

Parental Correlates Of Academic Achievement Among Primary School Pupils In Nairobi City County, Kenya

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Abstract: Primary school pupils in Kasarani Sub County have consistently recorded low scores in Kenya Certificate of Primary Education from 2015 to 2019. This low performance may be attributed to parental characteristics and other factors. This study was done to establish whether parental correlates namely support, communication and supervision of homework influence the academic achievement of the learners in the sub county. The study had three objectives which aimed at establishing the extent and direction of relationship between each correlate and academic achievement. The study was based on Bronfenbrenner's ecological systems theory. Correlational research design was applied. The study involved 313 pupils who were randomly drawn from ten public primary schools. Data collection was done using scales developed by Naseema and Gafoor (2001), Epstein and Salina (1993) and a researcher prepared form for capturing academic achievement scores. Data analysis was done using Pearson's product moment correlation. It was found that parental support and academic achievement had a positive relationship, parental communication and academic achievement were also positively related. It was also established that there was a positive correlation between parental supervision of homework a pupil's academic achievement. Increasing parental involvement through support, communication and supervision of homework was recommended.

Keywords: Parental support, parental supervision of homework, parental communication, academic achievement.

I. INTRODUCTION

Academic achievement at any level of education is a good indicator which may be used to evaluate whether one has achieved the set goals (Steinmayr, 2018). Some scholars view academic achievement as a key pointer assessing performance as well as educational attainment of the learners (Juan et al., 2019). For learners to register high academic achievement, Vijaya (2016) observed that collaboration between the parents and the teachers should be established and maintained. This is supported by the argument that the collaboration between parents and teachers is useful as it helps both of them in guiding the learners towards developing a stable character which enhances academic achievement. (Ercan, 2016). Fajoju et al., (2015) noted that greater academic achievement was realized among the primary school children when parents were involved in the education of their children in activities such as discussing the pupils academic progress as well as

monitoring the school attendance of their children. Lar and saracosti (2019) underscore the importance of parental involvement as a positive correlate on children's academic achievement as well as a tool for promoting socioemotional development of the child. Various studies have produced empirical evidence which links parental involvement in education to positive outcomes of the learners in academics (Perez Sanchez et al., 2013; Tarraga et al., 2017 & Garbaz et al., 2017).

In the Epstein's (1995) framework of parental involvement, parental support, communication and supervision of homework are identified as some of the factors which create a connection between the parents, teachers and the child, it is against this background that this study was done to establish how parental support, communication and supervision of homework relate to academic achievement of the primary school learners.

According to Kahrama and Yilmaz (2017), there are various ways in which parents support the schooling process of their children. Notably, they offer resources such as school fees, uniform and stationery. They also commit their time towards monitoring the progress of the children. According to Epstein (2001), parents who are involved and get concerned about the education of their children impact positively on the children's aspirations as well as their academic achievement.

Parental support begins at home with the parent offering the child the best conditions and a safe environment for growth and development. The support that the child needs for healthy growth is both in material needs as well as emotional needs. Kartika et al (2019) established that the support that a parent gives a child in terms of material things, warmth and affection is a source of motivation to the child and has a positive effect on academic achievement. According to Kartika et al., there is need for more research on the link between parental support and academic achievement. Kimaro and Machumu (2015) assert that the involvement of parents in the schooling process of their children translates to improved academic performance of the children.

Parental communication may be defined as the exchange of academic related information between the learner and the parent aimed at promoting the performance of the learner (Ntekane, 2018). In the context of this study, parental communication is inferred as the exchange of information relating to the academic progress of the child. This information is shared between the teachers' child and the parent. Kimaro and Machumu (2015) posit that the communication between the parents and teachers may take various forms such as parent teacher conferences, regular follow ups and making phone calls. This view is supported by Kaptich et al., (2019) who argue that in addition to the above modes of communication, parents may communicate with the teachers by writing notes or holding face to face dialogue. These researchers established that academic achievement of primary school pupils is predictable from parental communication.

It is through the communication between parents and teachers that the children's history is shared with the school thus giving teachers a good opportunity to address any deficiencies and imbalances which the child may have thus leading to have positive improvement in the child's performance in academics (Casey et al., 2018; Ravitch, 2018). According to Caro (2011), irrespective of whether the parent is educated or not, children whose parents communicate with their teachers post better academic outcomes compared to their counterparts.

Supervision of homework is a role of the parent to ensure that children completes the academic tasks which they are given by their teachers to do while at home (Fernandez et al., 2017). Kapur (2018) argues that home is the first environment that a child encounters before enrolling at school. Such environment should be enriched with resources and a conducive environment that promotes learning. Supervision and completion of homework have been associated with improved mastery of the concepts learned at school as well as improved performance of the learners in academics (Gan & Sude, 2019). According to Kolodnicki (2018), significant improvement in learning outcomes can be realized if schools

increased the rate of engaging parents in supervising some educational processes.

Parental involvement in education has become a global issue with studies done in various parts of the world such as Ireland, India, China and USA pointing that parents are key role players in their children's education (Hayes et al., 2017; Jaiswal, 2017, Daun et al., 2018; O'Toole, 2019 & Godwin, 2016). The findings of the above studies were that significant differences in academic performance were evident when comparing learners whose parents were active in the education and those parents who were less involved in their children's education. Similar studies conducted in African countries such as Nigeria, Uganda and Tanzania established that parents involvement in academics influences how their children perform to a great extent (Fajoju & OJugo, 2016; Mahuro & Hungi, 2016, Mauka, 2015). The findings of these studies have been corroborated by similar findings from studies done in Kenya (Ndiku et al., 2015; Kaptich et al., 2019). Given that parental involvement has been established to be a positive correlate of academic achievement, this study was done to explore how correlates of parental involvement namely parental support, communication and supervision of homework relates to pupils academic achievement in Nairobi county, Kenya.

STATEMENT OF THE PROBLEM

From 2015 to 2019, kasarani Sub County recorded KCPE mean score which was consistently lower than the county mean score. In addition, the mean score was below 250 marks out of possible 500 marks which may be regarded as average performance. The statistics on performance are presented in Table 1.

| YEAR | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------|--------|--------|--------|--------|--------|
| County mean | 247.08 | 248.25 | 248.32 | 248.46 | 249.11 |
| Kasarani Sub-County Mean | 217.97 | 221.20 | 219.35 | 201.24 | 228.15 |

Source- County Director of Education, Nairobi County (2020)
Table 1: KCPE mean scores for Kasarani Sub-County from 2015 to 2019

From the analysis of the examination results, it was observed that the mean score ranged between 201.24 and 228.15 in the entire period. This trend of performance was interpreted as low performance and there was a need for a study that looks at how various variables relate to academic achievement of pupils in this area. Therefore, this study aimed at establishing how parental aspects namely support, communication and supervision of homework relate to learners academic achievement in Kasarani Sub County.

OBJECTIVES

- ✓ This study was guided by the following objectives
- ✓ To determine whether there is a significant relationship between parental support and pupils academic achievement
- ✓ To establish the extent of relationship between parental communication and pupils academic achievement.

- ✓ To find out whether a significant relationship exists between parental supervision of homework and pupils academic achievement.

ALTERNATIVE HYPOTHESES

The following alternative hypotheses were advanced based on the objectives of the study.

Ha₁: There is a significant relationship between parental support and pupil's academic achievement

Ha₂: Parental communication significantly relates to pupil's academic achievement

Ha₃: There is a significant relationship between parental supervision of homework and pupils academic achievement.

THEORETICAL FRAMEWORK

The theoretical basis of this study was Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979). This theory focusses at various environmental factors which affect growth of the child. The theory identifies social, political, biological and economic conditions as some of the factors which affect growth and development of the child.

According to this theory, the ecological system is composed of many nested structures which consist of different institutions. The child is believed to be at the Centre of the ecological system. Bronfenbrenner (1989) labelled the nested structures as microsystem, mesosystem, ecosystem, macrosystem and chronosystem. Microsystem refers to those factors within the child's immediate surrounding and directly affect the child. These factors include home, school, religious institutions, peers, parents and teachers. According to Bronfenbrenner and Morris (2006), interactions in the microsystem are key to enhancing child's growth and learning. This proposition may lead to conclusion that interactions between parents and teachers can promote the academic performance of the children.

Mesosystem connect microsystem and ecosystem. The mesosystem is created by interactions of microsystems. The interaction within the microsystem are related and have an effect in the performance of the learner. An ecosystem settings in which a child is not an active participant but whatever happens in this system affects the child. The extended family and child's neighborhood are examples of components of the ecosystem. The impact of these components may prevent a parent from performing the duties of parental involvement in education as expected thus affecting child's academic performance.

Macrosystem consist of a set of societal values and culture. The culture of the people and the values that a society upholds not only affect development of the child but also academic achievement at the school. Finally, chronosystem is the structure which entails the life changes that family may undergo due to death, divorce, severe illness or even loss of job. All these issues affect developing children and have effect on how such children perform in academics.

This theory was deemed appropriate for linking the variables of this study because it explains the interactions of different aspects and their impact on learners academic

performance. All the variables of the study are well connected through the interrelations presented in this theory.

II. REVIEW OF RELATED LITERATURE

The literature reviewed in this section looks at how parental involvement components namely support, communication and supervision of homework relate to academic achievement

In a study conducted at Indiana campus in USA, the relationship between parental support and academic achievement was explored among college students (Defauw et al., 2018). This study used qualitative phenomenological research design and involved 12 participants. Data was collected using interviews and it was established that there was a positive correlation between parental support and college student's academic achievement.

Lara and saracostti (2019) studied whether there were significant differences in performance based on levels of parental support. In this study, 498 parents whose children were in second and third grades in 16 public elementary schools were involved. The levels of parental support were high, medium and low. The results of this study were that there were significant differences in performance of children based on the parents level of support with a bias towards highly involved parents.

In a study conducted in Bhutan, southern Asia, Gurung et al., (2020) explored the link between parental support and middle secondary school students academic outcomes. Concurrent convergent design was employed and data collection was using questionnaires and interviews. In this study, 220 students, five teachers and ten parents participated. The study reported a significant positive correlation between parental support and learner's academic achievement.

Sekiwu and Kaggwa (2019) related parents support towards education with academic attainment among secondary school students in Tororo district in Uganda. A random sample of 360 students was drawn eight schools. A comparative research design was used and data collection was done using questionnaires. It was found that most parents offered support towards their children and this positively impacted on the academic achievement. This study recommended that parental support in education should be increased in order to realize improved academic achievement.

Molden (2016) conducted a study in Pennsylvania in order to establish how parents and teachers perceive communication among them. Participants were drawn from eight schools located in the sub urban area. The sample consisted of 80 teachers and 1496 families. The study established that communication is a positive correlate of academic achievement.

A study conducted at Chicago related communication and academic achievement (Smokoska, 2020). This study involved 41 students and their parents. Data was collected using self-developed tools. Data analysis revealed existence of a positive relationship between communication and academic achievement.

In another study done at Ainabkoi Sub County in Kenya, Kaptich et al., (2019) sampled 331 class eight pupils and 61

teachers. This study aimed at exploring the relationship between communication and academic achievement. Ex post facto research design was used and data collection was done using questionnaires and interviews. This study established that there was a significant positive correlation between parent-teacher communication and pupil's academic achievement.

Wulandany and Herlisa (2017) studied how Indonesian parents get involved in schooling process of their children. Case study design was used and targeted learners were in grade eight and nine. This study focused on how parents communicate with the school about the progress of their children. Data analysis revealed that parental communication positively influenced learner's performance in academics.

In order to relate supervision of homework with academic performance a study was conducted in New Jersey in USA (Espinosa, 2018). This study looked at the role of parents in supervising their children while doing Mathematics homework. The study established that parents supervised their children while doing assignments at home and this resulted to improved performance of the children in academics. This study gave empirical evidence that supervision of homework is a positive correlate of academic achievement.

In a comparative study that drew participants from diverse natives, Yamamoto (2016) sampled learners from mothers who were of either Japanese or American origin. This study employed longitudinal approach and data was collected using surveys. The study found a positive correlation between supervision of homework and academic achievement.

Mwenda (2017) did a study in Kenya aimed at determining whether the role of supervising homework done by the parents impacts on academic achievement of the lower primary school pupils. This study involved standard two pupils, their parents and their teachers. sData was collected using interviews and questionnaires. The findings of this study were that supervision of homework related positively to the pupils' academic achievement.

The literature reviewed in this section has looked at the links between parental support, communication, supervision of homework and academic achievement. From the review, a positive relationship has been reported between the variables focused at in each study. Therefore, it can be concluded that parental support, communication and supervision of homework should be encouraged in order to promote the academic achievement of the learners.

III. METHODOLOGY

A correlational research design was used in this study. The choice of the design was informed by the intention of the researcher to measure the extent and direction of the relationship among the variables of the study without studying the causal relationships among the variables.

PARTICIPANTS

This study involved 313 standard seven pupils drawn from ten public primary schools which were purposively sampled from 25 public primary schools in Kasarani sub

county. The sample consisted of 151 boys and 162 girls. The mean age of the participants was 13.69 years. Boys had a mean age of 13.85 years whereas girls had a mean age of 13.54 years. This number of participants was determined using Krejcie and Morgan (1970) table for determining sample size for finite population.

RESEARCH INSTRUMENTS

Data collection was done using a questionnaire and a form for capturing learners' academic achievement scores. The questionnaire was composed of the background information concerning the learner and three scales for measuring the three parental aspects under study. Two subscales of parental involvement rating scale developed by Naseema and Gafoor (2001) were used to measure parental support and parental communication. These sub scales were parental provision of physical facilities which measured parental support and parental encouragement which measured the level of parent-teacher communication. Parental supervision of homework was measured using Epstein and Salina (1993) scale.

DATA COLLECTION

Authorization to collect data was sought from the Graduate school of Kenyatta University and National council for science, technology and innovation. A permit was also sought from Nairobi City Education Director and the Sub County Director of Education in Kasarani Sub County.

Piloting was done using 35 pupils drawn from one primary school which was excluded in the actual study. The data collected during the pilot study helped in computation of Cronbach alpha to determine whether the adapted scales were reliable. According to the findings of the pilot study, the scale yielded values as indicated in the Table 2.

| Scale | No. of items | Cronbach alpha(authors) | Cronbach alpha(pilot study) |
|------------------------|--------------|-------------------------|-----------------------------|
| Parental support | 15 | .91 | .86 |
| Parental communication | 17 | .91 | .75 |
| Parental supervision | 10 | .91 | .78 |

Table 2: Cronbach alpha for the scales

According to Fraenkel and Wallen (2011), alpha values above .70, indicate that a scale is reliable. Therefore, the three scales were deemed reliable for use in this study.

A specific date for data collection was arranged by the researcher and the school authorities. Questionnaires were administered under the supervision of the researcher, research assistants and class teachers. After the questionnaire filling exercise, the participants were thanked for volunteering to participate in the research exercise.

In order to obtain data on academic achievement, the researcher liaised with the class teachers and was given access to academic performance records for midterm and end of term two 2020 examinations. This information was copied in the form for capturing academic achievement scores and the average was obtained in order to obtain each learners academic achievement score.

DATA ANALYSIS

Since internal examinations done in different schools have different, academic achievement scores were standardized into T scores to enable comparison of performance. All the collected data was coded and keyed into the SPSS (Version 21) software for analysis. Pearson product moment correlation was used to establish the extent and direction of relationship between each parental factor and academic achievement.

IV. RESULTS

This section presents the findings of this study per the set objectives.

The first objective sought to establish the relationship between parental support and academic achievement. Parental support was categorized into two levels namely adequate support and inadequate support. Table 3 presents the distribution of the participants in the two levels.

| | Frequency | Percent |
|------------|-----------|---------|
| Inadequate | 121 | 42.8 |
| Adequate | 162 | 57.2 |
| Total | 283 | 100.0 |

Table 3: Distribution of participants per levels of parental support

The statistics presented in Table 3 indicate that majority of the participants had adequate parental support (57.2%). This is in line with Yulianti and Drop (2018) report that urban parents tend to support their children in education because of their higher literacy level and being more informed compared to the rural parents. The learners academic achievement scores were also examined and the descriptive statistics of the raw scores are presented in Table 4

| | N | Range | Minimum | Maximum | Mean | SD | Skewness | Kurtosis |
|------------------------------------|-----|--------|---------|---------|--------|-------|----------|----------|
| Raw scores of academic achievement | 283 | 392.55 | 105.45 | 498 | 239.61 | 63.19 | .29 | .62 |

Table 4: Descriptive Statistics of Academic Achievement Raw Scores

The scores presented had positive skewness which meant that most learners scores were low. The raw scores were standardized into T scores and the outcome of the standardization was as presented in Table 5.

| | N | Range | Minimum | Maximum | Mean | SD | Skewness | Kurtosis |
|----------------------|-----|-------|---------|---------|-------|-------|----------|----------|
| Academic Achievement | 283 | 62.12 | 24.02 | 86.14 | 49.94 | 10.06 | .319 | .579 |

Table 5: Descriptive Statistics of Standardized Scores of Academic Achievement

In order to establish the extent and directions of relationship between parental support and academic achievement, the scores of the two variables were correlated using Pearson product moment correlation and the results are shown in Table 6

| | | Academic Achievement |
|----------------------|---------------------|----------------------|
| Academic Achievement | Pearson Correlation | 1 |
| | Sig. (2-tailed) | |
| | N | 283 |
| Parental Support | Pearson Correlation | .40** |
| | Sig. (2-tailed) | .00 |
| | N | 283 |

** Correlation is significant at the 0.01 level (2-tailed).

Table 6: Correlation between Parental Support and Academic Achievement

It had been hypothesized that there was no significant relationship between parental support and academic achievement. According to the results presented in Table 6, the correlation between parental support and academic achievement was positive and significant $r(283) = .04, p > .01$. Therefore, the null hypothesis was rejected. As per the findings, increased parental support would translate to improved academic achievement of the learners.

The study's second objective sought to establish the relationship between parental communication and academic achievement. Parental communication was categorized into adequate and inadequate communication. The participants in each level are shown in Table 7

| | Frequency | Percent |
|------------|-----------|---------|
| Inadequate | 137 | 48.4 |
| Adequate | 146 | 51.6 |
| Total | 283 | 100 |

Table 7: Levels of Parental Communication

The data presented in Table 7 indicate that majority of the respondents (51.6%) had adequate level of parental communication.

In order to correlate parental communication and academic achievement, hypothesis was advanced that "there is no significant relationship between parental communication and academic achievement." Pearson product moment correlation was used to test the hypothesis. The correlation results are presented in Table 8.

| | | Academic Achievement |
|------------------------|---------------------|----------------------|
| Parental Communication | Pearson Correlation | .55** |
| | Sig. (2-tailed) | .00 |
| | N | 283 |

** Correlation is significant at the 0.01 level (2-tailed).

Table 8: Correlation between Parental Communication and Academic Achievement

Since the correlation between the two variables was positive and statistically significant, the null hypothesis was rejected. It was held that parental communication is a positive correlate of academic achievement.

The third objective aimed at establishing the relationship between parental supervision of homework and pupils academic achievement. It was hypothesized that there is no significant relationship between parental supervision of homework and pupils academic achievement. Supervision of homework was put in three levels namely low, moderate and

high level of supervision of homework. The data in Table 9 shows the distribution of scores per each level.

| | Frequency | Percent |
|----------|-----------|---------|
| Low | 37 | 13.1 |
| Moderate | 157 | 55.5 |
| High | 89 | 31.4 |
| Total | 283 | 100.0 |

Table 9: Levels of Parental Supervision of Homework

As per the statistics in Table 9, majority of the respondents (55.5%) had moderate level of parental supervision of homework. To test the advanced hypothesis, Pearson product moment correlation was used and the results are as presented in Table 10.

| | | Parental Supervision |
|----------------------|---------------------|----------------------|
| | Pearson Correlation | .36** |
| Academic Achievement | Sig. (2-tailed) | .00 |
| | N | 283 |

** Correlation is significant at the 0.01 level (2-tailed).

Table 10: Correlation between Parental Supervision and Academic Achievement

The correlation results presented in Table 10 were positive and significant. Therefore the null hypothesis was rejected. A proposition was held that increased supervision of homework would lead to improved academic performance.

V. DISCUSSION OF THE FINDINGS

The findings on the relationship between parental support and academic achievement were that the two variables have a positive and significant correlation. These findings were in line with the findings of a study that related parental involvement with adolescents academic outcomes in USA (Day & Dotterer, 2018). These findings are also consistent with the findings of a study by Anierobi and Ezzennaka (2019) who reported existence of a positive relation between parental support and secondary school students in Nigeria.

The findings of this study also corroborate findings of the earlier studies conducted in Nairobi and Bungoma areas in Kenya. (Kisiang'ani, 2018; Nyakundi et al., 2020). These studies reported that parental support positively influenced the learner's performance in academics. The current study adds more empirical evidence on the relationship among the variables using a Kenyan sample.

This study found a significant positive correlation between parental communication and academic achievement. These findings are similar to the findings by Wang et al., (2021) who conducted a similar study among Chinese learners. The findings are also consistent to the findings of a study that related parental communication and academic achievement among middle school students in South Africa (Goldschmidt et al., 2021). In that study, high academic achievement scores were noted in learners who reported to have constant communication with the parents.

The current study also had similar findings to a previous study conducted by Ngunya (2020) among learners at Eldoret in Kenya. Consistency of the findings of the current study with the findings of the previous studies suggest that parental

communication is a positive correlate of academic achievement.

The findings of this study on the relationship between parental supervision of homework and academic achievement were that the two variables have a positive correlation. These findings were consistent to the findings by Silinskas and Kikas (2019) who reported a significant positive correlation was found to exist between parental supervision of homework and academic outcomes in Mathematics. Given that the previous study looked at performance in one subject, the current study looked at overall academic achievement in order to produce more generalizable results.

The findings of this study also support the findings of a similar study done at Nigeria whereby Azuji et al., (2020) established a significant positive relationship between parental supervision of homework and academic achievement. The study's findings also corroborated findings of a study done among preschoolers and their parents (Yamamoto, 2016) which established that increased supervision of homework by the parents resulted to notable improvement in the preschoolers academic achievement.

VI. CONCLUSIONS

This study has established that parental support is a positive correlate of academic achievement. Therefore, parental support should be encouraged in order to improve the learners' academic achievement.

The study has found that communication between parents and teachers impacts positively on learners' academic achievement. Therefore, when many channels of communication are open and active between both parties, there are high chances of registering improved academic achievement of the learners.

Finally, it has been established that there is a positive relationship between supervision of homework and academic achievement. This calls for more supervision in order to register a positive deviation in academic achievement.

VII. RECOMMENDATIONS

It is recommended that schools should explore various channels of communicating with the parents and ensure that such channels remain active in order to ensure that there is consistent communication about the progress of the learner.

Since supervision of homework has been found to be a positive correlate of academic achievement, teachers should task themselves to giving learners take home assignments which would increase the engagement of the parents in supervising children's homework.

The study has established that the different aspects of parental involvement studied have a positive impact on learners' academic achievement. Therefore, it is recommended that schools should create awareness among parents on the need for involvement in their children's education.

Finally, the researcher recommends that a similar study can be done in a rural area in order to yield data which may be utilized for comparison purposes.

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