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Abstract

This study investigated female teacher's mentorship strategies and female student's academic performance in selected secondary schools in Rwamagana District, Rwanda. The specific objectives were to determine female teacher's mentorship strategies used among some secondary schools located in Rwamagana District, to investigate female student's academic performance in selected secondary schools in Rwamagana District, and establish relationship between female teacher's mentorship strategies and of female student's academic performance in selected secondary schools in Rwamagana District. This research was conducted descriptively with correlation study with a mixed approach to study the relationship between mentorship and female students' academic performance. Data collected from the target population of 486 respondents using a semi structured questionnaire. The study targeted not only school principals and female teachers in secondary schools in Rwamagana District. A sample size of 219 calculated through the use of Yamane formula and a representative group was obtained purposively and randomly. Questionnaire, interview guide and documentary analysis help the researcher to obtain information while both descriptive and correlation methods were adopted to analyze response and evidences. Results denoted 70% of female teachers in secondary schools agreed with statement, 86.4% agreed with the statement related suitable guidance and counseling for dealing with phycology issues that may influence their learning outcome, 80.0% of connecting students and school managers to improve female enrolment, 53.1% strongly agreed with the fact that the role modelling stimulates female students enrich their self-assurance, 40.9% strongly that studied schools are lack of girl's awareness and freedom, 69.8% strongly agree to help girls. Findings demonstrated that 90% of enrolled girls complete their secondary education, girls' education performance, mind-set, retention improved both in STEM and other subjects, and community behavior change about educating girls from seeing them as marriage material to equal individuals., 86.4% agree with girls of this school have self-motivation in their learning activities, 77.0% evidenced that girls of this

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school get improved grades in various exams compared to boys, 76.4% accepted an improved girls' completion in this school compared to the enrolment rate. To the third objective, results shows that mentorship through Hiring Female Teachers in schools was associated with participating in class with 0.176. Mentorship through role modelling and parental attitudes was connected to increase their outcomes in national exams with 0.887 and increase test outcomes and success with 0.0864. This research proposes that public institutions would increase educational quality and facilitate female to attain high performance and abandoning harmful culture through the adoption of gender sensitive strategies.

Keywords: *Influence, Female Teacher Mentorship, Female Students, Academic Performance, Secondary Schools in Rwamagana Distict, Rwanda.*

Introduction

At the international level as well as national level, therefore, access to education determined the socioeconomic development and welfare for the society (Zachary, 2011). In this regard, the cooperation or interaction between learners and educators determined the level of success or learning outcomes (Washington, 2011). Therefore, teaching staff members were considered as the decisive root of skills of students. Moreover, mentorship strategies have been adopted to enhance student level of performance (Bravo & DeFreita, 2012). However, mentoring strategy attained broad public scrutiny owing to their notable performance enhancing positive attitudes for young people and decreasing unfavorable behaviors. general young involvement in mentorship ameliorate the pertinent education procedures like unjustified absenteeism and suitable practices to be assigned to high performance in academic matters for mentoring interventions (Agunloye, 2013). In addition, mentorship was helpful in developing adequate behaviors and improved social and behavioral effects like good relationships between parent/guardians and friends (Pember, 2014). Obviously mentorship strategies were adopted to increase the interaction between students and teachers. This leads to the transfer of skills relying on social support and guidance (Owolabi & Oginni, 2013). Past studies indicated that 54% of female students obtain their degree in the United States of America in mathematics and sciences. According to Goudreau, Lyon, and Fulton (2014) evidenced that 43% obtained degree in chemistry and body by 58.5 percent.

In less developed countries, adolescent girls' emanate from poor families and it was not easy for them to have access to education owing to traditional cultural practices and ameliorate the profit from the interaction between teachers and students (Jane, 2016). The research demonstrated that girls necessitate mentorship from women teachers in order to success in the academic careers through self-confidence, autonomy, management and dissemination of knowledge (Jana, 2015).

In Africa, supporters of equality at the job market evidenced that mentorship is very important in developing confidence for women and young girls and assess and overcome such issues related to academic success and performance at the workplace (Salleh, & Tan, 2013). In this vein, female education in sciences was NGOs that assessed female success in sciences and established that low level of success by female students have been under the research process (Achor & Duguryil, 2014).

In Rwanda, the proportion of female enrollment in higher learning institutions is still low despite effort in mobilizing them. Since 2016, female students have accounted for around 42% of all enrollments consistently for the last six years (MINEDUC, 2019). Therefore, mentoring female students seemed to be pertinent in secondary schools in order to attain the SDGs targets in

education sector, previous scholars relies on providing high quality mentorship in secondary schools in order to empower female students. In Rwamagana District, women involved in mentorship program were crucial in educational sector and stimulate the level of girls academic performance and decrease challenges related to culture and socio-economic conditions that keep girls out of school. This study will indicate the relationship between female teacher's mentorship strategies and of female student's learning outcomes in selected secondary schools located in Rwamagana District. The main objective of this research was to assess influence of female teacher's mentorship strategies and of female student's academic performance in selected secondary schools in Rwamagana District, Rwanda. It was guided by the following specific objectives:

- i. To determine female teacher's mentorship strategies used in selected secondary schools located in Rwamagana district.
- ii. To investigate the level of female student's academic performance in selected secondary schools in Rwamagana District, Rwanda.
- iii. To establish relationship between female teacher's mentorship strategies of female students academic performance in secondary schools in Rwamagana District, Rwanda.

Theoretical Literature

This section reviews the existing studies in order to provide a deep description of key concepts such as mentorship, teacher-female, and academic performance of female students.

Mentorship Strategies Used In Female Education

Given the widespread application of mentorship initiatives in a number of different domains. Depending on the field, researchers define mentorship differently. For example, in health care research (Achor & Duguryil, 2014) explained mentorship as strong individual argument between senior skilled personnel and less skilled junior personnel in which mentors gives assistance, guidance and feedback concerning career development and capacity building.

Aina, and Akintunde (2014) used mentorship as planned activities where by assume their duties with high effort in development associated that bear the objectives protect pertinent elements. Therefore, the mentorship did not have a universal definition, there occurs to be agreement on some basic factors. There was acceptance that mentors give support, constraints and vision for their students via a formal or informal procedure (Jackevincius et al., 2014) and that mentoring had a pertinent effect on female students and individual development (Kashiwagi, et al., 2013).

Mentoring Through Hiring Female Teachers

Mentorship may be performed through the process of recruiting female teachers in secondary schools with the aim to demonstrate and assist female students in their everyday activities and lessons in secondary schools. Okeke (2015) reiterate that mentorship through hiring female teachers consists of helping persons to be awareness of themselves and educational conducive conditions for purpose of helping students to overcome from challenges their met (Owolabi & Oginni, 2013). Therefore, female teachers are recruited in order to provide orientation and psychological counseling services to female students adopted to assess pertinent problems met by female student in their learning processes in order to ameliorate their learning outcome, skills, knowledge and positive habits toward academic success, gender empowerment and gender balance, prevention of early marriage, reducing sexuality for teenagers, reduction of using drugs,

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prevention of school dropout (Jiyce, 2016). Secondary schools mentorship help female students every at their families by emphasizing academic career , socio-economic development, skills development and job creation in order to find out sustainable solutions (Grossman, Dubois, & Herrera, 2013). Results from hiring female teachers is deemed to ameliorate female educational activities and school management by fostering adequate relationship between teachers, students and school authorities.

Mentoring through Modelling and Parental Attitude

The second indicator of female mentorship is mentoring female students through role model and parental attitude which consists of helping female students to adopt positive attitudes and conducts from their teachers and parents or guardians (Zachary, 2011). According to Asante Africa (2016)), mentoring must provide students with knowledge that can be helpful to female students in secondary schools and in their families. Combining data on factors influencing academic performance of female students, behaviors of youth and their families, learning outcomes taken into account the completion rate, involvement in class activities.

Moreover, parent's behavior pertinence to their girls were for instance expressed in terms of pregnant life, infant living conditions, through preschool to school and in post-studies era. Crucial measurements and constructs such as parental read to girls, laws around the time of eating and sleeping time and parental involvement in negative behavior, alcohol use (Stephen, *et al*,2012). Therefore, female teacher role modeling consists of looking up by female students. Activities of role modeling were outdone by those followers. However, some role models may have negative influence and other may have positive influence to female students and their learning outcomes (Dou, 2017).

Role modeling from women mentors has been criticized whether they were perceived as female usually being followers to male and were responsible to supporting duties in secondary schools. Furthermore, women duties referred to the provision of food and care to children rather than educational and teaching activities (Al-Zoubi & Younes, 2015).

Mentoring through Safe Learning Environment for both Boys and Girl

The creation of safety and favorable learning conditions within secondary schools were very important in female students to have freedom of discussing the positive outcomes of their educational attainment and job performance (Vinales, 2015). Female sensitive policies that consider the conducive learning and working conditions were positively associated with the promotion of equality for accessing assets and other properties in the society (Camfed 2016). Furthermore, secondary school principals gives conducive environment to female students through the creation of female student clubs, association, sharing their experiences, reduction of distance from home to schools, providing toilet, girl's private room, providing of equipment and materials that help female students during their menstrual period, soaps, cotex, access to information related to reproduction, sexuality, sanitation, and safe leaning conditions (Camfed, 2016).

Assessing the Level of Female Students' Academic Performance in Secondary Schools

Girl's student learning outcomes refers to performance of female students which consists the achieving of education objectives, high grades in national examinations, grades in class tests, completion of assignment and home work on time, active class participation, readmission

secondary schools, entering or enrolling in tertiary education (Koskey, 2011). However, learning outcome would be considered as the term containing several area of education.

In less developed countries, academic performance play a significant role to living conditions of learners as examined through grade obtained, attainment of objectives, chance to enroll in universities(Kudari, 2016). A positive relationship was found between learning outcomes and economic growth were primordial component to assess education and high success of students (Nyagosia, 2011). Findings revealed that high grade obtained in exams, facts are used to analyze positive or negative effect of education policies (Omolo & Siitwa, 2010).

Theoretical Framework

Constructivism Theory

The study adopted constructivism model owing to its central role in determining mentorship approach in the Scandinavian countries (Maganga, 2016). This model helped the researcher assessed how female teachers guided female students and become models for them with the intention to increase their level of understanding their place in the community (Nyoni, 2017). Therefore, this approach reflected the methods of understanding things and addressing problems in order to acquire positive perception towards female education (Essays, 2013) argued that the model has been at the scrutiny of many scholars owing to discussion expectation of students in secondary schools.

Human Capital Theory

This study is constructed relied on human capital model that has been introduced by Schultz in 1960 in order to stimulate human capabilities and improve through education opportunities especially formal education (Nyagosia, 2011). The personnel taking into consideration that equal opportunities to education can lead to academic performance (Materu, 2013). It has been shown different studies but no one has carried out the research on the community attitude towards girls' education and its impact to the academic performance. Human capital theory argued that education enhances the production capacity of workers through improved skills and knowledge (Bruns, 2014). This theory argued that education is very expensive, is time consuming but whether successfully accomplished it can generate more income than expected. Education should be seen as capitalists (O'Gala, 2013). Furthermore, human capital theory is mostly appropriate in countries with high population growth due to the huge human personnel which might be a human asset. Therefore, human resources may be adjusted into human capital through education attainment and health care provision.

Gender Equity Theory

The underlying assumption of gender equity is that the intern instruments of equity of life that have been developed for human rights should be applicable to women, like it is to all sectors of society (Oscar,2013). Although education has called some women onto the educational scene at grassroots, women need Education regarding their rights. For example, girl-children in some communities are denied some jobs and access to some facilities like education. Ogunsola *et al.*, (2014) writes however, that culture is socially generated and perpetuated. By this, he exonerates individuals not to be blamed for the practices in their dysfunctional cultures. He therefore agrees with Goldstein (2010), who tows the line of taking collective responsibility for our societal cultural practices. The priority action should be taken to preserve human rights of girls and to ensure that

they obtain adequate care and education opportunities for attaining their full pertinent alongside their brothers (Abe & Adu, 2013).

Conceptual Framework

The conceptual framework provides the relationship between research variables.

Independent Variables

Female Teacher Mentorship

- Encourage girls to have academic goals in their monthly meeting to discuss about female students challenges and ways of mitigating them.
- Female staff play role modelling by sharing their own young journey and experiences and be resource for the girls
- Create safe Learning Environment for girls by being their advocate and trusted counsellors

Dependent Variables

Female student academic performance

- Girls' Education enrollment and completion improved to mean that 90% or enrolled girls complete their secondary education.
- Girls' Education performance, mindset, retention improved both in STEM and other subjects
- Community behavior change about educating girls from seeing them as marriage material to equal individuals

Intervening variables

- Family Structure that empowers daughter's education
- Positive behavior outcome that promotes girls' education in the community.
- Education system and School policies that promote girls' education

Figure 1: Conceptual Framework

Source: Researcher (2023)

Information presented in Figure 1 demonstrated that the researcher assessed the female teacher mentorship through encouraging girls to have academic goals in their monthly meeting to discuss about female students challenges and ways of mitigating them, playing a role model by sharing their own young journey and experiences and be resource for the girls and by creating safe learning environment for girls by being their advocate and trusted counsellors. Offering the hiring female teachers in schools, role modeling, parental attitudes and safe learning environment for both boys and girls that student examines was pertinent to improve their level of complying to rules and norms in order to influence academic performance. However, the dependent variable which was female student academic performances was examined using girls' education enrollment and completion improved to mean that 90% or enrolled girls complete their secondary education, girls' education performance, mindset, retention improved both in STEM and other subjects, and community behavior change about educating girls from seeing them as marriage material to equal individuals. Therefore, both independent and dependent variables were moderated using the family

structure that empowers daughter's education, positive behavior outcome that promotes girls' education in the community, and education system and School policies that promote girls' education.

Research Materials and Methods

Research Design

Creswell (2014) indicated that the study design presents the procedures and other plans of the study extending the decision from extensive assumptions to detailed techniques of data collection. In order to carry out this research, a correlational study was done and found the association between female teacher mentorship and female student academic performance. This research used a mixed approach to collect relevant information.

Targeted Population

As stated by Alvi (2016), the population of the study denotes the group of people who have specific criteria indicated in the area of investigation of the study. However, Dominick and Wimmer (2013) stated that the population of the study indicates people of factual hypothetical groups through the needs to specify findings. Therefore, this targeted 486 people categorized into 54 school principals and 432 female teaching staff members from selected schools located in Rwamagana District where the study targeted 8 teachers in each school. The names of 54 public secondary schools targeted in this study are listed in the appendix IV.

Size Determination

This consists of the determination of a representative group size employing the formula as: $n = N / [1 + N e^2]$. Where n = Representative Group, N = Population of the Study, and e = Margin error. This study also assumes that 05% (CI), e = margin error = 5%, while 486 people was the population targeted by the researcher.

Therefore, $n = 486 / [1 + 486 (0.05)^2]$

$n = 486 / [1 + (486 \times 0.0025)]$

$n = 486 / (1 + 1.215)$

$n = 486 / 2.215 = 219$ participants. Respondents were 219 who were proportionately selected ($n = N \times n / N$) has been adopted to obtain participants from each strata. School head teachers' respondents = $(54 \times 219) / 486 = 24$

Teachers' respondents = $(432 \times 219) / 486 = 195$.

Table 1: Target Population and Proportionate Sample Size

| Population Categories | Target Population | Sample Size |
|-----------------------|-------------------|-------------|
| School head teachers | 54 | 24 |
| Female Teachers | 432 | 195 |
| Total | 486 | 219 |

Sampling Technique

As stated by Sorensen, Jacobs and Ary (2010) sampling technique is a strategy used to select the small number of participants from a large population as desired to provide the study findings. Therefore, the researcher employed stratified sampling technique to sample respondents where they were stratified in two strata (School head teachers and teachers) and also simple random sampling was established in each stratum. The researcher selected school principals purposively while female teacher mentors were chosen randomly from Rwamagana District.

Data Collection Methods

Before going to the field, a recommendation letter was gotten from Mount Kenya University in order to distribute questionnaires to respondents as well as holding interviews with key informants. A documentary analysis was done using annual reports from Rwamagana District and secondary schools from 2019 to 2023.

Data Collection Instruments

According to Oso and Onen (2016) the instrument used in data collection refers to gathering the study findings to achieve items asked to respondents. Therefore, this study employed three research instruments such as questionnaire and guided interview and they comprised two sections. Section A for both questionnaire and interview, indicated the background information related to the study participants and section B of the questionnaire, comprised of close ended questions that were given to teachers so as to capture their responses related mentorship used as well as learning outcomes of students of selected schools located Rwamagana district.

The developed research questionnaire was stated in dummy numbers 1-5 so as to present the level of occurrence while section B of the guided interview which was given to school head teachers, comprised of open -ended questions so as to collect various information related to research variables and constructs, senior three students' division in national examinations used document analysis review.

Administration of Data Collection Instruments

After the provision of research permit, the selected public secondary schools in Rwamagana district was visited. Instruments that used in data collection was administered to teachers and school head teachers. The researcher personally through the assistance from school administration will distribute questionnaires to selected teachers and school head teachers was given guided interviews and educational document analysis review.

Results

Regression analysis between Female Teacher Mentorship and Female student academic Performance

The following multiple regression model was adopted:

$$P = \beta + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

P = Academic performance

β = Model Constant

$\beta_1 \dots \beta_3$ = Model Coefficients for independent variable X_1 - X_3

ϵ = Error term accepted that the normal distribution was $\epsilon \sim N(0, \sigma^2)$.

x_1 = Mentorship through Hiring Female Teachers in schools

x_2 = Mentorship through role modelling and parental attitudes

X_3 = Mentorship through Safe Learning Environment for both boys and girls

Inferential statistics on female teacher mentorship and enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education.

Table 11. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .901 ^a | .813 | .807 | .69043 |

a. Predictors: (Constant),Mentorship through Hiring Female Teachers in schools ,Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls

Source: Primary data (2023)

The results presented in Table 11 evidenced that the value of adjusted r square is 0.807 show the existence of change of 0.901 on Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education owing to the changes in the independent variable Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls).

Table 12. ANOVA

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 355.609 | 5 | 71.122 | 149.196 | .000 ^a |
| | Residual | 81.992 | 214 | .477 | | |
| | Total | 437.601 | 219 | | | |

a. Predictors: (Constant),Mentorship through Hiring Female Teachers in schools ,Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls.

b. Dependent Variable: Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education.

Mentorship through hiring female teachers in schools, mentorship through role modelling and parental attitudes, mentorship through safe learning environment for both boys and girls. The calculated value was 71.122. This indicates the general model was pertinent and that mentorship through hiring female teachers in schools, mentorship through role modelling and parental

attitudes, mentorship through safe learning environment for both boys and girls and all have a strong correlation between girls' education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education.

Table 13: Regression Coefficient

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | T | |
| 1 (Constant) | .824 | .217 | | 3.790 | .000 |
| Mentorship through Hiring Female Teachers in schools | .715 | .175 | .630 | 4.082 | .000 |
| Mentorship through role modelling and parental attitudes | .092 | .169 | .066 | .543 | .588 |
| Mentorship through Safe Learning Environment for both boys and girls | .023 | .203 | .017 | .114 | .909 |

a. Dependent Variable: Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education

Source: Primary data (2023)

The finding revealed that holding independent variables constant (Mentorship through Hiring Female Teachers in schools ,Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls) to a constant zero, Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education be at 0.23 a unit increase sanitary towels policy lead to Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education limited by a factor of 0.175

Regression analysis between independent variable and Girls' Education performance, mind-set, retention improved both in STEM and other subjects

Table 14 gives the summary of results between female teacher students and female education success, mind-set, retention increased both STEM and other subjects.

Table 14: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .925 ^a | .855 | .854 | .41684 |

a. Predictors: (Constant), Sanitary towels, Repetition policy, Readmission policy

Source: Primary data (2023)

From Table 14, the changed regression value is 0.855 and demonstration the adjustment of 0.92.5% of girls' education performance, mind-set, and retention improved both in STEM and other subjects obtained due to changes in the independent variable (Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls).

Table 15: ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 437.980 | 5 | 87.596 | 504.134 | .000 ^a |
| | Residual | 74.020 | 214 | .174 | | |
| | Total | 512.000 | 219 | | | |

a. Predictors: (Constant), Mentorship through Hiring Female Teachers in schools ,Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls

b. Dependent Variable: Girls' Education performance, mind-set, retention improved both in STEM and other subjects

Source: Primary data (2023)

Mentorship through Hiring Female Teachers in schools ,Mentorship through role modelling and parental attitudes, Mentorship through Safe Learning Environment for both boys and girls. Therefore, p-value has been 87.596 which indicated a strong relationship between mentorship through hiring female teachers in schools, mentorship through role modelling and parental attitudes, mentorship through safe learning environment for both boys and girls and all have a positive effect girls' education performance, mind-set, retention improved both in STEM and other subjects.

Table 16: Regression Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | Sig. |
|-------|--|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | T | |
| 1 | (Constant) | .568 | .052 | | 11.006 | .000 |
| | Mentorship through Hiring Female Teachers in schools | .067 | .021 | .091 | 3.124 | .002 |
| | Mentorship through role modelling and parental attitudes | .139 | .023 | .192 | 6.163 | .000 |
| | Mentorship through Safe Learning Environment for both boys and girls | .234 | .056 | .322 | 4.168 | .000 |

a. Dependent Variable: Girls' Education performance, mind-set, retention improved both in STEM and other subjects.

Source: Primary data (2023)

Results demonstrated that mentorship through hiring female teachers in schools, mentorship through role modelling and parental attitudes, and mentorship through safe learning environment for both boys and girls to a constant zero, girls' education performance, mind-set, retention improved both in STEM and other subjects would be at .568%, a change in repetition policy lead to improvement in girls' education performance, mind-set, retention improved both in STEM and other subjects limited by a factor of 0.23

Regression analysis between Independent variable and Community behavior change about educating girls from seeing them as marriage material to equal individuals

Table 17 evidences a model summary between female mentorship and community behaviour change about educating girls from seeing them as marriage material to equal individuals. More details are presented in Table 21; 22 and 20

Table 17: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .922 ^a | .849 | .848 | .56985 |

a. Predictors: (Constant), Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, and Mentorship through Safe Learning Environment for both boys and girls

Source: Primary data (2023)

From Table 17, a changed regression square is 0.849 which show that was a change of 0.922 on community behaviour change about educating girls from seeing them as marriage material to equal individuals due to changes in the independent variable (Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, and Mentorship through Safe Learning Environment for both boys and girls).

Table 18: ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | 780.545 | 5 | 156.109 | 480.734 | .000 ^a |
| | Residual | 138.335 | 214 | .325 | | |
| | Total | 918.880 | 219 | | | |

a. Predictors: (Constant), Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, and Mentorship through Safe Learning Environment for both boys and girls

b. Dependent Variable: Community behaviour change about educating girls from seeing them as marriage material to equal individuals

Source: Primary data (2023)

Mentorship through Hiring Female Teachers in schools, Mentorship through role modelling and parental attitudes, and Mentorship through Safe Learning Environment for both boys and girls affect community behaviour change about educating girls from seeing them as marriage material to equal individuals. The calculated value was 156.109. The study findings indicate the general

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summary is positively correlated mentorship through hiring female teachers in schools, mentorship through role modelling and parental attitudes, and mentorship through safe learning environment for both boys and girls) and all have a positive effect on the community behaviour change about educating girls from seeing them as marriage material to equal individuals.

Table 19: Regression Analysis

| Table 19: Regression Analysis | | Standard Coefficients | | Standardized Coefficients | | |
|-------------------------------|--|-----------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | T | Sig. |
| 1 | (Constant) | .503 | .071 | | 7.127 | .000 |
| | Mentorship through Hiring Female Teachers in schools | .309 | .029 | .315 | 10.561 | .000 |
| | Mentorship through role modelling and parental attitudes | .133 | .031 | .137 | 4.305 | .000 |
| | Mentorship through Safe Learning Environment for both boys and girls | .349 | .077 | .358 | 4.553 | .000 |

a. Dependent Variable: Community behaviour change about educating girls from seeing them as marriage material to equal individuals

Source: Primary data (2023)

Information felt that mentorship through hiring female teachers in schools, mentorship through role modelling and parental attitudes, and mentorship through safe learning environment for both boys and girls) to a constant zero, community behaviour change about educating girls from seeing them as marriage material to equal individuals would be at 0.833 a unit increase in mentorship through safe learning environment for both boys and girls lead to community behaviour change about educating girls from seeing them as marriage material to equal individuals limited by a factor of 0.064

Discussion

Information was analyzed according to three specific objectives. These objectives were to determine female teacher's mentorship strategies used in selected secondary schools located in Rwamagana district, to investigate the leaning outcomes realized by girls in secondary schools in Rwamagana District, Rwanda, and to establish relationship between female teacher's mentorship strategies and of female learning outcomes in secondary schools in Rwamagana.

Female teacher's mentorship strategies used in selected secondary schools in Rwamagana District

This research determined female teacher's mentorship strategies used in selected secondary schools located in Rwamagana district, in selected secondary schools in Rwamagana District, Rwanda. Findings indicated that 64.5% of respondents provided positive responses concerned with parental and mentorship involvement on building self-assurance and developing individual

knowledge such as confidence, dissemination of knowledge and solving skill issues. Consequently, female teacher mentors assist female students in boosting their learning outcomes and expected their needs, near 70% of female teachers in secondary schools accepted this statement.

Interestingly, 86.4% accepted that female students were afforded adequate guideline and counselling for dealing with psychological issues that may affect their learning outcomes, 80.0% of bridging the gap between female students and school management and this enhanced female student enrolment.

Results demonstrated that 53.1% show a strong agreement on the role model in helping female students to attain high level of performance in enhancing self-confidence. 49.0% accepted the importance of role model in disseminating information and interacting with female students to know their strong point and capabilities, 40.9% did not have parent awareness of female student expectations and poor female teacher involvement as role model. Results felt that 30.2 did not accepted the creation of conducive and safety school conditions for female student to enter into schools and attain high level of success, 69.8% accepted that mentorship is helpful to school administration to improve and ameliorate female student friendly spaces within secondary schools, moreover, 25.1% show a strong agreement on mentorship helpful role in sensitizing female students to use latrines and rest rooms and have access to sanitation equipment.

Level of Female Students Academic Performance in Selected Secondary Schools in Rwamagana District, Rwanda

This study evaluated level of female the success of female students and this was assessed using girls' education entry, completion increase to mean that 90% or enrolled girls complete their secondary education, girls' Education performance, mind-set, retention improved both in STEM and other subjects, and community behaviour change about educating girls from seeing them as marriage material to equal individuals.

The study indicated that Results presented demonstrated that 86.4% accepted that female students have self-motivation in their learning activities, 77.0% argued that girls of this school get improved grades in various exams compared to boys, it was only 3.33% of sampled population who did Girls of this school have regular class attendance. However, 76.4% accepted that there is an improved girls' completion in this school compared to the enrolment rate. The study indicates the Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education.

Relationship between female teacher's mentorship strategies and of Female Students Academic Performance

This connection between female teacher's mentorship strategies and of Female Students Academic Performance was established by correlation of girls' education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education, girls' education performance, mind-set, retention improved both in STEM and other subjects, and community behavior change about educating girls from seeing them as marriage material to equal individuals. Results shows the correlation matrix this connection between female teacher's mentorship strategies and of female student's academic performance improved Girls' Education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education, girls' education performance, mind-set, retention improved both in STEM and other subjects, and

community behavior change about educating girls from seeing them as marriage material to equal individuals). Results show the effect of female teacher mentorship on female student learning outcomes. Data indicated that mentorship through Hiring Female Teachers in schools was statistically associated with active learning with the 0.176 in improving test grade. Mentorship through role modelling and parental attitudes was connected to an increased grades at 0.887 and increased test.

Conclusion

Based on the study findings, the researcher make pertinent concluding remarks. The first objective, the study concludes that female teacher's mentorship strategies has been implemented in Rwamagana District as it has been done in other district in Rwanda. The most commonly adopted strategies in implementing female teacher's mentorship in studied schools are Encourage girls to have academic goals in their monthly meeting to discuss about female students challenges and ways of mitigating them; female staff play role modelling by sharing their own young journey and experiences and be resource for the girls, and creating safe learning environment for girls by being their advocate and trusted counsellors. To the second research objective, the study concludes that there is the girls' education enrolment and completion improved to mean that 90% or enrolled girls complete their secondary education, girls' education performance, mind-set, retention improved both in STEM and other subjects, and community behaviour change about educating girls from seeing them as marriage material to equal individuals but also improvement in gender parity indexed for female students. Generally, academic performance of female students has been increased.

Conclusion to the third objective felt that female teacher's mentorship strategies had a positive association with academic performance since the p value is less than 0.005. An increase of a unit in independent variable lead to an increase in dependent variable.

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