaluated in terms of its predictive power, over and above that offered by all the other independent variables. It enabled the researcher to know how much unique variance, in the dependent variable was explained by each predictor. Table 3.0 shows the regression analysis model summary output.
Table 3.0 Regression Analysis Model summary output: School organizational Factors on Students’ Academic Performance.

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|-------|-------|----------|-------------------|-----------------------------|----------------|----------|-----|-----|-------------|
| 1     | .580  | .336     | .318              | 1.37633                      | .336           | 18.912   | 3   | 113 | .000        |

a. **Predictors:** (Constant), Parental Involvement, Principals’ Leadership Skills, School Environmental Factors, Student Factors.

Findings show that there is a good measure of the level of prediction of the dependent variable –students’ academic performance, as signified by Adjusted R=.318. The value of Adjusted R Square (.318) translated to percentage show that school organizational factors alone accounted for 31.8% of the variance in secondary school students’ academic performance. This is the proportion of variance in the students’ academic performance explained by the school organizational factors. In other words, it is the proportion of variation accounted for by the regression model above and beyond the mean model. However, to assess the statistical significance of the result it was necessary to look at the ANOVA results shown in table 3.1

Table 3.1: ANOVA-School Organizational Factors on Students’ Academic Performance.

| Model   | Sum of Squares | Df  | Mean Square | F     | Sig. |
|---------|----------------|-----|-------------|-------|------|
| Regression | 107.474    | 4   | 35.825      | 18.912 | .000 |
| Residual | 212.158    | 112 | 1.894       |       |      |
| Total   | 319.632    | 116 |             |       |      |

a. **Dependent Variable:** Students’ Academic Performance

b. **Predictors:** (Constant), Parental Involvement, Principals’ Leadership Skills, School Environmental Factors, Student factor

It is evident from the ANOVA results that the model reached statistical significance [F (3, 112) =18.912, Adjusted R^2=.318, sig. <.05], implying that the model was significant and adequate enough to explain the variance in Students’ Academic Performance among public secondary schools. In other words, the results show that the school organizational factors significantly predict students’ academic performance, meaning the regression model is a good fit of the data.

4.2 Evaluating Contribution of each of the Predictor

The study sought to investigate the level of contribution of the individual organizational factors within the model in the prediction of students’ academic performance. This is shown by coefficients values in Table 4.0.

Table 4.0: Coefficient Output: School organizational Factors on Students’ Academic Performance

| Model                        | Unstandardized Coefficients | Standardized Coefficients | T     | Sig. |
|------------------------------|-----------------------------|---------------------------|-------|------|
| (Constant)                   | -2.621                      | 1.153                     | -2.273 | .025 |
| Student Factors              | .593                        | .248                      | .197  | .251 |
| Principals’ Leadership Skills | .782                        | .179                      | .363  | .436 |
| School Environmental Factors | .662                        | .250                      | .226  | .268 |
| Parental Involvement         | .581                        | .245                      | .193  | .237 |

a. **Dependent Variable:** Students’ Academic Performance

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

\[ -2.621 units +.593X_{units} +.782X_{units} +.662 X_{units} +.581X_{units} + \text{error term} \]

From the model, it is evident that all four aspects of school organizational factors contributed differently to predicting students’ academic performance. For instance, out of the four predictors factored in the regression equation, Principals’ Leadership Skills had the highest impact on enhancing students’ academic performance, while parental involvement made the least contribution in explaining the variability of the model. The variable “Principals’ Leadership Skills” had the largest beta coefficient of .363 (p<.05), implying that it made the strongest unique contribution to explaining the dependent variable. This means that a one standard deviation improvement in Principals’ Leadership Skills leads to a .363 standard deviation increase in predicting students’ academic performance, with the other variables held constant.

On the contrary, the beta value for parental involvement was the lowest at .193, indicating that it made the least contribution to the model; a one standard deviation increase in student factors would only lead to a .193 standard deviation increase in student academic performance, with the other variables in the model held constant, however, this effect was significant [p=.020]. It is evident that all the variables made a
It was noted that the total Adjusted R squared value for the model (.318 or 31.8% explained variance) did not equal to the sum of the Adjusted R Squared for each variable. This was because the part correlation values represented only the unique contribution of each variable, with any overlap or shared variance removed. The total Adjusted R squared value, however, included the unique variance explained by each school organizational factor. The predictors were positively correlated (shown by zero-order correlations) hence there was a lot of shared variance that were statistically removed when they were all included in the model.

4.3 The regression model
A regression model for the relationship between these independent variables and the dependent variable is shown below.

In this model: \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon. \)
Where: \( Y \) is Students’ Academic Performance
\( X_1 \) Student Factors
\( X_2 \) Principal’s Leadership Skills
\( X_3 \) School Environmental Factors
\( X_4 \) Parental Involvements

The predictors were positively correlated (shown by zero-order correlations) hence there was a lot of shared variance that were statistically removed when they were all included in the model.

Optimum level of students’ academic performance was presented by:

\[-2.621 \text{units} + .593 X_1 \text{units} + .782 X_2 \text{units} + .662 X_3 \text{units} + .581 X_4 \text{units} + \text{error term}\]

From the model, the coefficients indicate how much students’ academic performance varies with an independent variable when the other two independent variables are held constant. For example, the unstandardized coefficient, \( X_2 \) for principal’s leadership skills which is equal to .782 means that for each one unit improvement in the leadership skills, there is a corresponding improvement in student’s academic performance in public secondary school of .782 units. All the predictors, in the model, had a unique significant contribution to the model. Therefore, it is concluded that the model was adequate to predict student academic performance. The model was statistically significant \([F (3, 112) = 18.91, \text{Adjusted } R^2=.318, \text{sig. } < .05]\), implying that it was adequate to predict students’ academic performance. About 32% of the variability in student academic performance is explained by the school organizational factors. However, other factors (not covered in this regression model) account for about 68% of the model.

Empirical evidence confirms that among other factors, the school climate is powerful in affecting students’ academic achievement (Chen & Weikart, 2008). School environment is a strong predictor of students’ emotional and behavioral outcomes (Brand et al., 2008). It affects students’ adaptive psychosocial adjustment and self-esteem (Way et al., 2007). Bernstein (2006) study reveals that, in the United States of America, students who attend well-maintained schools with good classrooms have a higher achievement than those who attend poorly maintained schools. It is evident from the findings that school organizational factors are critical in predicting students’ performance. This revelation concurs with other previous studies in various ways. The consequences of failed school leadership skills are grave and lead to poor academic achievements of the learners (Kalagbor, 2016). Accordingly, possession of technical, interpersonal, conceptual and administrative skills is crucial in school academic performance (Akinola & Obafemi, 2013). Further, principals who adopted quality improvement measures by applying the right leadership skill influenced learning achievement greatly (Oluremi, 2013). Arguably, principals with relational leadership skills focus on the satisfaction, motivation and general well-being of team members which encourages school academic performance (Ojukwu, 2017).

Findings of student factors as predictors of academic performance are supported by (Ali et al., 2014; Ayça & Ali, 2017) who indicated that there is a significant relationship between the nature of students in terms of attitude and academic performance. Gitome et al., (2013) also affirmed the same in their study which confirmed that students differed in terms of their mastery based on the attitude formed by the students on the subject. School environmental factors are equally significant. Studies show that students from a school with adequate facilities, good teachers and favorable environment perform well than those from schools with fewer facilities, unqualified teachers and the less enabling environment (Mudasir & Norsuhaily, 2015; Ilomo & Mlavi, 2016). In addition, there is a notable difference between the mean performance of students taught in an ideal learning environment and that of those taught in a dull environment (Ado, 2015). Lastly, the role of environmental factors cannot be underestimated. Frequent teacher-family communication affects students’ academic achievement as demonstrated (Lee, 2014). In the same vain, parent-child and parent-school involvement practices differentially influence student attitude and behaviors thus affecting their learning achievement (Ralphand & McNeal, 2014).
5. Conclusions

Educational organizations need to think about the future and by extension their relevance. There are numerous factors that determine successful performance of organizations. Every organization has its success performance factors at varied measures. An educational organization is deemed to be effective when it achieves the expected output which is students’ achievement. This can only be understood by clearly identifying critical predictors of success. There is a number of factors within the school organization that affects academic performance of the students. This includes leadership skills, school learning environment, parental involvement, and student factors. Whereas many previous studies have mainly focused on school factors in isolation, this study treated them as a package by demonstrating how they together impact student academic performance. It also shows how the principal leadership skills take a center stage in enhancing learning by ensuring all the other organization factors are given due attention. This study clearly shows that these factors have a significant amount of influence on students’ academic achievement. Since the regression model was found to be a good fit for the data, it implies that the factors could be used to predict students’ academic performance.

It is vital for the students to be dedicated and sincere towards their studies. The learning environment should be peaceful and amiable and teachers should be facilitative in the entire process of learning. The ultimate aim of academic success can be attained within the school organization if principals are able to utilize appropriate leadership skills in pulling different strands together. It is therefore recommended that school authorities should continuously evaluate their leadership skill, ensure that there is a supportive learning environment for the students, assess the nature and capabilities of learners, and keep parents engaged. In addition education authorities both at national and local levels should enhance field inspections that are more focused in all the four organizational factors for better learning. This would improve an understanding of these important factors that if well managed and nurtured can be used to predict the future performance of students.

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