

# Female Adolescence Developmental Challenges And Academic Performance In Secondary Schools In Rwanda A Case Of Gs Nyamirama, Gatsibo District

Harerimana Theophile<sup>1</sup>, Dr. H. Opiyo Andala<sup>2</sup>

1 (Student, Mount Kenya University Rwanda)

2 (Lecturer, Mount Kenya University Rwanda)

---

## Abstract:

The study purpose was to assess influence of female adolescence developmental challenges on academic performance in public secondary schools in Gatsibo District, taking GS Nyamirama as a case. The study answered three specific objectives which included; to identify female adolescence developmental challenges among students in Gatsibo District, to find out the level of academic performance of female students in Gatsibo District and lastly to establish the influence of female adolescence developmental challenges on academic performance in Gatsibo District. A descriptive and correlational research designs were adopted. Target population for this study was 150 comprising of 19 teaching staff and 131 female students of GS Nyamirama. A sample size of 10 was calculated from population. The sampling techniques adopted included purposive, stratified and random sampling. Questionnaires were utilized to collect primary data in addition to head teacher interview guide while secondary data was collected through review of documentaries. Data analysis was done in line with objectives using IBM SPSS version 21 and results presented in tables. The findings constituted both descriptive statistics and inferential statistics. Descriptive statistics findings showed that 70% of students did agree that they experience various emotional challenges including feeling of loneliness, being irritated easily, developing sexual desires, getting angry with peers and teachers and day dreaming about the opposite sex. Additionally, 60% and above of students did point out social challenges at adolescent which included fear of talking or standing in front of teachers and fellow students, desire to spend much time with opposite sex, conflicts with parents also was mentioned by majority of teachers. Additionally, psychological developmental challenges pointed out by over 60% of students and teachers were related to fear of development of secondary sexual characteristics, shame of blood stains and enlarged breasts and hips and hair on armpits, and pimples on faces which were embarrassing to students. The mean response was approximately 4 for these cases with less than 1 standard deviation an indication of agreement. Additionally, over 60% of respondents did indicate that female students level of performance in exams has improved, they have developed a sense of self awareness, they have minimal indiscipline cases and they have lower irregular school attendance. The national exams result also indicated a rising trend of percentage of female students who got division 1 from 2015-2019 and decreasing trend for those who had division 4 in the same period. Pearson correlation coefficient for emotional, social and psychological adolescent developmental challenges was found to be -0.652, -0.610 and -0.685 respectively. Regression coefficients for emotional, social and psychological adolescent developmental challenges on the other hand were -0.152, -0.085 and -0.125 respectively with corresponding p values of 0.015, 0.038 and 0.026. The study concluded that female students face a lot of adolescent developmental challenges as pointed earlier, there academic performance was impressive though still below that of male students and there was negative significant influence of female students' adolescent developmental challenges on academic performance. Study recommended proper guidance and counseling to female students by teachers, government to provide necessary support in terms of sanitary materials to adolescent girls and lastly implementation of girl child education policies be done accordingly to improve further their academic performance.

**Key Words:** Female adolescence, female adolescence developmental challenges, academic performance, Secondary school

---

Date of Submission: 11-07-2023

Date of Acceptance: 21-07-2023

---

## I. INTRODUCTION

Adolescence period is a critical period in a girl's life as it greatly affects her future potential. This period represents key transitions in a girl's life right from being a girl to a woman, movement from primary to secondary education and lastly to joining the labour market. All these transitions at times does not end well with girl's life

resulting into possible dropouts from school, early marriages and possible drug abuse and HIV infections and maternal deaths among others (Aikman and Unterhalter, (2015).

Significant changes in psychosocial changes also occur at adolescence thus increased cognitive ability (Tamusuza, 2011). Adolescents experience development changes in every important social context, including family, school and peer groups. These factors may also influence their performance in school and other areas.

According to Calder and Huda, (2013) out of 582 million girls aged between 10 to 19 globally, an estimated 85% live under poverty conditions in developing countries Rwanda included. Additionally, in developing countries girls out of school are approximated to account for 25% of all girls (Chabaan and Cunningham, 2011). There is a greater percentage of girls who do not complete primary school in countries across the world accounting for between 50% to 80% (Hervish and Feldman-Jacobs,2011). This is an indication that girls are deprived and discriminated against any opportunity at high order in the society across the world. Less than 50% of women have access to literacy basics in half of African Countries according to Khosla and Kalita (2013). This is evidenced by low and irregular attendance of girls in schools (Maitra and Mani, 2012).

Plan International report of 2011 highlighted some of the results of girl's education as including postponement of marriage, reduced risk of HIV infection, family income increase and reduced fertility. In addition, girl's education also empowers the woman economically and politically and lastly reduces cases of domestic violence of which women are the mostly victimized.

In East Africa, girls are exposed to various risks and vulnerabilities that greatly impact negatively on the health status and living standards. Most girls in the east African countries are subject to high illiteracy levels, widespread poverty, high economic dependence low access to job opportunities which limits their income and lastly prevalent domestic violence and social discrimination. (KNBS, 2015).

In Rwanda, Primary education completion rate ranged between 52% to 75% in 2007 to 2009 of which female proportion formed majority at 78% compared to male counterparts at 71%. Additionally, transition rate to secondary also improved from 54% in 2008 to 88% in 2009 (MINECOFIN, 2016). Efforts to launch a policy that promotes girl child equal opportunity to in terms of access to education and income generation is in the process (Ministry of Heath, 2014). According to MINEDUC (2015), 47% of girls become pregnant while schooling exposing them to a number of difficulties. The continued trend of this phenomenon could plunge Rwanda's learning institutions in to a major crisis due to increased dropout form school among girls (REB, 2014).

Due to societal changes and exposures to various intellectual pursuits the development of adolescent has changed overtime. Technological advancement has enabled the adolescents to get exposed to various technological devices such as computers, cell phones and T.V sets (Oscar, 2013). The rate at which adolescents engage in sexual activities has increased overtime being active between age 13 years and 19 years, Plan International (2011). According to Santrock (2010), adolescents without parental guidance are more prone to sexual activities than the ones under parental guidance. Gatsibo District education report of 2018 indicated that most adolescents nowadays concentrate much on electronic devices which limits their time for studies hence possibly affecting their performance. A number of challenges are experienced by adolescents at school including inability to get along with teachers and administrators, poor adjustment to school programme, misconduct in classrooms which ultimately leads to poor grades in examinations hence poor school performance, Plan International (2011).

### **Statement of the problem.**

From studies done previously, an estimated one quarter of adolescent face risk of academic failure (CCAD, 2019). In fact, being below grade level (Mwaka, *et al.*,2010), low scores in tests (Tamusuza, 2011), lower completion rate (WDRE,2011), poor attendance in class (Maitra and Mani, 2012), high suspensions and expulsions (Cohen,2012) are indicators of low achievement.

Public secondary schools in Gatsibo District has recorded poor female academic performance. From secondary results analysis by Gatsibo District Education Office for the last five years (2016-2019), out of 1,340 candidates of 2016, 223 students from Gatsibo district got university direct admission of which girls only accounted for 22%(49 students). In 2017 however the number of girls who got direct university entry increased to 69 accounting for 23.7% of the total. Lastly in 2018 and 2019 the respective percentages of girls who got direct university admission was 20.5% (62 girls) and 28.4% (82 girls), (Gatsibo District, 2019).

Several studies indicate that the declining student performance begins at adolescence stage(Santrock). These challenges range from social, emotional and psychological dimensions. The psychological challenges include girls developing fear and embarrassment due to enlarged breasts and body weight, pimples in the face, among others. Emotional challenges include changes in moods, feeling of loneliness, getting irritated easily, developing negative attitude towards teachers among others. Lastly the social challenges include not free with teachers, always closer to opposite sex, not participative in class activities, not comfortable talking in front of peers among others. These challenges hinder the concentration of girls in their education activities hence can affect their performance. studies in Rwanda are not quite clear on what challenges students face at adolescence

that cripples their academic performance. (Rachel N, 2016). Despite this worrying trend of boys outshining girls in performance in Rwanda, studies on adolescence developmental challenges and academic performance in Rwanda are still scanty and have not specifically focused on girl child. Therefore, this study seeks to assess the effect of girl's adolescence development challenges on academic performance of female students in public secondary schools in Gatsibo District-Rwanda.

#### **Objectives of the study**

- (i) To identify adolescent developmental challenges among female students in Gatsibo District
- (ii) To evaluate the level of academic performance of female students in Gatsibo District.
- (iii) To establish the influence of female adolescence developmental challenges on academic performance of female students in Gatsibo District.

#### **Research questions**

- (i) What are adolescent developmental challenges among female students in Gatsibo District?
- (ii) What is the level of academic performance of female students in Gatsibo District?
- (iii) What is the influence of female adolescence developmental challenges on academic performance of female students in Gatsibo District?

## **II. REVIEW OF RELATED LITERATURE**

Barnett (2012) states that the stage of adolescence is characterized by human growth both psychologically, mentally and socially in addition to personality. Santrock (2010) further adds that adolescence transitions a child to adulthood and biological, cognitive and psychological changes rapidly takes place. These numerous changes that comes with adolescence poses challenges and opportunities not only to the adolescent but also to the family, teachers, health professionals and community at large (Cohen, Khurshid & Aurangzeb, 2012). Often the adolescent develops the urge to be more social and spend most of the time with the peers. Adolescence stage is divided into three: the first stage is between 10-13 which is referred to as early adolescence, the second stage which is the middle adolescence is from 13-18 while the last one referred to as the late adolescence is between 18-21 years (Cohen, 2012). The behaviors and reactions to issues totally changes among girls and boys at adolescence stage (Bosson, et al., 2012). These young adults' thoughts, ideas, and concepts begins to change rapidly to a future life when they reach adolescence. The developments in adolescent stage can be of three dimensions: emotional, psychological and social.

Emotion involves a feeling that arises when a person is in an important state or interaction with other individual (Santrock, 2010). In other words, emotion describes the state that is pleasant or unpleasant to the individual hence developing feelings. Emotions can either be negative or positive. Negative emotions are unpleasant feelings characterized by low self-esteem or sadness while positive emotions are characterized by high self-esteem or feeling of joy. According to Cohen (2012), emotional developments are common among adolescents and during such periods they cope with emotional changes through developing sense of identity and interacting with peers hence reducing effects of such e.g. stress.

In the context of emotional development, adolescence is defined as a stage when a person develops frequent emotional swings e.g. high or low emotional changes (Cohen 2012). Effects of emotional changes such as loneliness, social isolation, having bad thoughts among others can lead to drug abuse which interferes with the adolescent's effort to adjust to emotional changes. However, drug abuse also arises when a person believes that it enhances easy interaction with the peers. Severe emotional changes can lead to the adolescent blowing off to his or her siblings or parents. A study by Khurshid & Aurangzeb (2012), did indicate that majority of students adjusted positively to emotional changes even though 20% couldn't and exhibited negative emotional change traits such as loneliness, mood swings and self-unconscious. Its however important that adolescents cope with severe emotional changes and adjust accordingly to avoid falling into depression traps (Bosson, Maggiori, Gyax, & Gay, 2012).

According to Santrock (2010) suicidal attempts among adolescents originates from accumulated stress overtime since childhood usually caused by bad relationships with parents and school difficulties and loneliness that comes with adolescence. Although increased cognitive ability and awareness among adolescents can help in managing emotions, many have been defeated to do so and often end up rebelling against parents and teachers. The loss of loved one and family divorce can also lead to depression among teenagers. However, teenager's depression comes with lots of anger which can be perceived as normal emotional behavior with adolescent though not (Santrock, 2010)

When a teenage is in depression it's better to inquire about their problems as a parent or guardian or alternatively engage a friend to do so (Khurshid & Aurangzeb, 2012). Positive behaviors by adolescents must be emphasized by parents among their children to shield them from the trap of bad companies (Webster (2013).

An adolescent is deemed to be emotionally healthy if he or she is able to balance the emotions and tackle negative effects appropriately with being overstretched. Therefore, teachers and parents have to understand the

need to manage emotional changes to the adolescent's future life success (Aikman and Unterhalter (2015). It's also important to note that adolescent stage is very critical to the development of intelligence and competence among the adolescents which is of importance to success in life in terms of social and academic achievements.

Physical maturity among adolescents affects their social dimension (Santrock (2010). Adolescence is a critical stage characterized by rapid cognitive growth which influences person's communication and functional ability in the social world (Moshman, 2011).

Aikman and Unterhalter (2015) stipulates that adolescent stage sometimes embarrasses the victims. For example, enlarged breasts, menstrual blood and sweat in the armpits among girls causes discomfort on the other hand boys are worried of unusual ejaculation. These experiences among adolescent could impact negatively on the academic performance.

Rites of passage were perceived to be good preparation ground since adolescent could share their experiences easily hence critical to preparation for the future life social behavior inclusive. Social development is characterized by ability to seek freedom and enhanced personal identity (Santrock (2010). Social development allows adolescent to critically analyses the past, present and future hence able to cope up with life challenges. Additionally, they are able to get consumed in the current trends in life eg music, language and fashions which takes much of their time and hence may impact on their concentration in academic matters.

Self-identity is not achieved by everyone according to Cohen (2012). Many adolescent face identity crises which can ultimately affect their future life beyond adolescent. For example, girls may end up engaging in early marriages and boys remaining unmarried due to lack of self-identity (Cohen, 2012).

According to past researchers, boys with low testosterone levels and high endostestorene levels poses a greater chance of involving in behavior problems such as questioning authority excessively and being rude to adults. Children infancy stage where they develop lots of tempers and restlessness could explain their anti-social behavior (Cohen (2012). Effective parenting is therefore very important in curbing anti-social problems among children.

According to Khurshid & Aurangzeb (2012) children needs to be allowed to acquire proper socialization by parents and teachers without which the results are lack of honesty, courage, self-esteem among others. Students with social problems experience intellectual deterioration and lack problem solving skills. Soomoro and Clarbour (2012) however stresses that there is a direct link between high self-esteem and academic achievement.

According to Cohen (2012), adolescent is characterized by physical and psychological changes which includes sexual development like ability to reproduce among girls and sweat in armpits for both. These changes always cause anxiety and discomfort among adolescents. Psychological changes during adolescent is very paramount and should be treated with lots of care to avoid the adolescent being affected negatively in his or her life domains. (Barnett, 2012).

Academic performance is measured in terms of learner's achievement of learning outcomes. The understanding of the learner of the various learning targets set out in various learning institutions particularly secondary and higher institutions of learning is an indicator of academic performance. Academic performance is very wide and encompasses several learning outputs hence should be treated as a multidimensional concept that cuts across diverse fields.

In developing countries, learning outcomes greatly determines the academic progress and future life of student. The GPA method of determining academic success is a greater tool that determines student's entry into higher learning institution from the secondary level.

The existence of strong association between academic performance and socioeconomic aspects of development has greatly promoted international researches particularly PISA conducted by OECD. Results of the studies provide a basis for academic performance measurement scales and coming up with appropriate rules and regulations regarding education.

From the researcher's viewpoint, academic performance of a student is measured by the extent to which he or she has achieved educational goals. The various elements of academic performance of focus included national exam grades, marks in internal assessments and homework assignments. However, the index measurement of performance focus on ranking of schools from high index to low index which is used as a basis for revenue allocation whereby highest ranked school receives highest revenue. (Altbach & Balan, 2007). This ranking and revenue allocation criteria can encourage low performing schools to put more effort (Marmolejo, 2015).

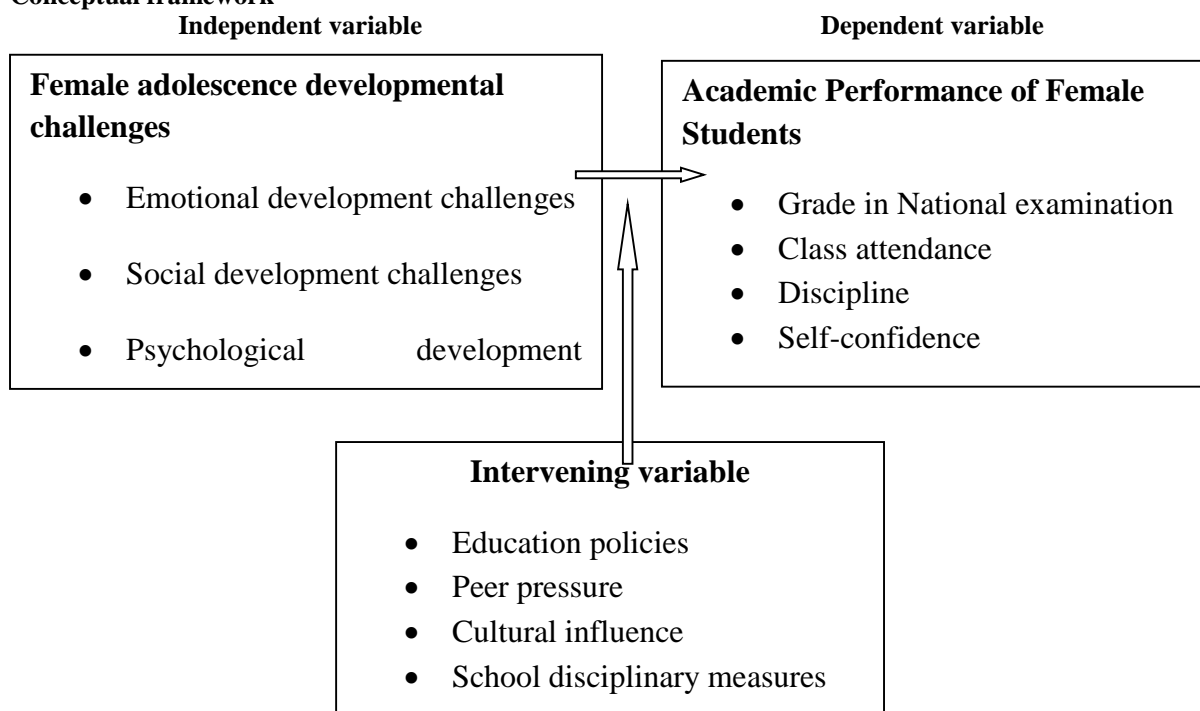
Teaching and learning indicators have been given greater consideration in a number of previous studies conducted among universities to assess their performance (Asif & Searcy, 2014). Additionally, other researchers measured education performance based on income from education consultancy and projects (Asif & Searcy, 2014) while others dwelt on students' satisfaction level with education services (ECPE, 2011). Limited interest was given to indicators such as reputation, securing job or field medals.

Girl's performance strategies are model of development that take into consideration the involvement of people in assessing their needs and problems but also to select adequate solutions through democratic processes

in local setting, own investment in infrastructural development, eliminating problems and consequences of past injustices and insecurity in rural areas with special references to females and young girls (Moseley 2003). A study of Robert Chambers demonstrated that the concept of girl's performance is one of approaches that empower a particular segment of the population, poor people, marginalized groups and residents of rural settings, girl and females to participate themselves in economic activities. In short, girl's performance is defined as a process that lead to sustainable advancement in the eminence of living conditions in rural areas. (Brown 2009).

Girl's performance as a theoretical concept lacks a precise definition. Perhaps this explains the reasons for the differences in approach to it in many parts of the world. The World Bank (2013) looks at girl's performance as purely a theory to do with economics which it believes can be achieved by raising the low levels of rural income. It recommends agricultural modernization as a way of realizing this. Yet Okafor (2012), as cited by Alkam (2005), views this theory from the angle of welfare which can be measured by parameters of the standard of living. All the divergent theories agree however, that girl's performance is the enhancement in the rural existential situations which can be realized with the facilitation of governments, (Charmichael, 2015). This therefore puts the factors which influence the theory of girl's performance as described by Bruns (2011), under two arms of; culture and beliefs as one arm, the other being that of; non-discrimination in the economic, political, and social aspects of life (Osinulu 1994).

**Conceptual framework**



**Figure 2. 1 Conceptual Framework**  
**Source: Researcher (2023)**

**III. RESEARCH METHODOLOGY**

**Research Design**

Descriptive research design was adopted by researcher which involve utilizing qualitative and quantitative research approaches. According to Franis, et al (2010) a descriptive research design help to collect data with accuracy subject of the study. In addition, correlational design was used to explain the association or relationship that exists between girl's adolescence developmental challenges and academic performance.

**Population and sample**

The population of the study included 19 teaching staff and 131 girl's students of GS Nyamirama. The population was 150 people. It was female students and teaching staff members from Groupe Scolaire Nyamirama. The study population covered one school due to their maturity to provide relevant information. the sample size was calculated using Slovins formula

$$n = \frac{N}{1 + N * (e)^2}$$

n=110

$$n = \frac{150}{1 + 150 * (0.05)^2}$$

**Table 3.1: Summary of the sample size**

S/N	Description	Population	Sample	Sampling Techniques
1	Head Teacher	1	1	Stratified, census
2	Teachers	18	11	Stratified, simple random
3	Students(Girls)	131	98	Stratified, simple random
	Total	150	110	

**Source: Researcher (2023)**

Data collection instruments used were questionnaire, interview guide and documentary analysis. Questionnaire was constructed and given to respondents as sample of targeted population. Self-administered questionnaire was addressed to respondents and collected after two days.

The Key Informant interview was conducted with head teacher, deputy head teachers in charge of studies and deputy head teacher in charge of discipline because the researcher expected these people to have adequate information on girl-child education, discipline and academic performance of female students.

The secondary information sources included collection and analysis of data from reports, published material and information from Ministry of gender promotion Rwanda. The reports were analyzed and complemented the primary data collected.

**Data Analysis Procedure**

Statistical Product and Service Solutions (SPSS) version 21 was used to generate tables and figures. As the research was quantitative and qualitative types, quantities were used to facilitate the action of data presentation and analysis. The respondents from the respondents were analyzed to and organized according to each objective and according to research question.

The data was further synthesized to provide descriptive statistics such as percentages, frequency and tables and have a worthwhile conclusion and to satisfy the requirements of accuracy and completeness. The data tables were used in data presentation.

A multiple regression approaches was adopted to indicate the relationship of education for female students to their academic performance in Rwanda. The following multiple regression model was adopted:

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

**IV. RESEARCH FINDINGS AND DISCUSSION**

**Research findings**

This was done as per objective

**To identify adolescent developmental challenges among female students in Gatsibo district.**

The researcher sought opinions of students and teachers regarding the various developmental challenges both emotional, social and psychological eminent among students of O and A level.

**Students opinion on emotional adolescent developmental challenges**

The students’ opinion regarding emotional developmental challenges among female adolescents did reveal that all of them agreed they get irritated easily, 72% expressed a feeling of loneliness, 65% opined they get easily get angry with peers and teachers, 88% agreed day dream about opposite sex, 80% indicated that they tend to develop a feeling of sexual relationship and desire and lastly 20% don’t have morale to engage in constructive activities. Additionally, 50% did disagree they don’t have morale to engage in constructive activities. The mean value was above 4 in all cases except in the case of not having morale to engage in constructive activities where the mean was 2.52. The mean value of 4 was an indication of wide agreement with statements. Additionally, the standard deviation was below 1 in all cases indicated a smaller deviation. The findings indeed indicated that students at GS Nyamirama exhibited emotional developmental challenges to a greater extent.

**Table 4.1: Students opinion on emotional adolescent developmental challenges**

Emotional developmental challenges for female adolescents	SA	A	N	D	SD	Mean	St. Dev
I get irritated easily	32%	68%				4.4	0.35
I tend to have a feeling of loneliness	10%	62%	20%	8%		4.1	0.71
I easily get angry with my peers and teachers	10%	55%	30%	5%		4.05	0.82
I day dream a lot about the opposite sex	30%	58%	10%	2%		4.38	0.26
Developing sexual relationship and desire	20%	60%		20%		4.29	0.31
I don't have the morale engaging in constructive activities		20%	30%	50%		2.52	0.48

Source: Primary data, 2023

**Students opinion on social adolescent developmental challenges**

The findings from students regarding social challenges of adolescent female students indicated that 12% of students will do anything to be accepted by friends whether good or bad, 15% opined they don't like being closer to teachers while 65% indicated they like being closer to opposite sex and creating sex relationships, 60% were afraid asking questions in class for the fear of being embarrassed and also they are afraid talking in front of fellow students or large group and lastly 20% opined they are not supportive in group work assignments. Additionally, 88% did disagree they will do anything to be accepted by friends whether good or bad, 85% disagreed that they don't like being closer to teachers, 80% disagreed that they are not supportive in group work assignments. In these three cases, the mean value averaged 2 with a standard deviation of less than 1. However, the mean value for being closer to opposite sex and creating sexual relationships, being afraid of asking teachers or fellow students' questions and being afraid of speaking in front of fellow students or a large group was 3.79 and 3.71 respectively with a standard deviation of less than 1. These findings indeed indicate that the emotional challenges at adolescent exhibited by female students at GS Nyamirama mainly includes afraid of speaking in front of people and being shy of asking questions and also being closer to opposite sex and making sexual relationships.

**Table 4.2: Students' opinion on social adolescent developmental challenges**

Social development challenge for girl adolescents	SA	A	N	D	SD	Mean	Std. Dev
I will do anything to be accepted by friends whether it's good or bad.		12%		58%	30%	2.2	0.58
I don't like being closer to teachers		15%		60%	25%	2.15	0.6
I like being closer to students of opposite sex and creating sexual relationships	20%	45%	10%	25%		3.79	0.32
Am afraid asking teachers or fellow students questions in class due to the fear of being embarrassed	10%	50%	10%	30%		3.71	0.4
I don't have courage to speak in front of fellow students, teachers or any other group of people	10%	50%	10%	30%		3.71	0.4
I am not supportive to my peers on class assignments and discussions.		20%		65%	15%	2.35	0.65

Source: Primary data, 2023

**Students opinion on psychological adolescent developmental challenges**

The students' opinion regarding the psychological development challenges indicated that 60% did agree that they experience unusual periods and they fear blood stains, and the growth of hair in their private parts makes them feel uncomfortable, 65% did opine that rapid increase in breast size is embarrassing, they are afraid of enlarged hips and they are embarrassed of their body image and appearance of pimples on their face, lastly 45% did indicate that they have a lot of body weight. On the other hand, 30% of students disagreed they experience unusual periods and they fear blood stains, 55% disagreed they have a lot of body weight while 35% disagreed that they are embarrassed of increased breast size, enlarged hips, body image and pimples on their faces and lastly 30% didn't agree that hair growth in the private parts makes them feel uncomfortable. The mean value average 4 for experiencing unusual periods and fear of blood stains, embarrassing increased breast size, hips, pimples on face, and hair growth in private parts which brings discomfort and embarrassing body image while having a lot of body weight had a mean of 2.89. The standard deviation was less than 1 in all cases. These findings indicated that psychological challenges eminent among students of GS Nyamirama are increased breasts, unusual periods, face pimples, hair growth in private parts, enlarged hips and body image which are embarrassing.

**Table 4.3: Student opinion on psychological adolescent developmental challenges**

Psychological development challenge for girl adolescents	SA	A	N	D	SD	Mean	Std. Dev
I experience unusual periods and I fear blood stains	10%	50%		20%	10%	3.85	0.4
I have a lot of body weight	5%	40%		45%	10%	2.89	0.62
Rapid increase in breast size is embarrassing	20%	45%		35%		4.1	0.24
I am afraid of enlargement of my hips	20%	45%		35%		4.1	0.24
I get embarrassed of my body image	20%	45%		35%		4.1	0.24
The growth of hair in my private parts makes me feel uncomfortable	10%	50%	10%	30%		3.95	0.34
The appearance of pimples in my face is embarrassing	20%	45%		35%		4.1	0.24

Source: Primary data, 2023

**Teachers opinion on adolescent developmental challenges among female students**

The researcher also sought teachers’ opinion on adolescent developmental challenges among female students. The findings did reveal that 45% of teachers agreed that there is high level of truancy among female students while 55% disagreed, 40% opined that female students are defiance of authority while 60% disagreed, 60% of teachers agreed that there are cases of parent child conflict while 40% didn’t agree, 55% indicated cases of violence among female students while 40% had opposite opinion, 80% supported that female students have desire for sexual relationship while 20% didn’t agree, 75% indicated that female students are prone to drop out while 25% disagreed, 70% of teachers also indicated that there is high peer pressure among female students while 60% indicated that female students are shy and inactive in class. Drug and substance abuse among female students was supported by 40% of teachers while all teachers agreed that secondary sexually characteristics are eminent among female students. Dug and substance use among female students was however not supported by 60% of teachers.

The mean averaged above 3.5 for most cases except for drug and substance abuse, high level of truancy, defiance of authority which reported below 3.5 an indication of disagreement with lack of cooperation with fellow students in doing assignments recording the lowest mean of 2.25. The standard deviations were all less than 1. These findings indeed indicated that there are female adolescent developmental challenges at GS Nyamirama as pointed out by teachers including high truancy among female students, defiance of authority by female students, violence among female students and parent child conflict, school dropout, peer pressure, secondary sexual characteristics, being shy and desire for sexual relationships.

**Table 4.4: Teachers’ opinion on adolescent development challenges among female students**

Adolescent developmental challenges for female students	SA	A	N	D	SD	Mean	Std. Dev
There is high level of truancy among female students		45%		55%		3.3	0.45
They are defiance of authority		40%		60%		3.2	0.54
There are cases of parents/child conflict	10%	50%		40%		3.74	0.35
Cases of violence among female students	15%	40%	5%	40%		3.55	0.32
They have a desire for sexual relationship	15%	65%		20%		4.05	0.21
They are prone to dropping out of school	10%	65%		25%		3.95	0.26
Lack of cooperation with their fellow students in school assignments		30%		60%	10%	2.25	0.56
High peer pressure among female students	10%	60%		30%		3.88	0.30
They are shy and inactive in class	5%	55%		30%	10%	3.74	0.35
Drug and substance abuse among female students	10%	30%		45%	15%	3.35	0.58
Secondary sexual characteristics	20%	80%				4.53	0.11

Source: Primary data, 2023

**To evaluate the level of academic performance of female students in Gatsibo District**

The second objective of this study involved evaluation of the level of academic performance of female students in Gatsibo district. The opinion of students and teachers aided the achievement of this objective.

**Students opinion on the level of academic performance of female students**

From the findings 65% of the students did agree that their performance in exams has increased overtime, while 35% did not agree, 60% indicated that they have consistently attending all classes while 40% declined, 80% did agree that they have been involved in minimal indiscipline cases and that they have developed a sense of self-awareness while 20% declined. The mean value was more than 3.7 for all cases with less than 1 standard deviation indicating that the academic performance of female students has improved.



**Table 4.5: Students opinion on the level of academic performance**

Academic Performance	SA	A	N	D	SD	Mean	Std. Dev
My performance in exams has increased overtime	25%	40%		30%	5%	3.8	0.24
I have consistently been attending all my classes	10%	50%		30%	10%	3.75	0.32
I have been involved in minimal indiscipline cases	20%	60%		20%		4.15	0.21
I have developed a sense of self awareness	20%	60%		20%		4.15	0.21

Source: Primary data, 2023

**Teachers opinion on the level of academic performance of female students**

The teachers’ responses did indicate that 20% agreed the female students’ performance in exams is comparably lower and they have comparably lower self-awareness while 80% declined, 30% indicated that female students have comparably high irregular class attendance and they exhibit comparably high cases of indiscipline while 70% disagreed. The mean values all averaged 2.2 and 2.3 with less than 1 standard deviations an indication that the level of academic performance has improved among female students.

**Table 4.6: Teachers opinion on the level of academic performance of female students**

Academic Performance	SA	A	N	D	SD	Mean	Std Dev
Female students performance in exams is comparably lower		20%		70%	10%	2.3	0.11
There is comparably high irregular class attendance among female students		30%		40%	30%	2.2	0.15
There is high rate of indiscipline cases among female students		30%		50%	20%	2.2	0.15
A sense of self awareness is relatively lower among girls		20%		40%	40%	2.3	0.11

Source: Primary data, 2023

From the interview session, the head teacher of GS Nyamirama did indicate that girls are more discipline and that early marriages and social media effects are some challenges that female adolescents are facing. Additionally, he indicated that the performance in exams for female students has increased though still low compared to their male counterparts. For the last five years, the performance has improved among female students (table 4.7). The percentage of those who attained division 1 steadily rose up from 12% in 2015 to 29.4% in 2019. Additionally, the percentage of girls who attained division 4 steadily dropped from 21.6% in 2015 to 5.6% in 2019. This showed an improvement in female students’ performance.

**Table 4.7: Results analysis for female students between 2015-2019**

year	No enrol	Percentage pass D1	Percentage pass D2	Percentage pass D3	Percentage pass D4
2015	79	12%	28.4%	38%	21.6%
2016	62	9.6%	17%	41.9%	31.5%
2017	49	7.04%	13.3%	4.6%	33.6%
2018	81	23.7%	18.9%	31%	26.4%
2019	101	29.4%	26%	39%	5.6%

Source: Primary data, 2023

**To establish the influence of female adolescent developmental challenges on academic performance of female students in Gatsibo District**

To achieve this objective, the researcher conducted correlation and regression analysis.

**Correlation analysis**

The researcher determined the strength of association between emotional, social and psychological adolescent developmental challenges and academic performance of female students. The findings indicated that Pearson correlation coefficient between emotional adolescent challenges, social adolescent challenges, psychological adolescent challenges and academic performance of female students is -.652, -.610 and -.685 respectively. this shows that there is high negative association between adolescent developmental challenges and female student academic performance.

**Table 4.8: Correlation between adolescent developmental challenges and student academic performance**

		Emotional Challenges	Social Challenges	Psychological Challenges	Academic Performance
<b>Emotional Challenges</b>	Pearson Correlation	1	.165	.087	<b>-.652</b>
	Sig. (two tailed)		.075	.067	.058
	N	110	110	110	110
<b>Social Challenges</b>	Pearson Correlation	0.165	1	.263	<b>-.610</b>
	Sig. (two tailed)	.075		.078	.056
	N	110	110	110	110
<b>Psychological Challenges</b>	Pearson Correlation	.087	.263	1	<b>-.685</b>
	Sig. (two tailed)	.067	.078		.183
	N	110	110	110	110
<b>Academic Performance</b>	Pearson Correlation	<b>-.652</b>	<b>-.610</b>	<b>-.685</b>	<b>1</b>
	Sig. (two tailed)	.058	.056	.183	
	N	110	110	110	110

Source: Primary data, 2022

**Regression Analysis**

The study conducted regression analysis to establish the influence of female adolescent developmental challenges on academic performance of students.

**Model summary**

The R squared value was found to be 0.648 equivalent to 64.8%. This implied that adolescent developmental challenges particularly psychological, social and emotional challenges account for 64.8% of the variations in academic performance. The remaining 35.2% is accounted for by other factors affecting academic performance that are not captured in the current study.

**Table 4.14: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805	.648	.618	.32570

Source: Primary data, 2023

**ANOVA**

The analysis of variance determines the suitability of the model used in the study. this is shown by the F value and the significance value in the ANOVA results. The findings did indicate that F statistic value was 115.382 with a significance value of 0.000. The significance value was less than 5% implying that the regression model used in this study was appropriate in analyzing the influence of female adolescent developmental challenges on academic performance.

**Table 4.9: ANOVA**

Model	Sum of Squares	Df	Mean Squares	F	Sig.
Regression	49.846	3	16.615	115.382	.000
Residual	13.482	96	0.144		
Total	63.328	99			

Dependent variable: Academic Performance

Source: Primary data, 2023

**Regression coefficients**

Regression coefficients measures the magnitude of the effects of one variable on the other. The findings did indicate that emotional, social and psychological female adolescent developmental challenges had beta coefficients of -0.152, -0.085 and -0.125 respectively. The corresponding significance values were 0.015, 0.038 and 0.026 respectively. The coefficients values imply that 1% change in emotional, social and psychological developmental challenges leads to a 15.2%, 8.5% and 12.5% change in the opposite direction. Both emotional, social and psychological challenges have negative influence on academic performance of female students. Increased occurrence of psychological, social and emotional adolescent challenges leads to reduction in academic performance of female students. Lastly the P values were less than 5% for both emotional, social and psychological adolescent challenges an implication that they significantly influence the academic performance of female students

**Table 4.10: Model Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	.205	.189		1.085	.001
Emotional challenges	-.152	.038	-.136	4.000	.015
Social challenges	-.085	.058	-.063	1.466	.038
Psychological challenges	-.125	.032	-.107	3.906	.026

**Dependent variable: Academic Performance  
Source: Primary data, 2023**

**Discussion of findings**

The above findings were discussed in this section in line with the objectives.

**Female Adolescent developmental challenges in secondary schools**

The first objective of the study was based on identifying the female adolescent developmental challenges among secondary school students. The study focused on emotional, social and psychological challenges at adolescent. The findings did indicate that over 70% of female students do experience various emotional challenges at adolescent including feeling of loneliness, being irritated easily, developing sexual desires, getting angry with peers and teachers and day dreaming about the opposite sex. Additionally, the findings also indicated greater percentage of female students exhibiting social challenges supported by over 60% of respondents. The most notable social developmental challenges included desire to be closer to opposite sex and creating sexual relationships, fear of talking in front of fellow students or teachers and fear of asking the fellow students or teachers questions, high peer pressure, violence cases among students, prone to school dropout and shyness. Lastly, the notable psychological challenges among female adolescents which were supported by a higher percentage of at least 60% included unusual periods and blood stains which makes them fear, increased breast sizes and enlarged hips which are embarrassing, hair in private parts and pimples on the face which makes them embarrassed. These results indeed indicate that female students do face a lot of challenges at adolescent related to emotional, social and psychological dimensions. These findings support the arguments of Santrock (2010) and Cohen (2012) who indeed opined that female students face a lot of challenges ranging from social and emotional challenges during adolescent that could negatively affect their performance.

**Level of academic performance of female students in secondary schools in Gatsibo district.**

The study assessed the level of academic performance by focusing on the attendance rate, involvement in indiscipline cases, self-awareness development and performance in exams. From the study responses of the students and teachers, the level of academic performance immensely improved for female students. High percentage of respondents over 60% did indicate that female students level of performance in exams is high, they have developed a sense of self awareness, they have minimal indiscipline cases and they have lower irregular school attendance. Lastly, the national results analysis between 2015 and 2019 also did indicate an increase in the percentage of division 1 female students and a decrease in the percentage of division 4 female students over time. These results indeed point the conclusion that there was improved female students’ performance despite the challenges that they face in their adolescent stage.

**Influence of female adolescent developmental challenges on academic performance**

The last objective focused on the influence of female adolescent developmental challenges on academic performance of female students. The results of correlation analysis did indicate negative association between girls’ adolescent developmental challenges particularly social, emotional and psychological challenges and academic performance. It implied that a rise in adolescent developmental challenges lead to a fall in academic performance of female students. Additionally, the regression coefficients also were negative in the case of emotional, social and psychological adolescent developmental challenges. These results indeed indicate that there was significant negative influence of female adolescent developmental challenges on academic performance. These results are in agreement with those of Aikman and Unterhalter (2015) Who opined that psychological adolescent challenges such as enlarged breasts, hair on armpits and blood stains embarrass girls and negatively affect their academic performance.

## V. SUMMARY, CONCLUSION AND RECOMMENDATION

### Summary

The study aimed at determining the influence of female adolescent developmental challenges on academic performance in secondary schools. The summary of the findings as per the objectives are presented under.

#### **To identify female adolescent developmental challenges in secondary schools**

The study focused on emotional, social and psychological adolescent developmental challenges. The findings did indicate that Over 70% of female students do experience various emotional challenges at adolescent including feeling of loneliness, being irritated easily, developing sexual desires, getting angry with peers and teachers and day dreaming about the opposite sex. The findings also pointed out social adolescent developmental challenges as including desire to be closer to opposite sex and creating sexual relationships, fear of talking in front of fellow students or teachers and fear of asking the fellow students or teachers questions, high peer pressure, violence cases among students, prone to school dropout and shyness. These were supported by over 60% of respondents some by students and some by teachers. Lastly, the notable psychological adolescent developmental challenges among female adolescents which were reported by most students included unusual periods and blood stains which makes them fear, increased breast sizes and enlarged hips which are embarrassing, hair in private parts and pimples on the face which makes them embarrassed. The teachers also noted development of secondary sexual characteristics among their female students at adolescent which makes them feel shy and not having courage to speak or stand in front of their peers and teachers.

#### **To evaluate level of Academic performance of female students in secondary schools in Gatsibo district**

The findings did indicate a great improvement in the level of academic performance of female students. High percentage of respondents over 60% did indicate that female students level of performance in exams was high, they have developed a sense of self awareness, they have minimal indiscipline cases and they have lower irregular school attendance. Lastly, from the interview session with head teacher of G.S Nyamirama Secondary School, the national results analysis between 2015 and 2019 indicated an increase in the percentage of division 1 female students and a decrease in the percentage of division 4 female students over time. These results indeed point the conclusion that there was improved female students' performance despite the challenges that they face in their adolescent stage.

#### **To establish influence of female adolescent developmental challenges on academic performance**

The results of correlation analysis did indicate negative association between girls' adolescent developmental challenges particularly social, emotional and psychological challenges and academic performance. It implied that a rise in adolescent developmental challenges lead to a fall in academic performance of female students. Additionally, the regression coefficients also were negative in the case of emotional, social and psychological adolescent developmental challenges. These results indeed indicate that there was significant negative influence of female adolescent developmental challenges on academic performance.

### Conclusion

From the above results, the researcher concluded that there is high rate of adolescent developmental challenges among female students in Gatsibo district. Girls face lots of challenges at adolescent ranging from emotional, social and psychological challenges particular enlarged breasts and hips, and hair on armpits which embarrass them, blood stains and unusual periods, fear of talking in from of fellow students and teachers, fear of standing in from of fellow students and teachers, drop out of school, feeling of shyness and loneliness and desire to be with opposite sex and make sexual relationships often.

Additionally, the study concluded that female academic performance has improved immensely over time. They have developed sense of self awareness, lower irregular school attendance and improved performance in national exams though still lower than that of male.

Lastly the study concluded that there was negative significant influence of social, emotional and psychological female adolescent developmental challenges on academic performance.

### Recommendations

The researcher came up with some recommendations of the study based on the conclusions above.

First this study recommends that head teachers and teachers should ensure that female students at adolescent get maximum support in order to address the challenges that comes with adolescent. This can be done through proper guidance and counseling to ensure that female students don't feel embarrassed by the psychological or get frustrated by emotional and social challenges at adolescence.

Secondly this study also recommends that the government through the ministry of education should offer support to female students through provision of sanitary materials so that they can address the psychological challenges such as blood stains that embarrassing to the female students.

Lastly school management should come up with appropriate disciplinary measures in a bid to improve the academic performance of female students. Female students have more needs and therefore there is need to come up with policies that aims at providing extra care so that they can fairly compete with their male counterparts.

### **Area for further research**

This study was based on analysis ng female adolescent developmental challenges in secondary schools in Gatsibo district. Same research can be done taking a case of other districts so that results can be compared.

Further research can also be done on the side of male students to ascertain which challenges they face at adolescent and how to tackle them. This can bring some fairness and improve the study area.

### **REFERENCES**

- [1]. Aikman S And Unterhalter E. (2015). *Beyond Access: Transforming Policy And Practice For Gender Equality In Education*. Oxford: Oxfam G.B.
- [2]. Aikman S. And Unterhalter E. (2015). *Beyond Access: Transforming Policy And Practice For Gender Equality In Education*. Oxford: Oxfam GB.
- [3]. Aikman S. And Unterhalter E. (2015). *Conclusion, Policy And Practice Change For Gender Equality*. Oxford: Oxfam GB.
- [4]. Barnett R.V. (2012). *Helping Teens Answer The Question. 'Who Am I?'. Cognitive Development In Adolescents*. Florida: University Of Florida.
- [5]. Bossom M. Et Al. (2012). *Smoking And Adolescence: Exploring Tobacco Consumption And Related Attitudes In Three Different Age Groups In Switzerland*. *Journal Of Youth Studies*, 15, 225-240.
- [6]. Calder R And Huda K. (2013). *Adolescent Girls' Economic Opportunities Study*. Mimeo: Nike Foundation And Girl Hub Rwanda.
- [7]. Chabaan J. And Cunningham W. (2011). *Measuring The Economic Gain Of Investing In Girls. The Girls Effect Dividend Policy Research Working Paper 5753*. Geneva: World Bank.
- [8]. Cohen M.I. (2014). *Definition Of Influence*. Dictionary.Com.
- [9]. Franis Et Al. (2010). *Women's Education In India: An Analysis*. *Asia Pacific Journal Of Social Science*, 11(1), 106-124.
- [10]. Hervish A. And Feldman C. (2011). *Who Speaks For Me?. Ending Child Marriage*. . Population Reference Bureau.
- [11]. Khurshid F And Aurangzeb W. (2012). *Teaching Styles And Adolescents' Psychosocial Development*. *Global Journal Of Human Socila Sciences , Linguistics And Education.*, 12(10) Version 1.
- [12]. Khosla P And Kalita D. (2013). *Young Women: Life Choices And Livelihoods In Poor Urban Areas*. Action Aid.
- [13]. Kisilu J, Kimani E. And Kombo D. (2012). *Factors Influencing Aspirations Among Girls In Secondary Schools In Nairobi Region, Kenya*. *Prime Research On Education , 2(4)*, 244-251.
- [14]. KNBS And ICF International. (2015). *Kenya Demographic And Health Survey 2014*. Calverton: KNBS And ICF International.
- [15]. Komba S.C. And Wilson J. (2012). *The Link Between English Language Proficiency And Academic Performance. A Pedagogical Perspective In Tanzania Secondary Schools*. Dar Es Salam.
- [16]. Koskey C. (2011). *Challenges And Prospects. The Case Of Education In Kenya In The 21st Century*. *International Journal Of Humanities And Social Sciences.*, 1(6), 257-261.
- [17]. Kothari C.R. (2004). *Research Methodology. Methods And Techniques*. 2nd Edition. New Delhi: New Age International .
- [18]. Kudari J.M. (2016). *Survey On The Factors Influencing The Student's Academic Performance*. *International Journal Of Emerging Research In Management And Technology*, 5(5), 30-36.
- [19]. Lange N. (2012). *Youth Envisioning Safe Schools. A Participatory Video Approach*. *South Africa Journal Of Education*, 32(24), 499-514.
- [20]. M Nyoni Et Al. (2017). *Factor Affecting Student's Academic Achievement In Zimbabwe's Rural Secondary School: A Case Study Of Marimasimbe Secondary School Injiri Community, Zimbabwe*. Harare.
- [21]. Maganga J.H. (2016). *Factors Affecting Student's Academic Performance: A Case Study Of Public Secondary Schools In Ilala District, Dar-Es-Salaam, Tanzania*. Dar-Es-Salam: Open University Of Tanzania.
- [22]. Maina M.J. (2010). *Strategies Employed By Secondary School Principals To Improve Academic Performance In Embu West District*. Nairobi: Kenyatta University Repository.
- [23]. Maitra P And Mani S. (2012). *Learning And Earning: Evidence From A Randomized Evaluation In India*. Discussion Paper 44/12. Monash University.
- [24]. Makewa L.N, Role E.M And Amadi M. (2013). *Girl Child Drop Out: Experiential Teacher And Student Perceptions*. *International Journal Of Humanities And Social Sciences , 3(3)*, 124-131.
- [25]. Marwa J.G. (2012). *Issues On Students' Safety In Secondary Schools In Kuria District, Nyanza Province*. (Unpublished Masters Thesis). Nairobi: Kenyatta University.
- [26]. Materu M. (2013). *Life Expectancy, Schooling, And Lifetime Labor Supply: Theory And Evidence Revisited*. *Econometrica*, Vol 81 No. 5.
- [27]. Mkalagale V. (2013). *The Poor Performance Of Students In Community Secondary Schools In Tanzania*. Morogoro: Mzumbe University.
- [28]. Mwaka M, Kegode G And Kyalo B. (2010). *Choosing The Right School: Redifing Performance In The Contemporary Kenyan Education System*. *Journal Of African Education*.
- [29]. Mwaka M, Kegode G And Kyalo B. (2010). *Choosing The Right School: Redifing Performance In The Contemporary Kenyan Education System*. *Journal Of African Studies In Educational Management And Leadership.*, Vol 1, 2078-7650.
- [30]. Mwaka M, Kegode G, And Kyalo B. (2010). *Choosing The Right School: Redifing Performance In The Contemporary Kenyan Education System*. *Journal Of African Studies In Educational Management And Leadership , Vol 1, 2078-7650*.
- [31]. Ngesu L, Wachira L And Mwelu B. (2012). *Critical Determination Of Poor Performance In KCSE Among Girls In Arid And Semi-Arid (ASAL) Regions In Kenya*. *Journal Of African Studies In Educational Management And Leadership*, 2(1), 63-70.
- [32]. Nyangosi P.O. (2011). *Determinants Of Differential Kenya Certificate Of Secondary Education Performance And School Effectiveness In Kiambu And Nyeri Counties, Kenya*. Nairobi: Kenyatta University.

- [33]. Odhiambo R.A And Yambo J.M. (2012). Role Of Principals In Dealing With Challenges Affecting Girl Child In Mixedday Secondary Schools In Rongo And Ndhiwa Districts, Kenya. *International Journal Of Academic Research In Progressive Education And Development*, 1(4), 220-256.
- [34]. O'Gara C. (2013). *Education-Based Approaches To Early Childhood Development*.
- [35]. Ogunsola O.K Et Al. (2014). Parental And Related Factors Affecting Students' Academic Achievement In Oyo State, Nigeria. *World Academy Of Science, Engineering And Technology. International Journal Of Educational And Pedagogical Sciences*, 8(9), 3137-3144.
- [36]. Oigara J. (2011). *Effect Of School Environment On Student Achievement And Self Achievement:.*
- [37]. Oigara J. (N.D.). *Effect Of School Environment On Student Achievement And Self Achievement*.
- [38]. Okafor M. (2012). *Emerging Nonstandard And Income Generation Relation And Implication For Human Resources Management Function In Nigeria*.
- [39]. Omolo D.O And Simatwa E.M. (2010). *An Assessment Of The Implementation Of Safety Policies In Public Secondary Schools In Kenya*. *Education Research*, 1(11), 637-649.
- [40]. Oscar. (2013). *Five Families: Mexican Case Studying (Condor Bodes)*. London: Souvenir Press.
- [41]. Plan International. (2011). *Weathering The Storm: Adolescent Girls And Climate Change*. Woking Paper. Plan International.
- [42]. Rao N Et Al. (2012). *A Review Of The Literature On The Impact Of Education On Marginalised Girls' Life Chances In Developing Countries*, *International Development*. University Of East Anglia.
- [43]. REB. (2013). *Rwanda Educational Statistical Year Book*. Kigali: REB.
- [44]. *Survey On The Factors Influencing Te Students Academic Performance*. (2016). *International Journal Of Emerging Research In Management And Technology.*, 5(6), 30-36.
- [45]. Tamusuza A. (2011). *Leaving School Early: The Quest For Universal Primary Education In Uganda*. Rome: WFP.
- [46]. Van A Et Al. (2015). *Rural Development. Knowledge & Expertise In Governance*. Wageningen: Wageningen Publishers.
- [47]. Watson C Et Al. (2013). *Background Note: Adolescent Girls, Capabilities And Gender Justice: Review Of The Literature For East Africa, South Asia And South-East Asia*. London: ODI.
- [48]. WDRE. (2011). *World Development Report 2012: Gender Equality And Development*. Washington D.C: World Bank.
- [49]. Webster. (2013). *Definition Of Emotional*. Retrieved On 9-4-2019.