Impact of Discipline on Academic Performance of Pupils in Public Primary Schools in Muhoroni Sub-County, Kenya

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Abstract
In Muhoroni Sub-County, Kenya, pupils’ academic performance has received little attention in relation to discipline. The objectives of this study were to determine the level of discipline and extent of impact of discipline on academic performance among class eight pupils in the sub-county’s public primary schools. The study adopted descriptive survey and correlational research designs. The study population comprised 2,450 class eight pupils in the sub-county’s public primary schools. From 34 randomly selected schools, 817 pupils were selected by stratified random sampling. Questionnaires were used to collect data on discipline and academic performance of the pupils. Reliability coefficients of the questionnaires were determined by test-retest method and found to be 0.83 and 0.97 for questionnaire on discipline and academic performance respectively. The questionnaires’ face and content validity was ascertained by experts. Results indicated that 46 (5.6%), 214 (26.2%), 413 (50.6%) and 144 (17.6%) of the pupils had low, moderate, high, and very high discipline respectively. Also, discipline related positively with, and accounted for 23% of variance in the pupils’ academic performance ($R = .480$, $\beta = .480$, $R^2 = .230$, $p < .05$). The study recommended enhancement of discipline among the pupils for improvement of their academic performance.

Keywords: Academic Performance, Discipline, Impact, Pupils, Primary Schools.

1. Introduction
1.1 Backgrounds to the Study
Researchers appreciate that discipline is an important component of human behavior and assert that without it an organization cannot function well towards the achievement of its goals (Ouma, Simatwa, & Serem, 2013). In the context of a school system, a disciplined student is that student whose behaviours, actions and inactions conform to the predetermined rules and regulations of the school (Ali, Dada, Isiaka, & Salmon, 2014). However, discipline ideally means more than adhering to rules and regulations and entails the learner’s ability to discern what is right or wrong (Gitome, Katola, & Nyabwari, 2013). Discipline is widely acknowledged to be essential for creating a positive school climate conducive to sound academic performance (Masitsa, 2008). It is a basic requirement for successful teaching and learning in schools and a subject of concern for teachers (Eshetu, 2014). According to Gitome et al., where there is good discipline, there is improved academic performance. In other words, discipline is vital for students’ academic performance (Njorge & Nyabuto, 2014). Furthermore, it is necessary for effective school management and accomplishment of its goals (Nakpodi, 2010). Lack of discipline is called indiscipline. Therefore, indiscipline can be seen as any action considered to be wrong and not generally accepted as proper in a set up or society (Omote, Thinguri, & Moenga, 2015). Among students, according to Ali et al., it is any form of misbehaviour which a student can display in several ways (e.g., disobedience, destruction of school property, poor attitude to learning, immoral behaviour, drug abuse, stealing, lateness, truancy, dirtiness, being quarrelsome, use of abusive or foul languages, rudeness, gangsterism or cultism).

The literature reveals that student indiscipline is experienced in schools globally (Ali et al., 2014; Moyo, Khewu, & Bayaga, 2014; Omote et al., 2015; Rahimi & Karkami, 2015; Yahaya et al., 2009). A study in West Virginia in the United States of America (USA) revealed that about 29.6% of 160,480 students (from grade 3 to 11) had one or more referrals for inappropriate behaviors (Whisman & Hammer, 2014). In Africa, researchers have pointed out the seriousness of indiscipline in schools in various countries. The countries include Ghana (Gyan, Baah-Korang, McCarthey, & McCarthy, 2015), South Africa (Marais & Meier, 2010; Masitsa, 2008), Botswana (Garegae, 2008), Nigeria (Okieemute, 2011; Nakpodia, 2010; Umezinwa & Elendu, 2012), and Tanzania (Yaghambe & Tshabangu, 2013). Umezinwa and Elendu for instance, observed that indiscipline among learners in Nigeria was high and experienced at all levels including primary schools. In Kenya, lack of discipline in schools has been one of the challenges facing schools (Njorge & Nyabuto, 2014). The Kenya National Examinations Council (KNEC) revealed that between 90% and 100% of teachers in primary schools in Kenya encountered disciplinary problems among their pupils (KNEC, 2010). In a study by Gakure, Mukuria, and Kihae (2013) in primary schools in Gatanga District, Kenya, 70% of selected 56 teachers indicated that their schools had cases of pupil indiscipline. Research shows that various discipline problems exist among primary
school pupils in Kenya. They include truancy, theft, sneaking, cheating, lateness, noise making, absenteeism, fighting, defiance, bullying, drug abuse, failure to complete assignments, sexual harassment, use of abusive language, drug trafficking and possession of pornography (Ouma et al., 2013).

The vital role of discipline in students’ academic performance is revealed or implied by a number of previous studies carried out in Kenya (Dawo & Simatwa, 2010; Gitome et al., 2013; Sureiman, 2010; Tikoko & Botet, 2011) and in other African countries (Ehiane, 2014; Keating & Rossouw, 2009). This is supported and corroborated by a number of studies in European, Asian and American countries (Bodovski, Nahum-Shani, & Walsh, 2013; Duckworth & Seligman, 2006; Ning, Van-Damment, Yang, & Gielen, 2013; Pasternak, 2013; Whisman & Hammer, 2014; Zhao & Kuo, 2015). A few studies however suggest that discipline has minimal, uncertain or non-significant influence on students’ academic performance or achievement (Gakure et al., 2013; Zimmerman & Kitsantas, 2014). Therefore, findings on impact of discipline on students’ academic performance are inconsistent and somehow inconclusive. Furthermore, only a few of the stated previous studies (i.e., Duckworth & Seligman, 2006; Pasternak, 2013; Zhao & Kuo, 2015) were correlational in design. Nevertheless, in their measure of student discipline, the few correlational studies focused on self-discipline and excluded social skills such as obedience, politeness, and social competence (i.e., ability to get along with other people). In addition, in Muhoroni Sub-County, Kenya, pupils’ academic performance has received little research attention in relation to discipline. The inconsistency of findings and the identified gaps suggested the need for more research on pupils’ academic performance in relation to discipline. To address the identified gaps, the current study focused on Muhoroni Sub-County and adopted a correlational design in examining the impact of discipline on pupils’ academic performance. It also adopted a wider perspective of discipline by considering discipline generally as a personal attribute characterized by obedience, politeness, social competence (i.e., ability to get along with other people), orderliness, and academic efficiency (i.e., competence in undertaking academic tasks and obligations).

1.2 Objectives of the Study
i. To determine the level of discipline of class eight pupils in public primary schools in Muhoroni Sub-County, Kenya.
ii. To determine the extent of impact of discipline on academic performance of class eight pupils in public primary schools in Muhoroni Sub-County, Kenya.

2. Methodology
2.1 Research Design
Descriptive survey design and correlational design were used in the study. A descriptive survey attempts to describe or document current conditions or attitudes (Wimmer & Dominick, 2013) while correlational designs allow researchers to describe the relationship between two measured variables (Jackson, 2014).

2.2 Area of the Study
The study was carried out in Muhoroni Sub-County, Kenya. The sub-county lies approximately within longitudes 34° 52' E and 35° 19' E, and latitudes 0° and 26° S. According to Muhoroni Sub-County Education Office (2013), the sub-county has 130 primary schools (100 public and 30 private) with a total of 39,391 pupils and 1,041 teachers.

2.3 Population of the Study
Target population refers to the group of people to whom the results of a research should apply (Whitley & Kite, 2012). In this study, the population comprised 2,450 class eight pupils (1,233 boys and 1,217 girls) in public primary schools in Muhoroni Sub-County, Kenya.

2.4 Sample Size and Sampling Techniques
In this study, a sample of 817 class eight pupils was used. This comprised a third or 33% of the pupils’ population. Researchers have used or appreciated the use of a third (33%) of a population as an appropriate sample size (e.g., Jugero, 2011; Manoah, Indoshi, & Othuon, 2011; Owaa, Aloka, & Raburu, 2015). Out of the 100 public primary schools in Muhoroni Sub-County, 34 schools were selected by simple random sampling. Simple random sampling is the most basic form of probability sampling in which elements are drawn from the population at random and all elements have the same chance of selection (Reis & Judd, 2014). From the selected schools, 817 pupils were selected by proportionate stratified random sampling with stratification based on gender (i.e., boys and girls). In stratified sampling, the population is divided into relatively homogenous
subsets called strata and then random samples are taken from each stratum (Albright, Winston, & Zappe, 2010). Proportionate stratified random sampling occurs when the percentage of the sample taken from each stratum is proportionate to the percentage that each stratum is within the population (Black, 2012). Stratified random sampling allows the researcher to take into account the population’s different subgroups and guarantees that the sample accurately represents the population on specific characteristics (Jackson, 2014).

2.5 Instrumentation

2.5.1 Data Collection Instruments

Questionnaires in form of rating scales were used to collect data on discipline and academic performance of the selected pupils. A rating scale is a measuring instrument requiring the rater to assign the person being rated directly to some point along a continuum, or in one of an ordered set of categories (Krishnaswamy, Sivakumar, & Mathirajan, 2009).

The rating scale for pupil discipline had 10 items on discipline. The items were; obedience, politeness, harmony with other pupils, bodily cleanliness (hygiene), neatness in dressing, seriousness with academic assignments, carefulness in handling of exercise/note books, neatness in writing, maintaining silence in class (avoiding noise making), and harmony with teachers. The items are in line with research findings that discipline problems among primary school pupils in Kenya include noise making, fighting, defiance, bullying, failure to complete assignments and use of abusive language (Ouma et al., 2013). In addition, the items reflect assertion by Ali et al. (2014) that indiscipline can be displayed by a student in several ways (e.g., general disobedience, poor attitude to learning, immoral behaviour, stealing, dirtiness, being quarrelsome, and rudeness).

Rating scales may involve use of descriptions such as always, often, occasionally, rarely or never (Kothari, 2011). In this study, the pupils were rated on discipline by their class teachers based on the frequency of each of the 10 items as follows: always (4), usually (3), sometimes (2), rarely (1), or never (0). The ratings by the class-teachers were then scored by the researcher (i.e., never = 0 score, rarely = 1 score, sometimes = 2 scores, usually = 3 scores, always = 4 scores). For each pupil, scores on the ten items were summed up and converted to percentage to obtain the pupil’s score on discipline. Possible total scores on discipline for each pupil ranged from 0 to 40 before conversion to percentage and from 0 to 100 after conversion. Higher scores implied higher discipline.

Several methods (e.g., standardized achievement test scores, teacher ratings of academic performance, and report card grades) are used to measure children’s academic performance (Topor, Keane, Shelton, & Calkins, 2010). In this study, pupils’ academic performance was based on teacher ratings of pupils on academic performance. Using the class-teachers’ questionnaire on pupils’ academic performance, each of the 817 selected pupils was rated on academic performance by their class-teacher based on performance in school examinations. In the questionnaire, the class teachers indicated the range within which the pupils’ overall score in the school examinations often falls (i.e., 0 -199, 200 - 219, 220 - 249, 250 - 279, 280 - 299, 300 - 319, 320 - 349, or 350 - 500 marks). Pupils’ academic performance is usually relatively stable within a given range of scores hence the decision to consider the pupils’ performance within a range of scores. The considered examinations included five papers with a total score of 500 marks. Consequently, academic performance was rated in continuum of 0 to 500 marks. To obtain pupils’ scores on academic performance, the class-teachers’ ratings were scored by the researcher (from a score of 1 for lowest rating of 0-199 marks to a score of 8 for the highest rating of 350 – 500 marks). The scores were then converted into percentages. Higher scores implied higher academic performance.

2.5.2 Reliability of Instruments

Reliability refers to the consistency or stability of a measuring instrument (Jackson, 2011). In this study, test-retest method was used to determine reliability of the questionnaires based on a pilot study carried out among 245 pupils (10% of pupils’ population). Test-retest reliability of a test is measured by correlating the scores from a set of subjects who take the test on two occasions (Kline, 2013). Reliability coefficients were found to be 0.83 and 0.97 for questionnaire on pupil discipline and academic performance respectively. Test and retest were conducted two weeks apart because approximately two weeks is a common interval between the tests (Rubin & Babbie, 2016).
2.5.3 Validity of Instruments
According to Fawcett (2013), a test is considered valid when it succeeds in measuring what it purports to measure. In this study questionnaires’ face and content validity was ascertained by experts from Department of Educational Psychology, Maseno University. An instrument has face validity when the items on it seem to measure the intended concept (Rubin & Bellamy, 2012). Content validity refers to the degree to which a measure seems to cover the entire range of meanings within a concept (Rubin & Babbie, 2016). Face validity is usually established by a panel of experts (Kraska-Miller, 2014) and likewise to content validity (Jackson, 2016).

2.6 Data Collection Procedures
Permission to collect data for the research was obtained from Maseno University, Kenya through the School of Graduate Studies. Thereafter, the Muhoroni Sub-County Education Office was informed of the proposed research and requested for clearance. The researcher then visited the selected schools for introduction. During the introductory visits, the researcher sought clearance for the research by the school authorities, made appointments for data collection, briefed the selected class teachers on the intended research and sought their cooperation, and obtained consent from parents of selected pupils through the head teachers. The researcher returned to the schools on the scheduled dates for data collection. The names of pupils who participated in the study were kept confidential.

2.7 Data Analysis
Data was analyzed using descriptive statistics in form of frequency counts and percentages, and inferential statistics in form of regression analysis. Statistical Package for the Social Sciences (SPSS) software was used in the analysis.

3. Results and Discussions
Objective 1 of the study was to determine the level of discipline of class 8 pupils in public primary schools in Muhoroni Sub-County. Table 1 shows a summary of the pupils’ scores on discipline. The table shows that in total, 46 (5.6%) of the selected pupils scored less than 50 out of the maximum possible score of 100, 214 (26.2%) scored between 50 and 69, 413 (50.6%) scored between 70 and 89 points, and 144 (17.6%) scored the highest scores of between 90 and 100. This implies that 5.6%, 26.2%, 50.6% and 17.6% of class eight pupils in public primary schools in the sub-county were of low, moderate, high, and very high discipline respectively. Therefore, discipline needed to be enhanced among the pupils.

Table 1
Pupils’ Scores on Discipline, Frequency Counts and Percentages

<table>
<thead>
<tr>
<th>Pupils’ scores on discipline</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>30 - 39</td>
<td>10</td>
<td>1.2</td>
</tr>
<tr>
<td>40 - 49</td>
<td>34</td>
<td>4.2</td>
</tr>
<tr>
<td>50 - 59</td>
<td>75</td>
<td>9.2</td>
</tr>
<tr>
<td>60 - 69</td>
<td>139</td>
<td>17.0</td>
</tr>
<tr>
<td>70 - 79</td>
<td>201</td>
<td>24.6</td>
</tr>
<tr>
<td>80 - 89</td>
<td>212</td>
<td>26.0</td>
</tr>
<tr>
<td>90 -100</td>
<td>144</td>
<td>17.6</td>
</tr>
<tr>
<td>Totals</td>
<td>817</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2 shows a summary of the pupils’ scores on academic performance. The table shows that the pupils’ scores on academic performance varied and ranged from 13 to 100. The table also reveals that a total of 308 (37.7%) of the pupils scored less than 50 out of the maximum score of 100 in academic performance. These findings imply that 37.7% of class eight pupils in public primary schools in Muhoroni Sub-County, Kenya were below-average in academic performance (i.e., scoring less half of total scores in school examinations). Therefore, Table 2 indicates that academic performance needed to be enhanced among the pupils.

Table 2
Objective 2 of the study was to determine the extent of impact of discipline on academic performance of Class 8 pupils in public primary schools in Muhoroni Sub-County. To achieve this, a regression analysis was carried out with pupil discipline (based on scores summarized in Table 1) as the independent variable and pupils’ academic performance (based on scores summarized in Table 2) as the dependent variable. The results are shown in Table 3.

Table 3
Extent of Impact of Discipline on Pupils’ Academic Performance

<table>
<thead>
<tr>
<th>Scores on academic performance</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>58</td>
<td>7.1</td>
</tr>
<tr>
<td>25</td>
<td>94</td>
<td>11.5</td>
</tr>
<tr>
<td>38</td>
<td>156</td>
<td>19.1</td>
</tr>
<tr>
<td>50</td>
<td>202</td>
<td>24.7</td>
</tr>
<tr>
<td>63</td>
<td>113</td>
<td>13.8</td>
</tr>
<tr>
<td>75</td>
<td>95</td>
<td>11.6</td>
</tr>
<tr>
<td>88</td>
<td>73</td>
<td>8.9</td>
</tr>
<tr>
<td>100</td>
<td>26</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>817</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 shows that $R (0.480)$, $R^2 (0.230)$ and standardized coefficient ($0.480^*$) are significant at $p < .05$. Table 3 also shows that the regression coefficients are positive. These results show that discipline relates positively with academic performance ($R = 0.480; p < .05$). This implies that an increase in discipline has a corresponding increase in academic performance among class eight pupils in public primary schools in Muhoroni Sub-County, Kenya. The results also imply that discipline account for 23% of variance in the performance ($R^2 = 0.230, p < .05$).

Findings in Table 3 support those of studies by Duckworth and Seligman (2006) among selected Grade 8 students in the USA and Zhao and Kuo (2015) among selected 10th grade students in China. The studies indicated that discipline plays an important role in students’ academic performance by showing that self-discipline relates positively with, and predicts students’ academic achievement. The findings are however contrary to that of Zimmerman and Kitsantas (2014) among selected high school students in the USA which indicated that self-discipline does not predict students’ academic achievement. Compared to the study by Duckworth and Seligman (2006) and the study by Zhao and Kuo (2015) which focused on self discipline, findings of this study (in Table 3) suggest that it is also important to focus on students’ general discipline for better academic performance. General discipline would be a personal attribute characterized by obedience, politeness, orderliness and social competence (i.e., ability to get along with other people). It would also include academic efficiency (i.e., competence in undertaking academic tasks and obligations). The findings in Table 3 concur with findings of Pasternak (2013) among selected fifth-grade students in Israel and the USA that discipline is positively related to students’ academic performance. However, the study by Pasternak confined the measure of discipline to learning oriented skills (i.e., perseverance, meeting schedules, goal setting and planning for goal achievement, and completion of unpleasant tasks). Therefore, compared to Pasternak’s study, findings of this study suggest that discipline measured by social skills (e.g., obedience, politeness and social competence) is also important for students’ academic performance. The findings in Table 3 also support findings of a study by Bodovski et al. (2013) among elementary school students in the USA. The study revealed the importance of discipline in students’ academic performance by associating higher improvement in math achievement by students with strong school disciplinary climate. Also supported by the findings in Table 3 are the findings of Ning et al. (2013). The study by Ning et al. also revealed the importance of discipline in students’ academic
performance. In the study, better classroom disciplinary climate was found to indicate better school reading performance in 53 of the 65 countries which participated in the 2009 Program for International Student Assessment (PISA). However, compared to findings by Ning et al. and those of Bodovski et al., findings of this study suggest that discipline is also important in students’ overall academic performance (i.e., combined performance in all school subjects taken by the student). The findings in Table 3 corroborate findings of several previous studies in Kenya (e.g., Dawo & Simatwa, 2010; Njoroge & Nyabuto, 2014; Sureiman, 2010; Tikoko & Bomett, 2011) which suggest that discipline is an important factor in students’ academic performance. However, the findings, to some extent, contradict findings by Gakure et al. (2013) which indicated that discipline has minimal and uncertain influence on pupils’ performance in examinations in Gatanga District, Kenya.

Indiscipline makes students to lose focus on educational goals which are achieved through hard-work, time management, respect for others and self determination (Gitome et al., 2013). This implies that disciplined pupils are more likely to be involved in disciplinary cases which may divert their attention from academic work. Therefore, the pupils are more likely to be psychologically settled and ready for academic work. This enhances their striving for academic success and eventually boosts their academic performance. Research shows that teachers reward and praise students for good behaviour (Rahimi & Karkami, 2015). This suggests that disciplined pupils may be more appreciated and accepted by teachers. They may also be more appreciated by their peers at school and by parents and other relatives at home. The appreciation and acceptance may make the pupils to develop positive self concept which may then enhance pupils’ achievement motivation. Studies show that students’ achievement motivation is positively related to their academic performance (Awan, Noureen, & Naz, 2011; Al-Qahtani, 2013; Emmanuel, Adom, Josephine, & Solomon, 2014; Rahimi & Karkami, 2015). Achievement motivation is the need to perform well or the striving for success, and evidenced by persistence and effort in difficulties (Singh, 2011). Therefore, the achievement motivation associated with discipline may enhance the pupils’ academic performance.

A correlation is strong, moderate, and weak when the coefficient is between ± .70 - 1.00, ± .30 - .69 and ± .00 - .29 respectively (Jackson, 2014). Therefore, the relationship found by this study between discipline and academic performance of class eight pupils in public primary schools in Muhoroni Sub-County, Kenya (shown in Table 3) can be interpreted as moderate. Although moderate, the relationship is important because it demonstrates that the pupils’ academic performance depends, to some extent, on their level of discipline.

4. Conclusions
Discipline has a moderate positive relationship with, and accounts for variance in academic performance of class eight pupils in public primary schools in Muhoroni Sub-County, Kenya. This implies that academic performance increases among the pupils with increase in level of discipline. The pupils vary in terms of academic performance with 37.7% being below average in academic performance (i.e., scoring less than half of possible total score in school examinations). The pupils also vary in terms of level of discipline, with 5.6% being of low discipline, 26.2% moderate discipline, 50.6% high discipline, and 17.6% very high discipline. There is need to enhance the pupils’ academic performance and level of discipline.

5. Recommendation
Based on the findings, the study recommended that discipline should be enhanced among class eight pupils in public primary schools in Muhoroni Sub-County, Kenya in order to improve on the pupils’ academic performance.

References


