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RESEARCH ARTICLE

INFLUENCE OF TEACHER'S GENDER ON STUDENT PERFORMANCE IN BIOLOGY IN SECONDARY SCHOOLS IN KENYA

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Abstract

Student academic performance and interest in secondary school Biology has been generally poor over the years. This has been attributed to factors like methods of instruction and misconceptions in the subject. However, literature suggests that teachers' gender too seems to influence students' academic performance generally. This suggests that interaction and relationship between students and teachers in the classroom seems to be affected by the teacher's gender. The purpose of this study was therefore to investigate the influence of teacher's gender on student academic performance in Biology in secondary schools in Malava sub-County in Kenya. The study adopted a descriptive survey design and 414 respondents were involved. These included: 384 eleventh grade students; 10 Biology teachers; 10 Heads of science department and; 10 directors of studies drawn from 10 co-educational secondary schools in the sub-County. Data collection was done through interview schedules and questionnaires. Pilot testing was done to establish validity and reliability of the instruments. Data collected were processed using the Statistical Package for Social Sciences to generate frequencies and percentages as well as means to establish the distribution of opinions of the respondents on study variables. The means were in turn used to compare the students' performance. Pearson's Product-Moment correlation was used to determine the degree of association between the teacher's gender and the students' performance. The Chi-square tested whether the teacher's gender had effect on students' performance.

Introduction

The attention to gender in society has passed through several phases. Initially, concern with differences between men and women and the extent to which these might be, based on biological attributes. Then attention centered on the socialization processes women and men experienced differentially in various societies. Various studies (Liu, 2006; Renold, 2006; Ogot, 1993) recognize gender as an organizing principle in all social institutions, from educational institutions and the workplace to legal systems. The gender dynamics in classrooms are also frequently portrayed as an important environmental source of the gender differences in educational outcomes (AAUW, 1992;

Sommers, 2000). There are a number of structural explanations for why assignment to a same-gender teacher, in particular, might influence the educational experiences of boys and girls. Understanding the distinctions among the theoretical explanations is an important antecedent to designing well-targeted policy interventions. One broad hypothesis is that male and female teachers have unique biases with respect to how they engage boys and girls in the classroom. For example, there is little information based on classroom observations, that teachers are more likely to offer praise and remediation in response to comments by boys, but mere acknowledgement in response to comments by girls (Sommers, 2000). Similarly, Cognitive Process Theories (Jones & Dindia, 2004) suggest that teachers may subtly communicate that they have different academic expectations of boys and girls. The biased expectations of teachers may then become self-fulfilling when students respond to them. This outcome is what is referred to as the Pygmalion effect. The available evidence on the extent to which male and female teachers share any particular bias in how they interact with girls or boys is more limited and contradictory. For example, Jones and Dindia (2004) cite several small-scale studies that examine teacher biases and conclude that a teacher's gender is the most obvious factor that seems to shape sex equity in the classroom. Many teachers express the viewpoint that they treat boys and girls equally and that their gender is irrelevant (Scantlebury, 1995). This position is called gender-blindness; it provides a false sense of objectivity and impartiality, often at variance with actual practice. Teacher attitudes may reflect biases toward girls and boys. Biases are subtler than visible discrimination and may result in unconscious behaviors that give more careful attention either to girls or boys. The challenge to this is the effect of gender stereotyping in the classroom. To explain this fact empirically, the present study therefore examined the teacher's gender attributes that influence performance of students with a particular focus on Biology.

Another dimension for the educational relevance of a teacher's gender involves how students respond to a teacher's gender and not how the teacher actually behaves. The phenomenon of stereotype threat provides another perspective on how students might react to a teacher's gender. Stereotype threat refers to a situation where student performance suffers when they fear being viewed through the lens of a negative stereotype threat (Spencer, Steele & Quinn, 1999). Students will acquire more knowledge, remember more content, and learn skills more effectively when a teacher's teaching style matches students' learning style (Lage, Platt, & Treglia, 2000). This approach, defining the match in terms of congruence, has led to a body of research called "goodness of fit." When there is a mismatch in that fit, there tends to be a decrease in students' performance, an increase in their dissatisfaction, and learner stress (Pervin, 1980).

Sometimes, students are "out of sync" with the teacher's way of delivering instruction; it is difficult for students to attempt to resolve any inconsistencies in their learning environment by trying to learn with strategies that do not necessarily match their learning style (Joyce, 1984). These early researchers conclude that if the goal is immediate changes, then the fit needs to be more closely matched. With a good fit, students are able to learn within a comfortable environment that facilitates a meaningful learning structure. The majority of students' time at school is spent with teachers, so teachers are influential role models. In many rural schools in developing countries, there are limited learning resources (Mungai, 2002), in which case the role of the teacher becomes extremely important. However, teachers send multiple gendered messages through the curriculum and organizational decisions in terms of: how teachers value the work of girls and boys; differential attitudes and expectations they hold toward them; how they treat students in the classroom and; how students react to the prevailing messages and practices. Based on the forgoing, the present study found it crucial to also determine student attributes that influence their performance in Biology in the district.

This study therefore attempted to meet the following objectives:

i. Examine the teacher's gender attributes that influence student performance in Biology and;

ii. Determine the student attributes that influence performance in biology.

Methodology

The study adopted the survey research design. The study was conducted in Kakamega North District in Kenya. The district has 33 co-educational secondary schools. Co-educational schools provided allowed the study to establish the preference of teacher gender by students when both boys and girls are taught under same learning environment. The data collection was done among eleventh grade students. Criterion for involving these students was based on the fact that they had had at least two years of secondary education and therefore could provide a true reflection of the teacher's gender influence on their studies unlike their younger counterparts. However, twelfth grade learners were

not accessible at the time of the study. Ten (10) schools were sampled by systematic random technique to assist in data collection. Only one stream per school was used for the study since intact classrooms were maintained to allow for normal classroom interactions and practices. Choice of the stream automatically resulted into a choice of the Biology teacher in the stream. The study therefore involved 384 students, 10 Biology teachers, 10 heads of science department and 10 directors of studies. The study sample size was therefore 414 respondents. The study therefore involved 196 (51.04%) boys and 188 girls (48.96%). Teachers of Biology were 6 (60.0%) and 4 (40.0%) male and female respectively.

Two instruments were used in data collection: questionnaire and interview schedule. The questionnaire was developed for students and teachers while interview schedules were administered on head of science department and directors of studies. The questionnaire for teachers sought information on their views and opinions concerning gender and education, their way of handling their students and whether this was influenced by gender or otherwise. It also included items that determined their attitude towards specific student genders and their teaching experience in terms of period of time they have been teaching. The questionnaire for students on the other hand sought information on their preferred gender for a Biology teacher, the amount of motivation received, their attitude towards the both the subject and their teacher, their expectations, socio-economic background and the kind of student teacher relationship that exists between them and their teacher. The interview schedule included items that allowed the study to gather information concerning the relationship between teachers and students, the motivational activities and the general learning environment from the head of science department and the director of studies. A pilot study was conducted by a test-retest technique for reliability and validity establishment. Both content and face validity were established by the researchers through ensuring that items in the instruments comprehensively covered the study variables as well as well constructed to flow. Such aspects were also sought for after piloting for improvement. Reliability on both student and teacher questionnaire were computed and coefficients of 0.82 and 0.78 were obtained respectively.

Data collected were first categorized according to themes of study for purposes of analysis. Coding was done to facilitate tabulation and counting. The data were then processed using the Statistical Package for Social Science (SPSS) to generate descriptive statistics like frequencies, percentages and mean.

Results and Discussion

Teacher's Gender attributes that influence Student Performance in Biology

The study sought to establish teacher's gender attributes through gathering respondent's opinions on: attitude towards students, level of inspiration the teacher of Biology offers their students, teacher of Biology expectation of their students, the level of resilience of the teacher of Biology and their interaction with students in the classroom. The section is therefore organized based on each attribute studied.

i. Attitude of Biology teacher towards Students

The attitude of the teacher towards students was determined by asking the students to give their opinions on the teacher's ability to encourage students to perform better through asking questions, consultations and deep learning. The findings showed that 361(94.0%) of the students indicated that they were encouraged to ask questions with only 23(6.0%) of them indicating otherwise. On whether teachers encouraged students to consult, 349 (91.1%) of the students said they were doing so as only 35 (8.9%) of the students reported that they were not being encouraged to consult. Furthermore, students were asked to state whether teachers encouraged them to engage deeply in individualized study of biology, 349 (91.1%) of the students admitted this.

From the Directors of Studies (DOS) and the Heads of Department (HODs) the gender of teachers that tended to exhibit the attributes namely, encouraging students to ask questions, consult and engage in deep learning were sought. Both reported that females seemed to exhibit such attributes more frequently than their male counterparts as 70.0% of DOS and 60.0% of HODs reported positively on this. One of the HODs confirmed that:

"Most male teachers are forceful and in fact end up discouraging students especially the weak ones".

Teachers also reported that girls are normally given more attention since they face more challenges than boys in terms of their attitude towards Biology as a science as well being involved in performing domestic chores when at home.

ii. Level of Inspiration of Students by Biology Teachers

The level of inspiration is expressed through the teacher's ability to help raise students' willingness to voluntarily engage in learning tasks geared towards helping them understand Biology and perform better in the subject. This may be achieved by the teachers constantly reminding their students to learn more in Biology through deep learning and praising them whenever they do so. The researcher therefore sought to find out from the students whether they felt motivated and inspired by their Biology teachers to perform better in biology. Most (370, 96.4%) of the students reported that they were inspired by their teachers to perform better in Biology while only 14 (3.6%) of them felt otherwise. All the HODs and 80% of the DOSs interviewed also confirmed that they motivated their students to perform better in the subject. Based on the gender of the students who were encouraged to perform better, teachers seemed to motivate girls more that boys since 8 (80.0%) of them reported that they motivate girls more to perform better in the subject. When asked for reasons for doing this, 80% teachers indicated that girls were encouraged more frequently because girls seemed to have poor attitude towards learning Biology.

iii. Level of Biology Teacher's Expectation of Students' Performance

The teacher's expectation of students' performance is predicated upon pre-set standards or levels of attainment for the students in the future or in the course of learning. The teacher thus expects the students to achieve a certain level of academic performance. The teachers were therefore asked whether they expected their students to perform upon a pre-set attainment targets. All the teachers of Biology indicated that they expected their students to perform up to a certain level of attainment targets. Data gathered also showed that all the HODs, 60% of the DOSs and 60% of the teachers expected boys to perform better than girls as only 40% of the DOSs and HODs respectively expected girls to perform better. When asked why they expected boys to perform better than girls, teachers reported that girls were always distracted by many issues either at home or school and thus were not consistent in their performance unlike the boys.

iv. Level of Resilience or Fluency of Biology Teacher

The teacher's resilience or fluency is determined by the teacher's ability to understand the cognitive ability of the students, the classroom environment and to effectively plan and apply interactive approaches and resources in teaching that enhance learning. Resilient teachers have therefore the necessary competence to teach specialized areas like Biology. A teacher who is resilient is proactive and endears to the learner and is likely to influence student performance. Such a teacher employs approaches that are effective and takes care of individual differences and interests. To have an idea of teacher's resilience and efficacy, it was first necessary to find out the average number of Biology lessons taught by the teachers per class per week. The findings showed that 60.0% of teachers had five lessons of Biology per week; however, the rest had less than five lessons. This implies that all teachers of Biology had a manageable load in the subject to be able to adequately prepare for effective teaching. With regard to the techniques of teaching teachers were asked to report on which ones they frequently used in the teaching of the subject. Most (6, 60%) teachers always used questioning together with lecture techniques of teaching. Another 3 (30%) of the teachers reported that they frequently used discussion technique. However, demonstration, debate and practical work were rarely used in teaching of the subject as was reported by the teachers involved in the study. This clearly shows that the techniques of teaching used seem not provide room for practical or hands on activities that make Biology interesting and worth learning.

Another component of resilience is the ability of the teacher to use a variety of interactive teaching resources in Biology. When the study sought to find out the variety of interactive resources that are regularly used in the teaching and learning of Biology; only textbooks (90%) were always used. However, charts (50%), resource persons (20%) and field trips (50%) were occasionally used while ICT was rarely used in some schools but never used in majority (90%) of the schools. The findings show that biology teachers used less of interactive instructional resources. This could be one of the reasons why students do not perform as expected since Biology is a subject that should be interactively taught. However, on the resilience of teachers, 80% of the directors of studies (DOSs) and 70% of the heads of department (HODs) indicated that female biology teachers used a variety of instructional resources while teaching unlike their male counterparts. This was also confirmed by one of the HODs who reported during the interview that,

> "I have observed both female and male teachers teach Biology and concluded that given a variety of resources, female teachers can be more effective than their male counterparts".

In addition, one of the DOS also added that:

> "Most male teachers are concerned about completing the syllabus in time while the female teachers are more concerned with effectiveness of the teaching itself".

Another, component of resilience is ability of the teacher to adequately plan and prepare for the teaching of biology in order to realize hands on activities and thus enhance the learning of Biology. With regard to competence in preparation and planning for Biology lessons, 80% of the DOS and 70% of the HODs respectively reported that female teachers made requisitions for teaching materials early in the term unlike their male counterparts. Furthermore, all DOS and 80% of the HODs indicated that female teachers made the schemes of work in advance too. In addition one of the DOS reported that:

> "Female teachers take their time in advance and prepare for the lessons unlike their male counterparts who just rush at the last minute to plan".

Resilience also involves the awareness of teachers about their role in students' learning. The teachers were therefore asked whether students liked them especially when they are to conduct extra tuition. All (100%) teachers indicated that they were liked by the students in such circumstances. All (100%) HODs as well as 60% of the DOSs reported that female teachers were liked more by the students. In support of this, one of the Heads of Department indicated,

> "With my experience, I have realized that male students like female teachers more while female students like male teachers more and that is the law of nature".

The forgoing suggests that female teachers are more endeared to by students than their male counterparts. They have time for their students and always prepare well in advance for their Biology lessons. Female teachers were found to be more resilient, and interacted more with students than their male counterparts.

The study findings seem to suggest that female teachers exhibit positive attitude towards students than their male counterparts. Teachers also seem to give more support to girls than boys since they believe girls seem to face more challenges in life than their male counterparts. Nevertheless, all teachers seem to hold high expectations for better performance among boys than girls. On their present Biology teachers' gender, 49.7% of the students reported that teachers' gender did affect their performance and another 45.1% of them believed that change to a teacher of opposite gender may enable them improve their performance in the subject. However, majority (63.3%) of the students felt teachers seem to put much pressure on them to complete their assignments in time. This seems to suggest that even though teachers do not influence students' performance by their gender directly, the perception of the students on the teacher gender seems to influence their performance in Biology. Furthermore; the idea that teachers expect higher performance among boys than girls yet they consecrate more effort to helping girls seems to affect performance in Biology as a result of building pressure on boys to perform better. The pressure seems to influence the attitude of boys negatively towards female teachers whom they perceive through the mirror of culturally defined gender roles which seem to make the boys believe that they should be better be pushed to perform better by male teachers other than the female ones. Literature also indicates that compared to male teachers, female teachers tended to encourage students to perform better during the learning process (Dee, 2006; Gangstrom, 2002). It is therefore not surprising that girls received more attention from teachers of Biology when it comes to the question of encouraging them to succeed academically. Biggs (1999) observes that each individual teacher as well as the institutions as a whole should create a learning climate either through formal or informal interactions with students. And this climate is about how a teacher and students 'feel about things which may naturally have positive and negative effects on students' learning.' And that students' deeper understanding can be achieved through dialogue and collaboration with their peers and their teachers. Therefore, by students consulting and receiving encouragement in and out of class they are able to have improved classroom interaction and consequently, improved student performance in Biology. This outcome is supported by Liu (2006) who asserted that, teachers' gender perceptions of students' ability is reflected in the type of praise and expectations they have of their students. This aspect of teachers' behavior is particularly detrimental because it means they do not receive feedback on their work that could help them develop deeper understandings of concepts.

It was also discovered that classroom practices differ from one teacher to another. A classroom practice that works well for one teacher may not necessarily work well for the other. For example, as a section of the teachers prefer giving more time to students to complete assignments and homework, the other group finds this to be quite unnecessary. It is also worth noting that no preferred gender of teacher was found for teaching Biology. That is, both female and male teachers of Biology were considered as being in a position to teach Biology. As indicated, all the respondents disagreed to the view that Biology is best taught by either a male teacher or female teacher. However, it was found that different teacher genders have differences in preparation for teaching, teaching techniques, classroom interaction skills and use of instructional resources. Female teachers are more resilient and interact more with

learners and therefore more preferred by most learners. Students are inspired by both male and female teachers and exhibit average cognitive ability across the board. Female teachers seem to positively influence students' performance in biology than their male counterparts. Male teachers were reported to be more authoritative whereas female teachers tend to be more supportive and expressive.

The foregoing results conform to the cognitive process theories (Jones & Dindia, 2004) which suggest that teachers may subtly communicate that they have different academic expectations of boys and girls. The biased expectations of teachers may then become self-fulfilling when students respond to them that is, the Pygmalion effect. There is also evidence that teacher expectations which are firm notions of future outcomes, tend to create inequalities in social interaction, which in turn affect performance. Extensive experimental research conducted by Cohen (1986) demonstrates that expectations lead to differences in opportunities for interaction in school classrooms and thus in children's opportunity to learn, or time engaged on cognitive tasks. One of the most often cited finding of both elementary and high school studies is that teachers continue to see girls as individuals who will succeed through quiet diligence and hard work and boys as more "naturally clever" (Skelton, 2006).
This suggests that girls would receive more attention from their teachers. Since the girls are not expected to be naturally clever, then the teachers would want to make sure they concentrate their attention to the girls to help them improve their performance in Biology. However, boys would be expected to perform well in Biology with or without teachers' strict attention thereby making them negatively influenced. Such expectations lead to certain perceptions of students by teachers that negatively influence their self-image regarding the subject. Teachers' perceptions of students and their learning and the teachers' attitude towards their own teaching are fairly important because they deeply affect students' interest in learning and the way learners approach learning tasks (Barry, 1999; Scantlebury, 2009). Thus teachers need to communicate their expectations of students in Biology to their students at the beginning of every lesson. Such expectations should be devoid of gender biases.

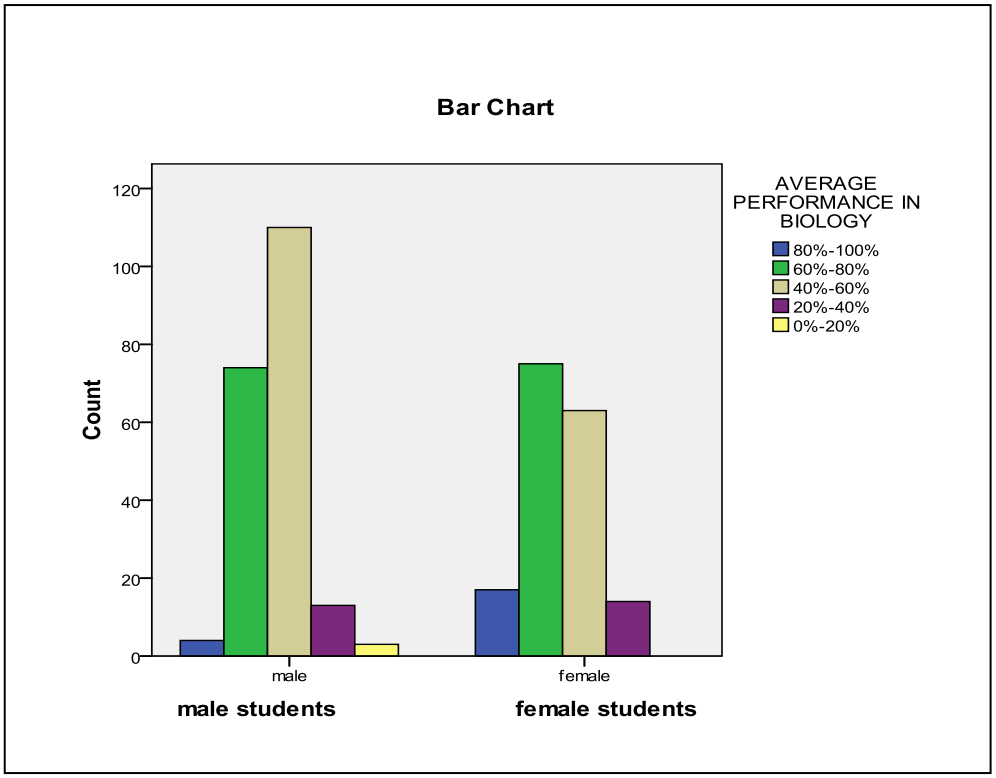
Good and Brophy (2003) advance that teachers with high efficacy beliefs generate stronger student achievement than teachers with lower teacher efficacy. Teachers who possess a secure sense of efficacy show a strong commitment to teaching, spend more time in subject matters in their areas of perceived inefficacy, and devote more overall time to academic matters. These behaviors naturally lead to students' better performance in the classroom. Effective teachers therefore normally produce higher student achievement because they use effective management strategies. These strategies are student-centered and involve students in classroom activities. The strategies stimulate student autonomy, reduce custodial control, and keep students on task (Woolfolk, Rosoff, & Hoy, 1990). Furthermore, they implement influential instructional strategies that enhance student academic growth and modify students' perception of their own abilities (Gray & Ross, 2006).

The majority of time at school is spent with teachers, so they are influential role models. In many rural schools in developing countries, there are no books (Mungai, 2002), in which case the role of the teacher in the classroom becomes extremely important. Teachers send multiple gendered messages through the curriculum and organizational decisions. Thus, having students like their teachers helped the students to be able to interact more with their teachers and hence learn. In this way, the students are able to grasp content and thereby improve their performance in Biology. This is important considering that books are scarce in schools and students only learn when the teacher is present.

Table 1: Students Overall Performance in Biology as indicated by Students (n = 384)

Performance in Biology	Frequency (F)	Percentage (%)
80% - 100%	24	6.3
60% - 79%	140	36.5
40% - 59%	186	48.4
20% - 39%	30	7.8
0% - 19%	4	1.0
TOTAL	384	100.0

Figure 1: Student Overall Performance in Biology by Gender



Student attributes that influence Performance in Biology

Students' attributes may be indicated by their attitude towards Biology, their attitude towards gender of teacher of Biology, their cognitive abilities and their overall performance in Biology. The study therefore explored from the respondents regarding these attributes and how they influence students' performance in the subject. The section is therefore organized on the basis of each attribute.

i. Students' Attitude towards Biology

Students' attitude towards Biology was established through students' perception towards the subject, their interaction with the subject content, concepts and the time they study biology outside normal classroom sessions.

The students were asked to indicate whether they considered Biology an easy subject and 204 (53.1%) of them indicated so however; another good proportion (180, 46.9%) of students reported that they considered biology a difficult subject. When they were asked to show how much time they allocate to private study of the subject, 283 (73.5%) of them reported that they assigned between 1 to 2 hours for private study of the subject per day. It was mostly likely that students assigned less time to study Biology since all the co-education schools were day schools. The students go to school from home every day, and return home in the evening. Students therefore seemed to interact less with the subject content. Such a scenario seems to negatively influence their performance in Biology and eventually affects their attitude towards the subject.

ii. Students' Attitude towards Gender of Biology Teacher

Students' attitude towards gender of their Biology teacher was determined by seeking their opinion whether their performance in the subject was being influenced by the current Biology teacher's gender, if change to a teacher of opposite gender may improve their performance and whether the subject teacher ever put pressure on them to accomplish their assignments in the subject. On the current teachers' gender, 49.7% of the students reported that teachers' gender did affect their performance and another 45.1% of them believed that change to a teacher of opposite gender may enable them improve their performance in the subject. However, majority (63.3%) of the students felt teachers seem to put much pressure on them to complete their assignments in time though they reported to have a liking for their Biology teachers as 98.4% of them attested to this. These findings suggest that students' performance seems to be influenced by their attitude towards their teachers' gender and manner of interaction.

iii. Student's Cognitive Abilities

Student's performance in Biology also depends on their cognitive abilities in terms of understanding the Biology subject, awareness of their own learning styles, retention and transfer of knowledge from one situation to another. The study therefore sought to find out from the students their overall performance in Biology by indicating their average scores range. They given score range as follows: 80-100%; 60-79%; 40-59%; 20%-39% and 0-19%. Their responses were as shown in table 1

From the Table, it can be observed that 186 (48.4%) reported an overall performance of between 40% and 59%. Another 140 (36.5%) of them reported an overall performance of between 60% and 79% while another 30(7.8%) of the students indicated that they had overall score of between 20% and 39%. It is also important to note that only 6.3% of the students had overall score of between 80% and 100%. This suggests that the students involved in the study seem to exhibit average cognitive abilities. The study went further to analyze the data based on students' gender. The results were as summarized in Figure 1.

The data as presented in figure 1 seem to indicate that majority of boys' overall performance in Biology was between 40-60% while that of girls was between 60-80%. Though boys also reported a 0-19% category of performance, this was not reported among girls. The findings seem to indicate a smaller range in overall performance of girls compared to a wider range among boys. This suggests that girls seem to perform better than boys in Biology in the district.

iv. Perception of Biology by Students

When asked to show whether they liked Biology as a subject, 375 (97.7%) of the students indicated that they liked Biology as a subject while only 9 (2.3%) of them indicated that they did not like the subject. The students considered Biology an easy subject and allocated little time to studying out of class yet their average score was between 40% and 59% which formed 48.4% of the performance. Only 6.3% score between 80% and 100%. This suggests that the students seem to hold a presumption that Biology is an easy subject thereby allocating less time for interacting with its content. This perception is therefore demonstrated by the fact that majority of the students get a mean of 59% and below as reported by the respondents in the preceding section. Students' perception therefore seems to influence their performance in the subject.

Students' attributes such as: their attitude towards Biology; their attitude towards teachers' gender; their cognitive abilities and perception of the subject seem to influence their performance in Biology to some extent. These seem to be the confounding factors in teacher's gender as it influences performance of students in general. As reported by the students some of them believe that if a teacher of opposite gender teaches Biology other than the one they currently have, then their performance would improve. This probably suggests stereotypes held by the learners. This therefore does not necessarily hold on how the teacher behaves as dictated by his/ her gender. This is observed by Spencer et al. (1999) that the phenomenon of stereotype threat provides another perspective on how students might react to a teacher's gender. Stereotype threat refers to a situation where student performance suffers when they fear being viewed through the lens of a negative stereotype threat. Students therefore seem to come to the classroom or develop a liking on a subject based on their individual attributes not those once exhibited by the teacher. However, if the teachers' attributes seem not to match what they already possess, they seem to switch off and exhibit poor performance. Lage et al. (2000) also observe that students will acquire more knowledge, remember more content, and learn skills more effectively when a teacher's teaching style matches students' learning style. However, defining the match in terms of congruence, has led to a body of research called "goodness of fit." When there is a mismatch in that fit, there tends to be a decrease in students' performance, an increase in their dissatisfaction, and learner stress (Pervin, 1980).

Conclusions

The following conclusions were drawn from the findings:

1. Both male and female teachers give more attention to girls than boys while at the same time prefer teaching mixed groups. It is important to note that none of the teachers preferred a single sex school. Both male and female teachers offer inspiration to their students to perform well in Biology; however, female teachers were found to be more resilient and were more self-efficacious compared to their male counterparts.
2. The gender of Biology teacher influenced students' performance because of the students' perception of the teachers' gender and not the manner in which teachers of different gender handled them.

Recommendations

The study made the following recommendations:

1. Male teachers should emulate their female counterparts in being resilient and interactive with their learners to improve performance;
2. Students should be debriefed not to view their teachers on the basis of gender stereotypes but as qualified personnel assigned to assist them to learn.

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