Media as a Behavioral Change Agent amid Girl's Educational Issues in Rwanda's Eastern Province

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Abstract: This study sought to establish the role of media as a behavioral change agent amid girl's educational issues in Rwanda's eastern province, using the descriptive correlational design. Data analysis involved descriptive statistics and Pearson correlations. The study took place in five sectors/ local administrative entities of Gatsibo District in Rwanda's Eastern Province. The researchers chose the province because it is the region with the highest prevalence of girls' education issues. The affected girls in the district were 1,542 while the non-affected girls were 77,428, identified through statistical data from the Gatsibo District department of education, department of gender monitoring and from the Sector authorities. The affected group was included because they were the victims of the teenage pregnancy and other forms of violence. The non-affected were also included because they are vulnerable to girls' education issue. Data collection involved the use of a questionnaire. Based on the findings, the study concluded that media has some potentials to educate girls on reproductive health and raise awareness of the importance to end violence against girls. The study contributes to the understanding of how to address girls' educational issues through media for sustainable education. Therefore, policy makers should design tailored behavioral change messages targeting peers, parents, educators and the community at large to promote social environment behaviors that support girls' education. Media can particularly address such issues like parenting skills, reproductive health education and girls' rights to education.

Keywords: Media approach; girls' educational issues; sustainable education, behavior change.

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Introduction

Issues of school dropout, teen pregnancy and various forms of violence (Girl effect, 2020; UNICEF, 2019) globally affect empowering girls and women through education for sustainable living. On the global scale, studies indicate that 20% teen girls are sexually abused. In the US State of Florida, 13% teen girls experienced sexual violence in 2017 (Patino & Gordon, 2019; Gatsinzi, 2023; WHO, 2018). In South Africa, the highest occurrence of sexual violence and rape against girls and women in every three hours is

denoted a pandemic (Powel, 2020). In Rwanda, 33% of teenage girls experience social and physical violence (NISR, 2016) while 75% face coerced sex (CLADHO, 2016). Violent behaviors manifest themselves from poor peer relationships, academic failure and poor parenting practices (Larson & Lochman, 2002).

Apart from violence, teenage girls also face pregnancy issues. In developing countries, for example, 2.5 million teenage girls below 16 years of age were estimated to have given birth (WHO, 2018) In Africa, estimations show that one in five girls become pregnant. In the Eastern Africa region, the estimation is at 21.5% (Kirchengast, 2016; Kassa et al., 2018). Rwanda is not immune from teenage pregnancy. Statistics indicate that teenage pregnancy rose from 4.1% in 2005 to 14.3% in 2018 (Nkurunziza, 2019; Mutanganshuro, 2019; NISR, 2016), and the highest rates are reported in the Eastern Province.

The combination of violence and teen pregnancy cases with unsupportive parents, communities and cultural norms that don't value girls' education do result in exacerbated girls' school dropout thereby affecting their better future livelihoods (Gatsinzi, 2022; WHO, 2018, NISR, 2016; CLADHO, 2016). Apart from school dropout, other effects on teenage girls include premature motherhood, exposure to violence and sexual risk behaviors, drag abuse, mental health, depression, sexually transmitted diseases acquisition, prostitution, extreme poor economic status, unemployment, maternal death during child delivery, stigmatization and isolation (Gatsinzi et al., 2023; Gatsinzi, 2022; Ahmed, 2020; Girls Effect, 2020, CLADHO, 2016).

Girls' education related issues have been researched (Gatsinzi, 2023, Gatsinzi, 2022; Girl effect, 2020; WHO, 2018; CLADHO, 2016). Such issues include irresponsible parents, family poverty, community norms, accessing justice information, accessing reproductive health information, peer pressure, sexual desires, unprotected sex, lack of self-awareness and lack of girls' rights. Other studies (Girl effect, 2020; Patino & Gordon, 2019) reveal that some families and communities in which teenage girls belong view those education issues as a blame for girls' poor self-responsibility.

Multi-stakeholder behavior change policy makers (Government, Donor Agencies, Civil Society Organizations, faith-based organizations) have devoted their efforts to alleviate girls' education issues through various approaches (WHO, 2018, Ministry of Gender & Family Promotion (2017, 2017, GMO, 2018). The used approaches include, but not limited to legal instruments, raising awareness against violence, unprotected sex, teen pregnancy, school dropout, skills on parenting, parent-child discussions, counselling, education support, reproductive health education, economic empowerment to vulnerable families, religious approach, free education, judicial support, girls' rights' awareness, self-awareness, peaceful living with others, conflict resolution, and many others (Gatsinzi et al., 2024; GMO, 2018; Reseau des Femmes 2018; Biglan et al., 2004).

The behavior change approaches appear in the Global agendas SDGs 4, 5 and 10 on quality education, gender equality and reduced inequalities (UN, 2020). The implementation of the approaches lacks proper coordination at the national level, regional revel, school level, community level, parental level, and peer level. In Rwanda, for instance, legal instruments criminalizes girls' rights abusers by giving them punishments ranging from 25 years of prison, for those who defile teenage girls, to life imprisonment to those who cause them incurable or killer sexually transmissible diseases (Gatsinzi, 2022; GMO, 2018). Other studies have found that effective implementation of the legal instruments is hindered by some parents, some community members and some local leaders who become accomplices in hiding the crime traces against girls for prosecution (Girl effect, 2020).

Behavior signifies any action done by an individual as a reaction to the external or internal forces or events (Davis et al., 2015). Behavior change is perceived as the way an individual alters his/her behavior towards the environment or society or even the person interacts with (USAID, 2014). Culture norms, poverty, education, environment and social determinants are the perceived factors affecting a person's behavior (Newton & Meyer 2011). Behavior change is necessary for the welfare of the individuals at the individual level, family level, community level and regional level (Newton et al., 2014). This is so because the attitude and personal values of the individual the key motivators for the change in behavior.

In the Stages of Change Model, Schmied (2017) explains changing behavior as occurring in six stages. The first stage is the pre-contemplation, where the individual isn't aware of the effect his/her

behavior has on others. That person believes that his behaviors are right. For instance, some men feel that it is right to entice teenage girls for unprotected sex without thinking about the consequences to them in regard to pregnancy or contraction of diseases. Others feel it right to beat their wives. The second stage is contemplation, where the person becomes aware of the consequences related to their behavior and start pondering about taking action. In the above example of men's behavior of enticing teenage school girls to sex, the person may think of the problem the girl will face in case she becomes pregnant. Potential problems include dropping school and living a miserable life. The third stage is preparation, where the person now is motivated to stop and change the behavior he has been practicing because he has analyzed its consequences to others. For example, through the awareness campaigns of preventing teenage pregnancy, the person is motivated to stop the behavior of engaging teenagers in sex.

The fourth stage is the action stage, where the person after getting the awareness of the consequences of his behavior, he now takes action by stopping the behavior. In other words, the person puts into practice his decision of stopping his engaging teenagers into sex. The fifth stage is the maintenance stage, where the person now puts in much effort to continue practicing the new behavior for quite a long time. The sixth stage is where the person fully commits himself to the new behavior and is not enticed to stop it but practices it sustainably (Schmied, 2017).

Dupas (2011) indicates behavior change as promoted through education and information access. Media is one of the main avenues to access the required information for behavior change (Biglan et al., 2004). Media is recommended because a strong correlation has been found to exist between the amount of media coverage and the perceived importance the public attaches to it (Rao, 2012). Learning a behavior occurs when individuals' beliefs, attitudes and behaviors are shaped by the media after either watching or reading a media story (Hoeken et al., 2016).

A plethora of media channels exist and are being used to communicate behavior change messages. They include newspapers, radio, television channels, magazines, periodicals, Facebook, WhatsApp, Instagram and Twitter (Luo et al., 2022). While continuous exposure to media content leads to

gradual behavior change (Olorunleke & Adefemi, 2016), social media enhances the sharing of information to a wider audience of varying social, demographic and geographic domains (Luo & Smith, 2015). Interaction with the posted media content can make individuals in groups to change their behavior positively or negatively. For instance, posting messages that denounce violence against girls like sexual violence and group members reacting to it via forums can cause a peer member to alter the behavior in case he/she practiced the behavior (Olorunleke & Adefemi, 2016; Luo & Smith, 2015).

Thus, to address girls' education issues, there is need to specifically tailor appropriate messages on various media sources. This is because, exposure Media as an approach to shaping behavior affects people's life in terms of wellbeing, information sharing, ideas and thoughts among the network of users, peaceful living, protected sex, and spreading behavior change messages to large audience through routine exposure to various media channels (Petkovic et al., 2021; Lu et al., 2019; Wakefield et al., 2010). Public awareness against girls' educational issues depends on the way the issues are presented/framed in the media. Besides, this way of presenting messages through media provides avenues for behavior change policy makers to choose the best course of action (Avis, 2016).

Wakefield et al. (2010) posit that the success of behavior change through media campaigns depends on the way the behavior message is defined, the number of times it is repeated and the time spent in announcing it. Access to media helps girls to reduce risky sexual behaviors, lead to sexual abstinence, and causes young people to avoid unprotected sex (Morrison-Beedy et al., 2013).

Valkenburg et al. (2021) found adolescents almost spending between two to three hours per day on social media while interacting with their colleagues through posting and exchanging feedback messages. These authors also find media affecting individual-specific behaviors. This implies that media is an important behavior change communication approach that can be used to fight unfavorable behaviors.

Methodology
Design
The study used the descriptive correlational design. Data analysis involved descriptive statistics in terms

of frequencies and percentages, mean scores and standard deviation. The analysis also involved the Pearson product Moment Correlations to establish the link between the independent and the dependent variables. Therefore, the study used the descriptive correlational research design.

Population and Sampling
The study took place in five Sectors/ Local administrative entities (Muhura, Kabarore, Gitoki, Rwimbogo and Ngarama) of Gatsibo District in Rwanda's Eastern Province. It covered five schools in the aforementioned Sectors. The researchers chose the province because it is the region with the highest prevalence of girls' education issues (NISR, 2020).

The affected girls in the district were 1,542 while the non-affected girls were 77,428. The affected and non-affected girls were identified using the statistical data from the Gatsibo District department of education, department of gender monitoring and from the Sector authorities. The affected group was included because they were the victims of the teenage pregnancy and other forms of violence. The non-affected were also included because they are vulnerable to girls' education issues and can fall victim any time. The non-affected girls were found in their respective classes at schools while the affected girls were found in their homes/sectors of residence or in schools (for those who had the opportunity to study again). Using Wyne and Chad's (2018) sample size determination formulae, 308 individuals were the sample size of the affected girls while 150 were the sample for the non-affected participants.

Source of Data
Primary data was collected through a survey tool. The survey tool contained structured questions. The items were measured on a 5-point Likert scale with strongly disagree (1), disagree (2), undecided (3), agree (4) and strongly agree (5) options for respondents to choose.

Validity and Reliability
The questionnaire was piloted for reliability test with 40 participants in Nyagatare District, which neighbors the Gatsibo District. The cut-off point Cronbach Alpha coefficient was set at .60. Reliability results showed the alpha coefficient of .638 and above, meaning the questionnaire was reliable for data collection.

Ethical Considerations
The research permits were secured from the Ethics Committee through the office of the Director of Graduate Studies at the University of Eastern Africa, Baraton. The permit was also sought from the Rwanda National Council of Science and Technology and from the office of the Mayor, Gatsibo District. Participants signed consent forms to participate in the study. Their identity was kept anonymous while the data they provided was kept confidential and only used for the study's purpose.

Results and Discussion
Demographics of Respondents
In table 1, the majority of respondents belonged to the age group of 16 to 19 with the percentage of 61, followed by those in the age group of above 19, and the least were in the age group of 13 to 15.

Table 1: Descriptive statistics on participants' demographics

Demographic Variable	Category	Frequency(f)	Percentage %
Age	13-15	55	14.4
	16-19	233	61.0
	above 19	94	24.6
	Total	**382**	**100.0**
Level of Education	lower primary	1	.3
	upper primary	33	8.6
	lower secondary	211	55.2
	upper secondary	137	35.9
	Total	**382**	**100.0**
Family structure	both parents	181	47.4
	single parent-mother	61	16.0
	single parent-father	56	14.7
	none of the parents	34	8.9
	fostered to a guardian	33	8.6
	others	17	4.5
	Total	**382**	**100.0**

Table 2: Perceptions of Girls on Media ad a Behavioral Change Agent

SN	Items in the Questionnaire	Mean	Std. Dev.	Mean Interpretation
1	Media educates girls on reproductive health	4.65	.683	Strongly agree
2	Media raises the awareness ending violence against girls	4.62	.690	Strongly agree
3	Media raises the awareness against teenage pregnancy	4.59	.844	Strongly agree
4	Media provides parenting skills	4.57	.697	Strongly agree
5	Media addresses girls' school dropout	4.56	.847	Strongly agree
6	Media promotes girls' future	4.55	.770	Strongly agree
7	Media advocates girls' rights	4.50	.868	Strongly agree
8	Media promote positive behavioral change	4.43	.847	Agree
9	Media promotes girls' education	4.21	1.112	Agree
10	Accessing media is important for teenage girls	3.55	1.28	agree

*. Correlation is significant at the 0.05 level (2-tailed).

Results in table 1 show that most of the participants were in the age bracket of 19 and above (24.6%), 16-19 (61%) and 13-15(14.4%). These age brackets show that teenage girls are at their peak in finding social relationships among peers in transition to adulthood. As they develop relationships through interaction with peers and adults, their behavior is influenced and some become victims of the gender education issues. Therefore, these teenagers 'participation in providing practical approaches to addressing issues affecting their education is of paramount importance.

Demographic information on participants was assessed to establish the participants' level of education. Results in table 1 show that the majority participants (55.2%) had upper secondary, 35.9% had lower secondary, while 8.6% had upper primary level of education respectively. One participant represented by 0.3% was a victim of the education issues while still in lower primary.

Research Question 1: What is the perceptions of girls on media as a behavior change approach to addressing gender education Issues?

Data for this research question 2 were analyzed using the mean score categories and SD rating scales- Mean scores (M): Strongly Disagree (Minimum score) = 1.00-1.79; Disagree = 1.80-2.59; Undecided = 2.60-3.39; Agree = 3.40-4.19; and Strongly Agree = 4.20-5.00 (Maximum score). The SD scores (SD): 0<1= no significant variations in data homogeneity; 1>= significant variation in data homogeneity. The results appear in table 2.

Table 2 indicates the perceptions of girls on media as a behavior change approach to addressing gender education Issues. The table shows that respondents strongly agreed that media educates girls on reproductive health, raises awareness of ending violence against girls and against teenage pregnancy. They also strongly agreed that media raises awareness against school dropout and it promotes girls' future and rights. Furthermore, media promotes behavioral change and it is important for teenage girls to watch media channels. Therefore, the perception of respondents about media as a behavioral change approach was positive Therefore, the perception of respondents about media was positive. Through proper communication channels, media helps the mass to access the information they need and most especially when it is repeated frequently (Kauppi, 2015; Dupas, 2011). The required behavior change will then occur when the target group watches, reads or listens to the media story several times (Hoeken et al., 2016). Other studies found awareness programs through media reduces juvenile delinquency (Van der put et al., 2020).

Research Question 2: Is there a significant relationship between media approach and eradication of gender issues?

This research question sought to establish the relation between media approach and eradication of gender education issues. The research question called for testing of the following null hypothesis: there is no significant relationship between media approach and eradication of gender issues.

Table 3: Correlation between Media approaches and Eradication of Gender Issues

Variables		Media	Eradication of gender issues
Media	Pearson Correlation	1	.103[*]
	Sig. (2-tailed)		.044
	N	382	382
Gender education issues	Pearson Correlation	.103[*]	1
	Sig. (2-tailed)	.044	
	N	382	382

As seen in table 3, the media approach had a weak yet significant positive relationship with the eradication of girls' education issues (p= .044r=.103). The relationship suggests that the more media approach is used, the higher the rate of eradication of girls' education issues eradication. The continuous exposure to the media information results in behavior change of the users due to the importance they attach to it (Kauppi, 2015; Rao, 2012; Bull et al., 2012; Dupas, 2011).

Conclusions and Recommendations

Based on the findings, the study concludes that media has some potentials to educate girls on reproductive health and raise awareness of the importance to end violence against girls. Furthermore, media has a significant contribution in effort to alleviate girls' educational challenges. The study contributes to the understanding of how to address girls' education issues through media for sustainable education. The study recommends that policy makers should design tailored behavioral change messages targeting peers, parents, educators and the community at large to promote social environment behaviors that support girls' education. Media can particularly address such issues like parenting skills, reproductive health education and girls' rights to education.

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