

# Perceptions of the Effectiveness of Sex Education in Reducing Pregnancies in Schools

Athumani Juma Mgya<sup>1</sup> and Pendo Samson Mwakililo<sup>2</sup>

<sup>1</sup>Sokoine University of Agriculture: School of Education, Morogoro, Tanzania

amgya640@gmail.com

<sup>2</sup>Morogoro, Tanzania

mwakililo@gmail.com

**Abstract:** *The objective of this study was to explore perceptions and views of parents, teachers and students on the effectiveness of sex education in reducing the magnitude of pregnancies and related risky sexual behaviours in schools. The study consisted of 542 respondents where 100 were parents, 150 teachers and 292 students. Descriptive survey design and quantitative approach were used through questionnaires. By using an independent t-test and ANOVA, the Statistical Packages for Social Sciences (SPSS) version 20 were used for data entry. The statistical p-value was  $p \leq .05$  and the confidence level was 0.95 (CL of 95%). The results showed that about 70% of parents, teachers and students had positive views on sex education that it will reduce risky sexual behaviours including pregnancies contrary to 45% of respondents who suggested that sex education will lead to prostitution. There were variations in opinions about the appropriate level of students to be taught sex education whereby using t-test there were variations of opinions with their gender with  $p < .001$  for parents,  $p > .08$  for teachers and students. The study recommends the education policy and curriculum be reviewed so that sex education is set as an independent and impartial subject in schools.*

**Keywords:** Perception, Sex education, Pregnancies.

## 1. INTRODUCTION

Pregnancy in adolescents is a result of early unprotected sexual practice for a girl, which does not merely expose them to pregnancies also a danger of abortion and acquiring sexually transmitted diseases and infections (Svanemyr, 2020).

In Tanzania, the problem of early pregnancy is high and has been related to dropouts among girls, it is estimated that 23.2 per cent of primary school-aged children consisting a total number of 1,968,910 meaning that at least 1 in every 5 children drops out of primary school while in secondary school 40.9 per cent of lower secondary school that is 1,522,680 thus at least 2 in every 5 aged 14 to 17 are out of the school where pregnancy is one of the reasons (UNICEF, 2018). However, 21 per cent of girls aged 15 to 19 years get pregnancies while at school thus they are forced to drop out of school (Makoye, 2020; Human Rights Watch [HRW], 2017).

Although there are several declarations and conventions on education for all such as UN, 1948 Article 26, head of states assembly, 1986 Article 17 and UN 1979 Article 10, the Millennium Development Goals (MDGs) laid in the year 2000, and the agenda 2030 under Sustainable Development Goals number 4 (SDG 4) that ensures equitable and inclusive education for all, but the number of dropouts due to pregnancy is still high resulted from different factors which include traditions, sexual behaviour, peer pressure, inadequate knowledge concerning sexual and reproductive health such as improper use of contraceptives, sexual abuse, poverty, family strife and violence, low self-esteem, and little education ambition (Porter, 2016; UNESCO, 2019).

The 1995 Tanzania education and training policy which was reviewed in 2014 does not clearly state the provision of sex education in schools, however the primary and secondary school curricula, sex education is taught in other subjects such as Biology and Civics in secondary schools and Science and Social studies in primary schools (Mkumbo, 2009).

Sex education in both primary and secondary schools have been taught in mainstream subjects such as Biology and Civics starting from form one for secondary school students and Social science and science for primary school students starting from standard three to seven but the problem of pregnancies in schools is still high, therefore, intends to explore perceptions of the parents, teachers, and students about the effectiveness of sexuality education in schools, whereby listening to their views is very crucial since they are one of the important stakeholders in this regard. The research question was;

What views do parents, teachers, and students have on the effectiveness of sex education in reducing the risks of sexual behaviours?

The objective was to;

Explore parents, teachers, and students' views on the effectiveness of sex education in reducing the magnitude of pregnancies and related risky sexual behaviours in schools.

## **2. LITERATURE REVIEW**

It is found that as a result of sexuality education can lead to the accomplishment of education and human capital stock contribute to more economic growth where girls are likely to gather economic benefits only by completing secondary school education, contrary to boys who will be able to engage in the labour market even at primary school education (Al-Samarrai & Tamagnan, 2016; Isiaka, 2019).

The 1995 Tanzania Education and Training Policy analysis insisted on education involvement by enrollment of women where it is stated that "there must be compulsory and universal primary education to all children aged seven years till they complete this cycle of education and promoting and encouraging secondary education through girls' secondary schools" however the 2014 education policy directed that the authorized age to start pre-primary school is 5 years, for basic education is 6 to 15 years, for upper secondary is 16 to 17 years and higher education is 18 to 21 years" (MoEC, 1995; MoEVT, 2014). From the above policy statements, the statistics show that there is an increase in enrollment for both government and non-government secondary schools by 8.8 per cent where males make up 52.2 and females 47.8 per cent while in primary schools the increase is 4.9 per cent where males make up 49.98 per cent and female 50.02 per cent in the year 2018 to 2019, despite this increase in enrollment drop out cases due to pregnancies are still high in which in the year 2016 dropout due to pregnancies were 10 per cent and 6.95 per cent in the year 2018/2019 in both primary and secondary schools (United Republic of Tanzania [URT], 2016, MoEST, 2019; Mashala, 2019; world Vision International, 2020).

Factors associated with adolescent pregnancies look similar among Sub-Saharan Africa these factors include lack of control over sex, lack of parents-adolescent communication on reproductive health (RH), peer pressure, and sexual abuse, for example, a study conducted in eastern Uganda shows that there is restricted information especially from families on sexuality due to expectations and gender roles, thus increased girls probability of getting HIV/AIDS, pregnancies, and missing the chance to education, thus leads to the prevalence of teenage pregnancy (Chematai et al., 2020).

Adolescent girls are exposed to different risks of getting early pregnancies and other related complications such as the risk of contracting HIV/AIDS, illegal abortions, and sexually transmitted infections (STIs) because of deficiency in access to contraceptives and early sexual activity (UNFPA, 2016; UNAIDS, 2019). Sexual behaviour to young people goes parallel with behaviours such as alcoholism, smoking, school absenteeism, substance abuse, and delinquency leading to teenage pregnancy and HIV/AIDS, therefore; sex-related education should be conducted to help young people to get out of the risks (Sommer et al., 2020; Mcharo et al., 2020).

Literature proposed that a suitable time for providing sex education is standard four when a student is expected to have ten (10) years, this comes from the fact that at 10 to 13 years towards secondary school, students turn out to be conscious about puberty therefore to offer sex education in the last grade will cause a significant number of girls to be left out this is because sexual behaviour in girls occurs at ten (10) while primary school begins at six to seven (6-7) years (Lyimo et al., 2017; Wekesah., 2019). It is from this point that sex education is important in the sense that detaches young people away from sexual and reproductive risks including unplanned and or unprotected sex which may result in sexually transmitted infections (STIs), early pregnancies and unsafe abortions (Leung et al., 2019; Ivanova et al., 2020).

This study employed Social judgment theory (SJT) as proposed by Sherif and Hovland (1961). The theory anticipated that persons construct or make the decision about the information relying on their position, about a certain topic. They argued that each one's attitude is positioned into different types namely; the latitude of acceptance which includes thoughts, views and opinions seems to be suitable and acceptable by the person; latitude of rejection which includes improper and unacceptable opinions by a person, finally, the latitude of non-commitment, that is one has no opinion, it is neither accepts nor rejects the information (Sherif & Hovland, 1961).

In this study, therefore, the latitude of acceptance means that; there are parents, teachers, and students who accept the view, and they have positive opinions depending on their reasons. On the other side, there are parents, teachers, and students who reject the topic and they have negative views or opinions about sex education these fall under the latitude of rejection while in the latitude of non-commitment there are parents, teachers, and students who are intermediate which means, they neither accept nor reject this varies greatly from positive and negative value making it difficult to predict. Therefore if persuasion occurs to any of the three latitudes, an individual's attitude will change from the three latitudes into either a positive or negative perception or attitude about the phenomenon.

### 3. METHODS

#### 3.1 Study Area

Tanzania's largest and highly populated city Dar es Salaam is where the study was conducted, city has 4.36 million people consisting 10 per cent of Tanzania's mainland population with an annual increase of 5.6 per cent from 2002 to 2012 according to the 2012 population and housing census (NBS, 2013). The study was specifically conducted in Ilala municipality because according to the Dar es Salaam Regional (City) Educational officer, it is the only municipality that has girls' secondary and primary schools which are owned by the government (NBS, 2013). Since the study is gender-based then it is important to include the attitudes of girls within girls' only schools as one of the stakeholders.

#### 3.2 Research design

This study used the descriptive design because it provides a description of trends, attitudes, or opinions of the population about a certain phenomenon and it is guided by a quantitative approach, as the objective way of collecting information about people's opinions and attitudes (without an in-depth understanding of a phenomenon).

#### 3.3 Procedure

Parents, Teachers, and Students were the target population of the study, where teachers and students were drawn from selected primary and secondary schools and also parents were selected based on those with children in those schools. In nine (9) surveyed schools there were N=973 students, N=500 teachers, and N=334 parents were obtained using a respective number of students.

The sample of this study involved 542 respondents. Out of which n=292 were students, n=150 teachers and n=100 parents. The criterion used for obtaining each sample was thirty per cent (30%) of the expected population. It was argued that for quantitative studies a sample size should be at least thirty per cent of the population (Fraenkel and Wallen, 2014; Mohsin, 2016).

Sampling procedures were conducted to obtain schools, students, teachers, and parents where four primaries and five secondary government day schools were simple randomly selected from nine (9) wards out of 26 found in Ilala Municipality. The lottery technique was used to obtain the exact number involved in the study, The procedure used to obtain the exact number of students n=292 was a simple random technique and lottery method whereby 28 and 36 students from primary and secondary schools respectively were selected from each school. Teachers 150 n=150 were selected from nine (9) schools using a convenient sampling technique to obtain at least 16 teachers from each selected school. Parents were simple randomly selected by using their respective children who were in schools to obtain a sample of 100 parents.

#### 3.4 Data Collection

The data-gathering technique and instrumentation involved questionnaires, where three different questionnaires, that is, for parents, teachers, and students were translated into the Swahili language and then were administered. Questionnaires were administered in person by the researcher with the help of a research assistant, which was collected at the end after being filled by respondents. The method was chosen because questionnaires cover a large number of the sample which represents the population; therefore it was an effective tool for data collection. The study used both closed and open-ended items (semi-structured items) in the questionnaires with a rating Likert scale and dichotomous questions were also asked.

#### 3.5 Data analysis

Analysis was done through (SPSS V.20). The analysis was done inferentially and descriptively where tables and charts were used in descriptive statistics while inferential statistics were used in calculating t-test and analysis of variance (ANOVA), whereby the statistically significant (*p*-value) value used was  $P \leq .05$  and the confidence level of 0.95 (CL of 95%). Validity and reliability of questionnaires were ensured through a pilot study, involving ten (10) students (pupils) and five (5) teachers from primary school, and ten (10) students and five (5) teachers from secondary school together with three (3) parents with children who are studying at primary school and three (3) parents who have children studying at secondary school whereby those involved in the pilot study were not included in the actual study this helped the researcher to make necessary corrections and modifications of the instruments. It is argued that validity shows interpretation that the test measures what suppose to be measured where reliability shows stability and consistency of the scores from an instrument (Cresswell & Poth, 2018; Haradhan, 2017).

**Table 1.** Analysis of variables

Objectives	Variables	Patterns of Analysis	
Views on the effectiveness of sex education in reducing the magnitude of pregnancies and other risky sexual behaviours in schools	Gender and educational level of parents and students	Frequency and percentages	Independent t-test & ANOVA

#### 4. RESULTS

Respondents' opinions about the effectiveness of sex education in reducing the magnitude of pregnancies and related risky sexual behaviours in schools were explored based on the views that; sex education will help to reduce the problem of pregnancies among school girls', sex education will decrease fertility rate, sex education will bring knowledge about sexuality and reproductive health will help to reduce adolescents' behavioural problems such as the use of alcohol and drug abuse. The results are shown in a summary in Table 3.

**Table 2.** Opinions of respondents on sex education

	Parents		Teachers		Students	
	True	False	True	False	True	False
Reduce the problem of school girls pregnancy	82(82)	10(10)	109(73*)	28(19*)	230(78.7)	46(15.7)
Reduce the problem of early pregnancies and STDs, for example, HIV/AIDS	83(83)	9(9)	120(80)	28(19*)	242(82.8)	38(13)
Reduce fertility rate	72(72)	16(16)	108(72)	31(21*)	204(69.8)	65(22.2)
Knowledge about sexual and reproductive health	73(73)	15(15)	117(78)	21(14)	205(70.2)	64(21.9)
Reduce adolescents behavioural problems	81(81)	12(12)	111(74)	24(16)	197(67.4)	65(22.2)
Will lead to prostitution	27(27)	61(61)	37(24.6)	101(67*)	44(15)	225(77)

Parents, n=100, Teachers, n=150 and Students, n=292, Number in bracket are percentages

\*= approximated percentage

Table 2 shows, 83(83%) of parents, 120(80%) teachers and 242(82.8%) students agreed that sex education will reduce the problem of early pregnancies as well as sexually transmitted diseases among girls. Furthermore, 82(82%) of parents, 109(72.6%) teachers, and 230(78.7%) viewed that sex education will reduce the problem of school girls' pregnancy. On the other hand 81(81%) of parents, 111(74%) teachers and 197(67.4%) students indicated that sex education will reduce adolescents' behavioural problems while 73(73%) of parents, 117(78%) teachers and 205(70.2%) students provided that sex education will provide knowledge about sex and reproductive health. Some 72(72%) of parents, 108(72%) teachers, and 204(69.8%) students agreed that sex education will reduce the fertility rate. However, only a small number of parents 27(27%), teachers 37(24.6%), and students 44(15%) viewed that sex education will lead to prostitution among students while a greater number of the respondents viewed the opposite.

Apart from above description an independent sample t-test was computed to check whether there were variations between gender and the observed views of respondents. The results showed for the case of parents, male ( $M= 1.097$ ,  $SD= 0.30$ ) and female ( $M=1.098$ ,  $SD= 0.40$ );  $t(90) = -.008$ ,  $p= 0.99$  while for teachers, male ( $M=1.22$ ,  $SD = 0.42$ ), female ( $M=1.16$ ,  $SD = 0.37$ ) with  $t(146) = 0.95$ ,  $p = 0.34$  meaning that there was no significant difference between the views of parents with their gender. The same opinions were observed to students basing on their level of education (schooling level) results revealed that standard seven ( $M=1.14$ ,

$SD=0.34$ ) and for form two were ( $M=1.13, SD=0.34$ ) with an independent sample t-test,  $t(278) = .008, p = 0.99$ , indicating no significant difference but the significance different observed from the opinion that sex education leads to prostitution were results revealed that seven ( $M=1.92, SD= 0.31$ ) and form two ( $M=1.79, SD=0.40$ ) with the  $t(267) = 2.65, p = .008 (\eta^2 = 0.16)$ .

Moreover, an ANOVA test was used to find out if there were variations between the level of education of parents, teachers and their views on sex education, where the results were  $F(6, 91) = 0.95, p = 0.46$  and  $F(3, 138) = 1.76, p = 0.15$  respectively, showing no significant difference, but in the case of students variations in age of students and their opinions about sex education, results were  $F(6, 279) = 0.88, p = 0.51$  showing no significant difference.

Respondents were again asked to provide their opinions about the appropriate level preferred for sex education in primary schools, results showed that the majority of female parents 32 out of 54 reported that sex education should start at standard six against the male parents 18 out of 42 parents suggested that it should start at standard five. However an independent sample t-test was computed to check if there were variations between gender of parents and their suggestions on the level for start teaching sex education in primary school, the results were male ( $M= 4.3, SD=1.89$ ) and female ( $M=5.3, SD=1.08$ ) with  $t(94) = -3.51, p = .001 (\eta^2 = 0.34)$  showing statistically significant difference.

The teachers' suggestions were also explored and the results were 30 out of 83 female teachers suggested that standard four was the appropriate period while 24 out of 57 male teachers suggested standard five was the appropriate period. Then from that, an independent t-test was computed to find out if there were variations between their suggestions and their gender. The results were male ( $M = 4.78, SD=1.61$ ) and female ( $M = 4.26, SD=1.81$ );  $t(138) = 1.76, p = .08$  showing no significant difference.

In the case of students, 73 out of 171 females and 39 out of 121 male students reported that sex education should start at standard five while 59 out of 171 females and 42 out of 121 male students reported that it should start at standard six. Independent sample t-test results show that male ( $M=5.3, SD= 1.38$ ) and female ( $M=5.19, SD= 1.11$ );  $t(281) = 0.14, p = 0.88$  have no significant difference. Moreover some 63 out of 171 standard seven students and 30 out 121 form two students, standard seven ( $M = 5.18, SD= 1.27$ ) and form two ( $M=5.21, SD=1.20$ ) with  $t(281) = - 0.172, p = 0.86$  showing no significant difference.

## 5. DISCUSSION

In this study, the findings have launched an important amount of opinions among respondents' perceptions on the effectiveness of sex education in reducing the magnitude of pregnancies and other risky behaviours while in schools; the significant role of sex education on which the respondents' views portrayed the information that sex education will help to prevent students from sexually transmitted diseases including HIV/AIDS, make them familiar with the use of contraceptives, and reduce adolescents risky behaviours that might lead them to early pregnancies, an example is from the study conducted by (Chematai et al., 2020; UNFPA, 2016; UNAIDS, 2019; Sommer et al., 2020; Mcharo et al., 2020) that there is restricted information on sexuality due to expected gender roles thus increasing girls' probability of getting pregnancies, HIV/AIDS and losing the chances to education not only that but can also lead to illegal abortion since it is the fact that sexual behaviour in young people goes with socially unacceptable behaviours including alcoholism, smoking, substance abuse, truancy, and delinquency.

Apart from that respondents were providing their views on the appropriate level of education preferred for sex education in primary schools and suggestions indicated that the appropriate level for providing sex education should start at standard five simply because at this age most girls have reached the age of maturity. It is from the fact that parents', teachers' and students' results emanated from the reason that in standards five and six is the period at which girls reach the period of mental and biological maturity meaning that it is the period of understanding of what is good and what is bad this seems to be contrary to the curriculum on which this kind of education is offered which is standard three to seven. It was stated by (Lyimo et al., 2017; Wekesah., 2019) that in Tanzania school age begins with six to seven (6-7) years and it takes seven years to complete the cycle of primary education while sexual activities in girls take place as young as ten (10) years because of menarche, therefore, offering sexual education to finalists may lead to leaving out a significant number of girls.

## 6. CONCLUSION

The study described parents, teachers, and students' opinions about the effectiveness of sex education in reducing the magnitude of pregnancies and related risky sexual behaviours in schools.

It was concluded that due to negative impacts of pregnancies while at school there is the importance of re-admitting these girls to school after delivery in which more than 80% of respondents had positive attitudes towards re-admission relying on the

latitude of acceptance with sex education being the important course of study starting from their primary education cycle to reduce the problem of early pregnancy but also to free them from the risks of contracting sexually transmitted diseases such as HIV/AIDS.

The study recommends that there should be various means of insisting on sex, reproductive and life education in every level of education as a way of helping young people, but can also be done through the establishment of school programmes and making a strict follow up of various social clubs in schools and the society at large example drama, debate and sports clubs, additionally, the curriculum has to be set in such a way that sex education is taught as an independent and standalone subject in schools. The study also recommends that another study can be conducted on psycho-social challenges faced by pregnant school girls after dropping out of school.

## 7. REFERENCES

- Al-sammarai, S., & Tamagnan, M. (2016). *Gender Equity and Fee-Free Basic Education in Tanzania*. Washington, D.C: Education Global Practice.
- Chematai, V., Nteziyaremye, J., & Wandabwa, G. (2020). Lived experiences of Adolescent mothers attending Mbale regional Hospital: a phenomenological study. *Obstetric and Gynaecology International*.
- Cresswell, J.W., & Poth, C.N. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4<sup>th</sup> ed)*. Thousand Oaks, CA: Sage.
- Frankel, J. R., & Wallen, N. E. (2014). *How to design and evaluate research in education*. Boston, MA: McGraw-Hill Higher Education.
- Haradhan, M. (2017). Two criteria for Good measurements in research; Validity and reliability. *Chittagong*. 17(3), 59-82.
- Human Rights Watch. (2017). *Barriers to secondary education in Tanzania*. Amsterdam: Human Rights Watch.Pp 65-71.
- Isiaka, R. (2019). *Economic growth in Africa: Does gender education still matter?* Ibadan, Oyo state: University of Ibadan.
- Ivanova, O., Rai, M., Michielson, K., & Dias, S. (2020). How sexuality education programmes have been evaluated in low-and lower-middle-income countries? A systematic review. *International Journal of Environmental Research and Public Health* 2020, 17, 8183; doi:10.3390/ijerph.17218183.
- Leung, H., Shek. D.T., Leung, E., & Shek, E.Y. (2019). Development of contextually-relevant sexuality Education: Lessons from a comprehensive review of Adolescent sexuality education across cultures. *International Journal of Environmental Research and Public Health* 2019, 16, 621; DOI: 10.3390/ijerph 16040621.
- Lyimo, W.J., Masinde, J.M., & Chege, K.G. (2017). The influence of sex education on students'

involvement in premarital sex and adolescent pregnancies in Arusha City, Tanzania.

*International Journal of Educational Policy Research and Review*, 4(6), 113-124.

Makoye, K. (2020). Tanzania: Teen pregnancy, early marriage crushes dreams of girls. Dar es Salaam: Anadolu Agency.

Mashala, Y.L. (2019). The impact of the implementation of free-education policy on secondary education in Tanzania. *International Journal of Academic Multidisciplinary Research* (IJAMR), 3(1), 6-14.

Mcharo, R.D., Olomi, W., Mayaud, P., & Msuya, S.E. (2020). Risky sexual behaviours among young adults attending higher learning institutions in Mbeya, Tanzania: implications for STIs and HIV preventive programmes. *ASS open Research*.

<https://doi.org/10.12688/aasopenres.13123.1>.

Mkumbo, K. (2009). Content analysis of the status and place of sexuality education in the national school policy and curriculum in Tanzania. *Educational Research and Review*, 4(12), 618-625. <http://www.academicjournals.org/ERR>.

MoEC. (1995). *Tanzania education and training policy*. Dar es Salaam: Ministry of Education and Culture.

MoEST. (2019). Education sector performance report 2018/2019, Tanzania Mainland. Dar es Salaam: MoEST.

MoEVT. (2014). *Tanzania education and training policy*. Dar es Salaam: Ministry of Education and Vocational Training.

Mohsin, A. (2016). *A manual for selecting sampling techniques in research*. Karachi: Iqra University.

NBS. (2013). *Population and housing census: Tanzania in figures*. Dar es Salaam: National Bureau of Statistics.

Porter, S.A. (2016). Girls' Education, Development and Social Change. *Policy Futures in Education*, 14(5), 517-538.

Sherif, M., & Hovland, C. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. New Haven, NH: Yale University Press.

Sommer, M., Ibitoye, M., Likindikoki, S., & Parker, R. (2020). Participatory methodologies with Adolescents: A research Approach used to explore structural factors Affecting alcohol

use and related unsafe sex in Tanzania. *Journal of Primary Prevention*.

<https://doi.org/10.1007/s10935-020-000586-0>.

Svanemyr, J. (2020). *Adolescent pregnancy and social norms in Zambia*. An international Journal for research, *Intervention and Care*, 22(6), Pp 615-629.

UNESCO. (2019). *UNESCO Report illustrates leap forward in Girls' Education over past 25 years, now threatened by COVID-19*. Paris: UNESCO.

UNICEF. (2018). *Global initiative on out of school. Tanzania country report*. Dar es Salaam: UNICEF. Pp 24-25.

URT. (2016). *Tanzania Demographic and Health Survey and Malaria Indicator Survey 2015-2016 Final Report*.  
<https://dhsprogram.com/pubs/pdf/FR321/FR321.pdf>.

Wekesah, F.M., Nyakangi, V., Onguss, M., Njagi, J., & Bangha, M. (2019). *Comprehensive sexuality education in sub-Saharan Africa*. Nairobi: African population and health Research Centre (APHRC).

World Vision International. (2020). *Teenage pregnancy threatens to block A million girls across Sub-Saharan Africa from returning to school*. Manila: World Vision International. Pp 9-25.