Influence of Peer Group Discussions on Academic Performance in Kenyan Primary Schools in Kapsoya Zone, Eldoret Municipality

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Abstract

School and pupil factors have been widely documented as factors that significantly affect student's achievement in school. Peer influence has been categorized under either school or pupil factors that may affect academic performance of the learners. This study sought to investigate the relationship between peer group discussions and pupils' academic performance in primary schools in Kapsoya zone, Uasin Gishu County. This was a correlation study. This study adopted social development theory developed by Vygotsky. It was carried out with a sample size of 424 pupils from 20 primary schools. The pupils were selected using stratified random sampling. Data was collected using pupils and teachers questionnaires. Pupils' scores were extracted from zonal examinations records at each individual school. SPSS was used to aid in analysis. Mean and standard deviation were used as descriptive statistics for continuous variables such as academic performance. The study found out that there was no significant relationship between group discussion and academic performance. However, there was weak and positive relationship between peer influence and academic performance. In nutshell, it can be concluded that the peer influence did have weak relationship with the academic performance. It is recommended that school managements should ensure there are regulations that govern the peer group organizations within the school environment. The findings of this study will be instrumental in informing schools management's decisions on academic performance of the pupils.

Key words: academic performance, peer influence, group discussion, primary schools.

1. Introduction

Academic performance is globally recognized as a tool to measure learning by educational institutions. Academic performance of the students may be affected by several factors. Literature has widely identified and categorized the factors into teacher, pupil, school and home factors (Kevin, 2012). In primary schools, pupils are taken through a formal process by which society deliberately transmit its accumulated knowledge, skills, customs and values which have been going on from one generation to the other (Howes, Felner & Primavera,1994).

A longitudinal study carried out in Florida State found out that peer effects was significantly associated with classroom performance depicting the importance of identifying strong and stable peer groups in the class. In his article on peer effects on academic performance among public elementary schools in Boston public schools, Kevin (2012) asserts that there is sufficient evidence that peer influence affect child academic performance. He argued that a low performing student improves significantly when he/she interact with peer of high performance. Still in Louisiana State, a study carried out to find out the association between the peer relationship and academic performance showed that children who had positive peer relationship performed better academically (Zitzmann, 2000).

In many African countries, some of previous studies conducted have revealed a wide variety of discriminative behaviours among pupils that significantly affected their academic performance. Pupils tend to come up with small groupings based on unobservable and immeasurable factors common to their members. A study carried out by Southern and Central African Consortium for monitoring Education Quality(SACMED) targeting six countries namely Kenya, Malawi, Mozambique, Tanzania, Uganda and Zambia found that social influence have large effects on learning of the pupils. The study attributed poor academic performance to peer effects and it was more evidenced among girls (Michele & Barret, 2010).

Kenya's education system is dominated by examination-oriented teaching. Passing examinations is highly rated as a benchmark for academic performance among pupils and students. There is over reliance on scores and transition rates as core measures of achievement (Kamau, 2002). The quality of school administration plays a vital role in academic performance as it is concerned with pupils, teachers, rules, regulations and policies that govern the school system. This leaves the school focused on the administration and pupil academic performance not considering the social well being of the individual pupils which are dependent on their peer groupings (Lane, 2005). This study therefore sought to establish the relationship between peer influence and academic performance at primary school level.

2. Statement of the Problem

Pupils' academic performance may greatly depend on the school and class environments to which the pupils are subjected. Several factors have been documented to have significant contribution on pupils' performance. The literature cites pupils' socio economic background, teachers' commitment and availability of learning materials as prominent factors that affect students' performance. Research conducted in 2001 in Kenya by the Ministry of Education showed that more than 70% pupils performed poorly in examinations due to school environment to which they were subjected. According to Kamau (2002), many pupils in primary schools performed below their capacity. The low performance was attributed to many factors at school and home and especially social aspect of the learning process. Within the school environment, peer group influence has always been considered less important in affecting academic performance and more often ignored by the teachers. From Evaluation Test Report (2012) by Kapsoya Zone Education Board, there has been a trend of low examinations performance among pupils in the upper classes by consistently having class four on the top among the upper classes in the three terminal examinations. Pupils in class 7 have scored the lowest score of between 40 to 46 points for three consecutive examinations in 2012. Teachers attributed low performance on terminal examination by pupils to peer influence associated with adolescent experience by the pupils in upper classes especially class seven and eight. However, studies have showed that at adolescent stage, peer influence is a powerful factor that affects pupil's way of doing things including academic performance (Kirk, 2000). This is because they are in the process of developing a value system and are vulnerable to peer influence.

Programs have been rolled out by various stakeholders among primary schools in Kenya to enhance pupil performance through various methods such as better learning environments and provision of equipment for easier learning (Odeng, 2007). However, little gains have been realized because probably the programs neglect social aspects of the pupils. Little attention is directed to addressing effects of peer influence to academic performance of the pupils. It is against this background that this study considered investigating the relationship between peer group discussions and academic performance in primary schools in Kapsoya Zone. This study tested the following hypothesis:

HO: There is no significant relationship between peer group discussions and

academic performance in primary schools in Kapsoya Zone.

3. Literature Review

Peer influence refers to individual decisions and actions that are directly affected by opinions, ideas, behaviours and interactions of his/her peers. The influence comes from peer groups characteristics as singled in this study (Zitzmann, 2000). Peer group discussions is the conversation carried out by pupils together through exchange of ideas and opinions that informs general conclusions and decisions by peers (Wentzel & Watkins, 2003). Peer groups are among the most influential social forces affecting adolescent behavior as stated by Betts and Morell (1999). Howard (2004) attributed the strong influence to time spent by peers with fellows during adolescent than other persons.

This exposure time make the peers learn how to interact, define identity, interests and personality, have emotional support and coping strategies among the friends. Peer discussions are the communication channel with the peer groups for learning and influencing decisions among the peers. They discuss things concerning clothing, hairstyle, music, and entertainment, academics which naturally impact significant on individual decisions concerning short and long-term education plans. During formative years of the child, educational goals take form, and youth make a series of decisions that shape their educational trajectories, even as their friendship networks gain influence upon these decisions (Betts & Morell, 1999).

Among various dimensions of peer interactions, the effect of classroom/school peers on a student's own academic performance is at the heart of the diverse debates on educational reform, (Case & Katz, 1991). The discussions among the peers significantly improve peer quality which King (2006) concluded that it enhances student performance in school. He asserted that there is positive correlation between peer quality and students grades. The improvement of students' academic performance can be explained by two major reasons. One of the reasons is that among the many things peers discuss, academic is central. They discuss contents of the subjects

and carry out revisions together. A previous study carried out in India found out that always weak students who performed poorly always benefitted from strong students within their peers (Kapoor & Jain, 2012).

The second reason is the fact that peer discussions promote child competence, psychological well being and ability to cope with academic challenges related to motivation and academic performance. Establishing the challenges faced by members of the peers groups makes them come up with solutions after discussing among themselves. This has been reported to promote healthy psychological development, motivation and competences among the peers (Gonzales, Cauce, Friendman & Mason, 2002).

One more aspect of the peer discussions that influence academic performance is peer relationship. It is perceived that where peer groups discuss issues affecting them, it tends to make peer groups to have strong and sustainable relationship (Michele & Barret, 2010; Zitzmann, 2000). This kind of relationship provides a platform for children to socialize in daily interactions with their peers and provide support to each other in all peer engagements. This support does happen in academic and become an aid to improving the students' academic performance (Kirk, 2000; Miranda, Margaretha, Van Der WErf, Snijder, Creemers & Kuyper, 2006). It is claimed that a certain structure of peer interactions among classmates, schoolmates and friends in the residential neighborhood is either implicitly or explicitly assumed in arguments on ability grouping, school desegregation, school choice and school competition. Nonetheless, the existence and nature of academic interactions among students remain controversial (Lazear, 2001). There are several ways in which peers influence each other. Not all of them are bad. In some peer groups, they tend to share low aspirations of going to college or getting certain careers. There may be other values in place, such as taking care of the family or making money sooner rather than going to college first(Foster, 2006). This study considered peer discussions as one of the aspects of the peer influence that can negatively or positively affect the pupils' academic performance.

4. Research Methodology

This study was guided by social development theory as developed by Vygotsky in 1978. Vygotsky's recognition of socialization as a foundation of child cognitive development makes it applicable in this context. This study was focused on the social interaction of the pupils within school environment and the role it plays in determining the academic performance. This study used ex post facto study design and was carried out in Kapsoya Zone in Eldoret town. This study targeted only class seven pupils because they were among the lowest performing classes in upper classes in the Kapsoya Zone (Evaluation Test Report, 2012). A total of 30 class teachers were involved in the study from 20 primary schools. Every primary school had at least one class seven teacher. They were aware about the social interaction within the class. They were able to evaluate the peer groups based on their impact on the academic performance. The proportion of sample of the teachers was done according to proportion of targeted private to public schools. A total of 15 private and 5 public teachers were sampled.

Data was collected using questionnaires for pupils and teachers. The scores from the last zonal terms examination for the sampled pupils were extracted from the school records kept at the head teacher's office. The data generated from pupils and teachers questionnaires was analyzed using descriptive statistics that included frequencies, mean and standard deviation. Pearson correlation coefficient (designated r) was applied to test the hypothesis.

5. Findings of the Study

5.1 Gender of the pupils and teachers

In the primary schools, the pupils were also distributed differently. In private primary schools, there were more boys (62%) than girls (38%). In public primary schools, there were still more boys (56%) than girls (44%). This finding shows that there are more boys in class seven than girls in both private and public primary school. In these primary schools, the class teachers were distributed differently. The findings shows that in private schools, there were more male (78%) than female teachers (22%) while in public primary schools, there were more females (72%) than male teachers (28%). This is a direct opposite of teachers' composition in private and public primary schools.

5.2 Age of the Pupils

The findings presented in Table 1 shows that in private and public primary schools, the number of pupils

increased up to 16 years and dropped from 17 years and above. The drop was high (71%) in private school than in public school (53%). Another observation, the number of the pupils at the age 17 and above was almost equal. This findings show that there are few pupils in class seven in later teenage.

The findings further showed the average age for the pupils was 14.6 years (SD = 1.6 years) with a minimum of 11 years and maximum of 19 years. However, in private primary schools the pupils had an average of 14.7 years (SD = 1.6 years) and in public primary school, the pupils had an average age of 15.1 years (SD = 1.9 years). In relation to gender, boys had higher mean age of 14.9 years (SD = 1.6 years) than female who had an average age of 14.3 years (SD = 1.5 years). This meant that majority (95%) of the pupils were aged between 12 and 16 years of aged, implying that the pupils were age mates with minimal difference among their age.

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Age	Private	Public	Total
11 - 12	43	1	44
13 - 14	144	33	177
15 - 16	108	47	155
17 - 18	20	18	38
19 - 20	6	4	10
Total	321	103	424

Table 1. Age of pupils in private and public primary schools in Kapsoya zone

5.3 Academic performance of the pupils

In relation to academic performance, the pupils in private primary schools had average score of 365.2 marks (SD = 22.9 marks) while in public primary school they had an average score of 362.1 marks (SD = 18.4 Marks). The overall average performance from all the sample pupils was 363.6 marks (SD = 20.8 marks). Table 2 shows that majority of the pupils in both school scored marks between 326 and 400 marks. In relation to gender, male pupils had a mean of 363.4 marks (SD = 20.5 marks) and female had 364.8 marks (SD = 21.2 marks).

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Marks	Public	Private	Total
300 - 325	3	12	15
326 - 350	22	80	102
351 - 375	53	148	201
376 - 400	23	64	87
401 - 425	2	15	17
425 - 450	0	0	0
451 - 475	0	2	2
Total	103	321	424

The academic performance was further categorized into (Low, Average and high) as shown in Table 3. The researcher assigned class interval (351 - 375) where the mean of the examination performance was located to be at the average category. Below this class intervals (326 - 350 marks and 300 - 325 marks) formed the low category and above class intervals (376 - 400 marks, 401 - 425 marks, 426 - 450 marks and 451 - 475 marks) formed the high category. From the findings showed in Table 3, majority of the pupils in private and public primary schools were in the average category in their academic performance and almost equal proportion in the low and high categories.

Categories	Public	Private	Total	
Low	25	92	117	
Average	53	148	201	
High	25	81	106	
Total	103	321	424	

Table 3. Academic performance categories in private and public primary schools

5.4 Perception of Peer influence by the pupils and teachers

The data generated on the three aspects of the peer influence (peer group discussion, peer group behaviour and peer group conflict) was first analyzed separately. According to the findings shown in Table 4 on pupils' responses, the peer group discussion had a mean score of 32.9, peer group behavior had 35.9 and peer group conflict had 33.4. This implies that pupils' perception on peer influence was ambivalent as all the scores were in the range of 24-37. Further analysis on teacher's responses, showed that peer group discussions had a score of 36.8, peer group behavior had 34.3 and peer group conflict had 38.8. Therefore the teachers' perception on peer influence is also ambivalent in all the aspects except peer group conflict that was positive.

Table 3. Indices of the pupils on the peer influence

Peer influence	Mean Std. Devia	
Peer group Discussion	32.9	4.3
Peer group Behaviour	35.9	6.5
Peer Group Conflict	33.4	5.1
Total	34.1	5.3

Table 4. Indices of the teachers on the peer influence

Peer Influence	Mean	Std. Deviation
Peer group Discussion	36.8	4.6
Peer group Behaviour	34.3	5.3
Peer group Conflict	38.8	7.4
Total	36.6	5.8

5.5 Students' and Teachers' Perception of peer influence

To generate the indices, each of the statement (item) under peer group discussion generated average score per the statement (index). In this section, sub scale analysis was done on each aspects of the peer influence (peer group discussion, peer group behaviour and peer group conflict) and results reported on a five-point scale.

5.6 Indices of peer group discussion of the teachers and pupils

Table 5. Pupils' perspective on the peer group discussion

Statements	Indices
Individual interests and future ambitions	4.3
Identifying and developing each other talents	4.3
Events that are taking place at home	2.4
Discussing relatives' and neighbours' personalities	1.8
Discussions on assignments and revisions	4.5
Discuss how pupils can adjust to the class setting	4.0
Events happening within the school environment	3.9
Teachers' and pupils' behaviour in school	2.7
Relationship issues with peers	3.0
Casual talking with no specific issue of concern	2.1
Total	3.3

Table 6. Teachers' perspective on the Peer discussion

Statements	Indices
Encourages pupils to participate actively in class activities	4.1
Gives each and every pupil a chance to maximize their potential	3.7
Creates a good condition for learning	4.2
Enables pupils to learn from each other	4.4
Encourages pupils to read more	3.5
Makes pupils more adjustable to class setting	3.7
Gives pupils more time with each other	4.4
Improves social relation	4.3
Avails platform for all pupils to participate in class activities	4.0
Raises the confidence of pupils	4.3
Total	4.1

According to the findings presented in Table 6 on pupils responses, their perception of peer group discussion was ambivalent with an overall index of 3.3. The highest score was 4.5 and lowest score was 1.8. The Tables 7 on teachers' responses on group discussion shows that the teachers had positive perception of peer group discussion (index of 4.1) influence on the academic performance in primary schools of Kapsoya zone. This implies that the teachers had confidence in the higher limit of Vygotsky's zone of proximal development of the pupils than the pupils who are more sure.

5.7. Influence of Peer Group Discussion on Academic Performance

The peer group discussion was categorized into negative, ambivalent and positive influence. ANOVA was also done to test the influence of peer group discussion on academic performance. The results have been presented in tables 8 and 9.

Table 8. Academic performance and Peer group discussion by pupils

Peer group		Academic performance					
discussion levels	Ι	Low Average		•	High		
	Mean	SD	Mean	SD	Mean	SD	
Negative	348.5	4.3	358.9	3.2	377.2	4.4	
Ambivalent	348.7	5.1	362.4	4.8	380.3	5.1	
Positive	349.1	3.2	372.3	4.1	388.4	3.8	
Total	348.8	4.2	364.5	4.0	382.0	4.4	

The findings presented in table 8 shows that the pupils who were low achievers and had perception that peer group discussion positively influenced their academic performance had a mean score of 349.1 marks as compared to those who believed that peer group discussion negatively influenced their academic performance(348.5 marks). The low achievers who were ambivalent had a mean score of 348.7 marks with a standard deviation of 5.1. As for the average pupils who participated in this study, those who had perception that peer group discussion positively influenced their academic performance had a mean score of 372.3 marks, while those who believed that peer group discussion negatively influenced their academic performance had a mean of 358.9 marks. Those who stated ambivalent scored a mean of 362.4 and standard deviation of 4.8. The higher achievers who were of the opinion that peer group discussion positively influenced their academic performance had a mean score of 388.4 marks as compared to those who believed that peer group discussion negatively influenced their academic performance had a mean score of 388.4 marks as compared to those who believed that peer group discussion negatively influenced their academic performance had a mean score of 372.3 marks.

A Two-way Analysis of Variance (ANOVA) was done to find out if there was any difference in academic performance between peer group discussion under three categories namely positive, ambivalent and positive influence. On the peer group discussion, the study had the hypothesis that stated as; peer group discussion has no significant influence on academic performance in primary schools in Kapsoya zone. The analysis was done using the pupils' responses because the academic performance measured was for the pupils and not teachers. The responses are presented in Table 9.

Discussion levels	Sum of Squares	df	Mean Square	F	Sig.
Peer group discussion	7180.464	2	598.372	102.432	.504
Academic performance	13531.779	2	751.765	128.690	.241
Interaction	8218.456	4	747.132	127.897	.185
Within cells	9643.566	407	699.090		
Total		415			

Table 9. ANOVA table for peer group discussion and academic performance

ANOVA results presented in Table 9 indicate that there was no significant difference (p = 0.504, p=0.241 and p=0.185) in academic performance in the three categories of peer group discussion. This implies that academic performance was not significantly influenced by learners' perceptions towards peer group discussion.

6. Conclusion

Academic performance among the pupils in both private and public primary schools was 363.6 marks (SD = 20.8marks). The findings on pupils and teachers responses also showed that peer influence affected their academic performance differently. Majority (61%) of the pupils reported there was ambivalent influence of the peer group discussion on their academic performance but majority (75%) of the teachers reported that it was positive.

The relationship between peer group discussion and academic performance was investigated in this study. From the teachers 'responses, it was observed that there was positive peer influence of the peer group discussion on academic performance. Three observations can be made from the teachers' view. First the discussions have effects on the learning by the pupils in and out of class. Participation in class provides a platform for pupils to learning moderated either by class teacher or appointed pupils. The learning is encouraged by sharing knowledge from different pupils. Secondly, it encourages pupils to read more earning extra knowledge hence increasing the understanding more of the contents of the lessons taught in class. Thirdly, it is the discovery of knowledge which increases confidence not only to share knowledge among the peers but also with giving answers to the examinations offered to them.

Based on the findings that pupils' response that peer group discussion had ambivalently influenced academic performance, then it means according to the pupils, peer group discussion is not only directed to academic performance but also to other aspects of lives. Two observations can be made from the pupils' responses. The first observation is that academic related topics take the second in the order of the priority of what they discuss. Pupils spend time discussing future interests, ambitions and to some extent talents even if the discussion was purely academic. Secondly, they take time to discussing events and behavior within the school environment. It is worth noting that class seven pupils are at adolescent stage whose peer opinions have influence on what they

i. Both private and public primary schools to put mechanisms in place to ensure peer groups are recognized and encouraged to thrive within the school. This is because from the findings, it is clear that peer group discussion is ingredients of academic performance.

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ii. There is need for class teachers to encourage interaction that may promote discussion of issues that are of paramount importance for academic excellence.

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