*Tanzanian Journal of Population Studies and Development, Vol. 32 No. 1, 2025: 74–93*

# Verbal Persuasion as a Correlate of Adolescents' Self-efficacy in Utilizing Sexual and Reproductive Health Services in Tanzania

*Chris Mauki*[*]

**Abstract**

The study investigated verbal persuasion as a correlate of adolescents' self-efficacy in utilizing sexual and reproductive health services in secondary schools, in Tanzania. Specifically, it sought to determine the relationship between adolescents' verbal persuasion and the utilization of sexual and reproductive health services. The study employed a quantitative research approach and a correlational research design. Using stratified and simple random sampling, the it drew a sample of 552 secondary school adolescents from Katavi and Njombe regions. The study used questionnaires to collect data; and then used the SPSS, version 25, to analyse it. Descriptive analyses were performed across four demographic characteristics, namely, gender, age, class level, and type of school. Additionally, inferential statistics, including Spearman's correlation coefficient, helped determine the relationship between verbal persuasion and the utilization of SRHS in terms of condom use and HIV testing and counselling among secondary schools students. The results revealed a weak, positive and significant relationship between verbal persuasion and adolescents' condom use (r = .266, p-value <.001). There was also a weak positive and significant relationship between verbal persuasion and adolescents' HIV testing and counselling (r = .131, p-value .002). Consequently, the more verbally persuaded the adolescents were, the more they enhanced their self-efficacy on condom use and the utilization of HIV testing and counselling services. Based on these findings, the study recommends that the national policy be reviewed to integrate self-efficacy sources to enhance its role in life-skills education, thereby empowering adolescents in Tanzania's secondary schools to make better use of HIV testing and counselling services, as well as condoms, more effectively.

**Keywords:** *verbal persuasion, self-efficacy, condom use, HIV testing and counselling*

## 1. Introduction

The utilization of sexual and reproductive health services (SRHS) among adolescents is a global concern as this group is vulnerable when it comes to sexually transmitted diseases and early pregnancies (WHO, 2014). Consequently, continued efforts at both global and national levels are intended to foster the use of SRHS among adolescents, and produce positive health outcomes (Shariati et al., 2014). Sexual and reproductive health services provide adolescents with information on issues related to family planning, pregnancy testing, safe abortion, post-abortion care, ante- and post-natal care, normal growth and development for

[*] Department of Psychology and Curriculum Studies, University of Dar es Salaam, Tanzania: chrismauki57@gmail.com

 ▪ *https://doi.org/10.56279/tjpsd.v32i1.214*

adolescents, counselling, mental health services, and pre- and post-test counselling for HIV/AIDS, and condom use (WHO, 2014). The offer of condom use and utilization of HIV testing and counselling services (HTC) to adolescents has now gained recognition in the international arena as an effective and essential strategy for the prevention of both HIV/AIDS and early pregnancies among adolescents (Sam-Agudu et al., 2016; Mugisha et al., 2011). The WHO advocates for adequate access to condoms and utilization of HTC services among adolescents to prevent adolescents from HIV/AIDS-related problems, most of which occur in Sub-Saharan African (SSA) countries (WHO, 2019). Impliedly, the effective utilization of condoms and HTC services among adolescents facilitates the delivery of other AIDS-related care and treatment services in most needy regions and countries, including SSA, and Tanzania in particular.

Furthermore, the International Conference on Population and Development (ICPD) held in Cairo in 1994 recognized SRHS and the attended rights as key agendas for adolescents and development programmes (UN, 1995). Specifically, the ICPD directed all governments and non-governmental organizations to establish programmes to provide family planning information, counselling and support during pregnancy, early childcare information, counselling about sexuality, and peer education (ibid.).

Despite the ICPD recommendations, since 1995 many adolescents—especially girls in developing countries—still suffer from unintended teenage pregnancies, which heightens the health risks of both girls and children. In this regard, extant literature indicates that many adolescents in SSA underutilize SRHS (UNFPA, 2015). In Tanzania, the Ministry of Health, Community Development, Gender and Children [MoHCGC] (2014) reported that the country had bolstered its efforts to get more adolescents to utilize SRHS, including testing for HIV/AIDS, over the last decade. The government of Tanzania has also strived to reduce teenage pregnancies; and fight against HIV/AIDS by initiating different programmes, policies and strategies, such as the National Adolescent Health and Development Strategy (2018), and the National Health Policy (2017). All these efforts embrace the ambition of creating awareness of SRHS among adolescents. Such efforts notwithstanding, there is still an underutilization of SRHS among adolescent students in the country. Only a tiny fraction of school-age adolescents have utilized the services; and figures put it at less than 50% of the adolescent population in the country using SRHS (Jeckoniah, 2018; Mrema, 2015).

Studies on the utilization of SRHS among adolescents are well-documented in developed countries, and even in some SSA countries, including Tanzania (Ajayi et al., 2020; Bryan et al., 2017; Kwok et al., 2010; Roy et al., 2012; Meiberg et al., 2008). These studies suggest that the level of the utilization of SRHS among adolescents is lower than expected. Moreover, these studies reveal that attitude, knowledge, awareness, religion, sociocultural, and physical factors influence the use of SRHS (Jeckoniah, 2018; Mbeba et al., 2012). Moreover, related studies have

shown that self-efficacy plays a pivotal role in adolescents' utilization of SRHS (Binu et al., 2018; Miller et al., 2019; Brega et al., 2013; Tlaye et al., 2018).

The social cognitive theory (SCT) by Bandura (1997) informed the present study. The theory capitalizes on the role of the thinking processes (personal factors) acting and reflecting on the environment and the self to influence behaviour (Bandura, 1989). Bandura developed the SCT in 1997 to explain how individuals develop and behave. The socio-cognitive perspective explains that an individual is not only reactive to external influences of the environment, but also proactive and self-regulated. In other words, individuals become both products and producers of their environment (Pajares, 2005). Bandura (1997) defined self-efficacy as an individual's belief in his/her capability to perform a particular behaviour. He maintains that self-efficacy is not concerned with the number of skills, knowledge, attitudes, or resources people have, but with what they can do with what they have under various circumstances. As a fundamental construct of the SCT, self-efficacy appears vital because it touches on adolescents' motivation and personal conviction about using SRHS. Self-efficacy explains how adolescents choose health behaviours they believe they are capable of sustaining, and avoid those they cannot uphold.

Furthermore, Bandura (1997) explained that self-efficacy originates from four sources: mastery experience, vicarious experience, verbal persuasion, and emotional arousal. Mastery experience represents the experiences and practices from when a person has accomplished a task or behaviour. Vicarious experience refers to observational learning, where people imitate those who appear most like them—as social role models. Verbal persuasion involves affirmative statements given to individuals regarding their capabilities, supporting the convictions that they possess, and the characteristics needed to succeed in their tasks. Finally, emotional arousal is an individual's response and reaction to a particular behaviour.

Empirical evidence associates verbal persuasion with adolescents' utilization of SRHS. The evidence is revealed in a study by Kusumaningrum et al. (2021), which established that there is a relationship between verbal persuasion from parents and adolescents' utilization of HTC services (p-value = .003). Similarly, a study conducted at Mekelle in Ethiopia by Melaku et al. (2014) found that verbal persuasion from parents and peers had a strong bearing on female adolescents' utilization of SRHS, especially condom use. Comparable results were also observed in a study by Van Rossem and Meekers (2011), which found that the perceived approval and verbal persuasion of condom use by significant others had a significant positive effect on the frequency of condom use among youths. These results imply that, even though verbal persuasion might be associated with using SRHS, it may not be directly applicable in other contexts. Also, people might be verbally persuaded to use HTC services and make use of condoms by peers and adults; but not by significant others, including teachers and relatives, and vice versa.

Hence, it is evident from the preceding review and empirical evidence that SRHS is underutilized by adolescents in SSA countries, including Tanzania. Also, it has been shown that while verbal persuasion is associated with using SRHS in one context, this is not necessarily the case in other contexts. Invariably, there is little evidence in the studies conducted in Tanzania to suggest that verbal persuasion is associated with adolescents' utilization of SRHS. Against this background, this study sought to investigate the correlation between verbal persuasion and adolescents' self-efficacy in the utilization of SRHS among secondary school adolescents in Tanzania.

## 2. Methods

### *2.1 Research Design and Setting*

The study utilized a quantitative method, allowing the researcher to quantitatively test hypotheses regarding the correlation between verbal persuasion and adolescents' self-efficacy in accessing SRHS. This was achieved through the use of standardized questionnaires for data collection. Moreover, a correlational research design was employed to explore the relationship between verbal persuasion and two elements of SRHS. Lavrakas (2008) contends that a correlational research design identifies the degree of relationship between two or more variables. Ary et al. (2006) further contend that a correlational research design helps assess relationships and patterns of relationship among variables in a single group of subjects at one point in time.

The study was conducted in Katavi and Njombe regions, in Tanzania. The selection of the two regions was based on two reasons. First, the two disrticts had higher prevalence rates of teenage pregnancy and HIV/AIDS, relative to other regions in the country, based on data given by the MoHCGC (2017) and the Tanzania Commission for AIDS [TACAIDS], 2018). Katavi Region had the highest prevalence rate of teenage pregnancy in the country, involving 45.1% of teenage girls aged 15–19 compared to the overall prevalence rate of adolescent pregnancy of 27% in the country; followed by Tabora (42.5%), Morogoro (38.6%), Dodoma (38.5%), Mara (37.5%), Mbeya (37.4%) and Shinyanga (33.5%). The data also indicates that Njombe Region had the highest HIV/AIDS prevalence (14.8%) in Tanzania among adolescents aged 14–24; followed by Iringa (11.3%), Mbeya (9.3%), Mwanza (7.2%) and Coast (5.5%) (TACAIDS, 2018). Specifically, the study was conducted in Njombe District in Njombe Region, and Mpanda District in Katavi Region. Second, the two districts had secondary schools that were implementing HIV/AIDS programmes at school, with trained teachers teaching sexual and reproductive health education (BEST, 2020).

For ethical purposes, the researcher requested permission from the University of Dar es Salaam to conduct the research. The research clearance letters were then directed to the Njombe and Katavi administrative secretaries (RAS), and then forwarded to the respective district administrative secretaries (DAS). The DAS introduced the researcher to the respective municipal executive

directors, who forwarded the permission letter to the heads of secondary schools, which allowed the study to be conducted in the designated area. Throughout the study, the respondents were assured that their information would remain confidential, and it would be used only for the intended purpose.

### *2.2 Sample and Recruitment*

Simple random and stratified random techniques guided the selection of municipalities and/or districts, schools and students. The researcher selected Mpanda District for two main reasons. First, the district had one of the highest adolescent pregnancy prevalence rates in Tanzania (TACAIDS, 2018). Secondly, as mentioned earlier, the district had nine secondary schools that were implementing programmes on HIV/AIDS at school with trained teachers teaching sexual and reproductive health education (MoEST, 2020). On the other hand, Njombe District was selected because it was another district with the highest HIV/AIDS prevalence rates in Tanzania (TACAIDS, 2018). Also, it had 27 secondary schools that were providing education on sexual and reproductive health and HIV/AIDS infection and prevention by trained teachers teaching sexual and reproductive health education.

In total, 11 secondary schools were selected in four main steps. First, the researcher requested and obtained a list of all secondary schools from the district education office in each district. Second, from that list, the researcher—with the assistance of the district education officers—identified all the schools that were providing education on sexual and reproductive health; and which had trained teachers who were teaching sexual and reproductive health education. Third, the list of all schools was stratified based on ownership (private and public), and the gender composition of the students (single-sex or co-education). These selection criteria for schools were used based on the insights obtained from the literature review (Masinde & Chege, 2017).

The study sample comprised 716 students from all the 11 schools. Of these, 407 were drawn from Njombe District and 309 from Mpanda District. Ultimately, 552 respondents out of 716 returned their filled-out questionnaires. However, 69 respondents opted out of the study during data collection. A total of 21 respondents did not return their questionnaires, 43 respondents returned partially completed questionnaires, and 31 respondents made the questionnaires unusable by either missing out on some items, or placing two ticks in a row of choices instead of only one. Nevertheless, the sample size of 552 respondents, equalling to a 77.1% return rate, was deemed sufficient for the study purposes (Baruch, 1999).

Four classes—namely, Forms III, IV, V, and VI—from each school were included in the study primarily because students from Form III and above are normallys aged 15 years and above, and are likely to be sexually active. Indeed, literature on sexual debut among adolescents, such as by Mathews et al. (2016), identify such age as one in which youths seek to experiment with their sexuality.

Also, existing studies indicate that adolescents start engaging in sexual intercourse while aged between 15 and 18 years (James, 2016; Mathew et al., 2016). Hence, the involvement of students in Forms III, IV, V, and VI aged between 15 and 21 enabled the researcher to include sexually active student respondents, who were expected to possess adequate information on condoms and their use. Forms III, IV, V, and VI students were selected because they are generally more mature and have had more exposure to the social environment of their schools compared to Forms I and II. Also, the increased maturity and longer time in school settings made them more likely to have formed relationships, encountered peer influences, and faced situations involving sexual decision-making factors that are critical when studying sexuality and related behaviours.

### *2.3 Data Collection*

The study used a structured questionnaire to gather information. Also, it adopted and adapted items in all the questionnaires from the Music Performance Self-Efficacy Scale (MPSES) developed by Zelenak (2010), the Condom Use Self-Efficacy Scale (CUSES) developed by Brafford and Beck (1991), and the HIV Testing and Counselling Tool developed by Tlaye et al. (2016). The questionnaire was divided into three parts: respondents' demographic information, sources of self-efficacy, and information on the utilization of SRHS.

The consideration of validity started at the early stage of the construction of the research instrument, where the study considered both construct and content validity. To begin with, 30 students from three private schools and 30 from three public schools participated in a pilot study. The study involved 10 students from each form (Forms III-VI) from public and private secondary schools to generate a representative sample. The data from the pilot study was first entered into the SPSS, version 25, before conducting a confirmatory factor analysis (CFA) using SPSS AMOS. Before factor analysis, negatively worded items were reverse-scored as this sub-scale included positively and negatively worded items. The results from model fit indices for verbal persuasion were unsatisfactory.

Based on the CFA results, two items from verbal persuasion that did not contribute generously to the total variability during the pilot study, and had very low loading factors, were ignored. A second CFA was conducted on the remaining items. The second CFA revealed a good model fit for all the remaining items: RMSEA = .07, SRMR = .04, GFI = .81, and CFI = .07. Problematical items were excluded from the analysis. Generally, the second confirmatory factor analysis was found to measure a unique form of sources of self-efficacy that demonstrated modest relationships with verbal persuasion in condom use. Each component of the internal and overall reliability of the questionnaire was tested using Cronbach's alpa coefficient. The overall Cronbach alpha for verbal persuasion was $\alpha = .08$. Similarly, the Cronbach alpha for the condom use self-efficacy scale was .073, and $\alpha = .07$ for utilizing the HTC services scale. This implies that the items on all scales were correlated when measuring the intended construct.

### *2.4 Data Analysis*

The SPSS, version 25, was employed in analysing the data. The data was cleaned, checked and rechecked to ensure that all values for all questions were correctly entered into the software. Also, data cleaning was done before analysis to check for errors such as values falling outside the range of possible values for a variable in the data set. For items measuring sources of verbal persuasion, the respondents were required to insert a tick (✓) in each question among the series of four Likert scales, which ranged from '*Strongly agree = 1'*, *'Agree = 2'*, *'Disagree = 3'*, and '*Strongly disagree = 4'*. The researcher decided to exclude a 'neutral' response option in the questionnaire because such a neural response could have prevented some participants from thinking deeply and sincerely about their self-efficacy in utilizing SRHS (Zelenak, 2010). Coding and data entry were done as *qn1, qn2, qn3, qn4, qn5*, and *qn6*. During the analysis, items on verbal persuasion were transformed into two levels, high and low, to simplify the interpretation and discussion of the results (Field, 2014). In addition, all negative items were positively worded to prevent response bias (Pallant, 2005).

Thus, for the verbal persuasion scale, the total score was calculated for all six items; whereby three items measured condom use, and three measured the utilization of HTC services. The minimum scale score was 3, and the maximum scale score was 12. All the respondents who scored 3–6 were considered to have a high level of verbal persuasion in the utilization of HTC services and condom use, and those who scored 7–12 were considered to have a low level. Frequencies were run for all items of the scale to determine the level of the utilization of HTC services and condom use among the adolescent secondary school students.

Regarding information on the utilization of HTC services, the respondents were required to indicate their confidence in their capability on HIV testing in four Likert scale levels: *1 = 'Strongly agree', 2 = 'Agree', 3 = 'Disagree',* and *4 = 'Strongly disagree'*. Data was coded and entered as *qn1, qn2, qn3, qn4, qn5* and *qn6*. The scale score was calculated for all six items. Moreover, regarding the items measuring condom use, the respondents were asked to indicate their confidence in using condoms on four Likert scale levels: *1 = 'Strongly agree', 2 = 'Agree', 3 = 'Disagree',* and *4 = 'Strongly disagree'*. Data was coded and entered as *qn7, qn8, qn9*, and *qn10*. During data analysis, the total scale score was calculated after reversing item 10, which was positively worded.

Descriptive analysis also involved computing frequencies, percentages, standard deviation and mean scores to determine the prevalence of both adolescents' verbal persuasion and the two aspects of SRHS, namely, the utilization of HTC services, and condom use. Descriptive results also included variations across the four demographic characteristics of gender, age, class level and type of school. Additionally, Spearman's correlation coefficient was used to determine the relationship between sources of self-efficacy and the utilization of SRHS in terms of the utilization of HTC services and condom use among students.

## 3. Results

Table 1 shows that 552 questionnaires were returned from the respondents. Most (n = 394, 71.4%) of the respondents were public secondary school students. Almost an equal number of male and female students participated in the study. Most respondents (78.3%) belonged to the ordinary secondary school cohort, relative to the advanced secondary school cohort. However, an almost equal proportion existed between classes in the two secondary-level cohorts. Likewise, based on the age group, 400 (72.5%) were aged 17–21 years, followed by 152 (27.5%) who belonged to the 15–16 years age group.

**Table 1: Background Characteristics of Respondents by Type of School, Gender, Class Level and Age**

| Variables | | Frequency | Percentage |
|---|---|---|---|
| Age group | 15–16 | 152 | 27.5% |
| | 17–21 | 400 | 72.5% |
| | Form III | 213 | 38.6% |
| Class Level | Form IV | 219 | 39.7% |
| | Form V | 58 | 10.5% |
| | Form VI | 62 | 11.2% |
| Sex | Boys | 279 | 50.5% |
| | Girls | 273 | 49.5% |
| | Private | 158 | 28.6% |
| Type of school | Public | 394 | 71.4% |
| | Total | 552 | 100% |

### *3.1 Relationship between Adolescents' Verbal Persuasion and Condom Use*

The first hypothesis of this study aimed to investigate the relationship between adolescents' verbal persuasion and condom use. The study hypothesized that there is no statistically significant relationship between adolescents' verbal persuasion and condom use. The relationship between the variables was analysed using Spearman's rank order correlation coefficient. Table 2 presents the results.

**Table 2: Spearman's Rank Order Correlation Coefficient between Verbal Persuasion and Condom Use among Secondary School Students**

| | | | Verbal Persuasion | Condom use |
|---|---|---|---|---|
| Spearman's rho | Verbal Persuasion | Correlation Coefficient | 1.000 | .266** |
| | | Sig. (2–tailed) | | .000 |
| | | N | 552 | 552 |
| | Condom Use | Correlation Coefficient | .266** | 1.000 |
| | | Sig. (2–tailed) | .000 | |
| | | N | 552 | 552 |

**Note:** **. Correlation is significant at the 0.01 level (2–tailed).

Table 2 indicates that there was a weak positive and statistically significant relationship between verbal persuasion and adolescents' efficacy in condom use (r = .266**, p-value<.000). This result suggests that increased level of verbal persuasion was associated with heightened efficacy in condoms use. In other words, the more adolescents received positive comments and encouragement about condom use from peers, parents and TV/radio ads, the more likely their convictions in their ability to use condoms increased. This outcome led to the rejection of the null hypothesis, which hypothesised that there was no statistically significant relationship between adolescents' verbal persuasion and condom use.

### *3.2 Relationship between Adolescents' Verbal Persuasion and Utilization of HIV Testing and Counselling Services*

Spearman's rank order correlation coefficient was also used to investigate the relationship between adolescents' verbal persuasion and the utilization of HTC services. The study hypothesized that there was no statistically significant relationship between adolescents' verbal persuasion and the utilization of HTC services. The results are as summarized in Table 3.

**Table 3: Spearman's Rank Order Correlation Coefficient between Verbal Persuasion and Utilization of HTC Services among Secondary School Students (N = 552)**

| | | | Verbal Persuasion | HIV Testing |
|---|---|---|---|---|
| Spearman's rho | Verbal Persuasion | Correlation Coefficient | 1.000 | .131** |
| | | Sig. (2–tailed) | | .002 |
| | | N | 552 | 552 |
| | HIV Testing | Correlation Coefficient | .131** | 1.000 |
| | | Sig. (2–tailed) | .002 | |
| | | N | 552 | 552 |

**Note:** **. Correlation is significant at the 0.01 level (2–tailed).

As Table 3 illustrates, the results of Spearman's rank order correlation coefficient revealed a weak positive and significant relationship between adolescents' verbal persuasion and the utilization of HTC services (r = .131, p-value = .002). This result suggests that high verbal persuasion is associated with high self-efficacy in utilizing HTC services. Implicitly, the more adolescents received positive comments and encouragement about HIV testing, the more likely their convictions in their ability to use HTC services would increase. This outcome led to the rejection of the null hypothesis, resulting in the fact that there was no statistically significant relationship between adolescents' verbal persuasion and utilization of HTC services.

## 4. Discussion

### *4.1 Relationship between Adolescents' Verbal Persuasion and Condom Use*

The results of the Spearman rank order correlation coefficient between adolescents' verbal persuasion and condom use revealed a weak positive significant relationship between verbal persuasion and adolescents' condom use ($r = .266$, p-value $<.005$). The findings indicate that a modest increase in adolescents' verbal encouragement regarding condom use is associated with a corresponding rise in their self-efficacy in this area. Specifically, the more positive reinforcement and supportive comments adolescents receive about condom use from parents, peers, and significant others, the greater their ability to use condoms effectively. Hence, the study suggests that parents, peers, and significant others can play a pivotal role in enhancing adolescents' health behaviours, such as practising safe sex, through their affirmative remarks and feedback. Ultimately, the degree to which adolescents receive positive messages about condom use correlates with an increase in their self-efficacy related to condom use.

In practice, these results suggest that public health initiatives, educational institutions, and community programmes should involve and empower important figures in adolescents' lives—including parents, teachers, and peer educators—to consistently convey positive messages about safe sex and condom usage. By promoting supportive communication environments, these key individuals can significantly enhance adolescents' confidence and motivation to engage in safe sexual behaviours, ultimately helping reduce sexually transmitted infections and unplanned pregnancies among young people.

These study results are congruent with the social cognitive theory by Bandura (1997), which argue that the affirmative statements individuals receive regarding their capabilities support their belief that they possess essential characteristics that help them become successful in their accomplishments. Bandura further contended that when significant others, peers, and parents express faith in an individual's ability, it becomes easier for that individual to maintain a sense of self-efficacy when struggling with a particular trait. In this study, therefore, the verbally persuaded adolescents developed the ability to use condoms, and, as a result, they were more likely to persistently mobilize their efforts to use condoms.

These results are also similar to the findings of Njau et al. (2007) on the relationship between peers and significant others on condom use among youths in Northern Tanzania. Their study found that adolescents were more likely to be verbally persuaded to use condoms by significant others, including teachers and relatives (p-value = .001). Indeed, positive comments about condom use from significant others, including teachers and relatives, are associated with adolescents' self-efficacy in condom use, as the current study has also attested. In the study, however, adolescents' verbal persuasion came from parents, peers, and significant others, as opposed to the study by Njau et al. (2007), which only identified significant others as the most influential in persuading adolescents.

Also, the current study only involved school-going adolescents aged 15–21 years, whereas Njau et al. (2007) involved both in-school and out-of-school adolescents aged 15–24 years. Such a variation could affect how the adolescents were verbally persuaded to use condoms. For instance, adolescents in school are more likely than their out-of-school counterparts to be persuaded by their parents to refrain from risky sexual behaviours and to use condoms, thereby reducing the chances of early teenage pregnancy and preventing the still incurable and feared HIV/AIDS. Honig (2012) contends that parents play a crucial role in educating their adolescent boys and girls about sex, and teaching them about the appropriate sexual conduct as early as possible—within what is acceptable and applicable based on their cultural context—to prevent teenage pregnancies, which often have far-reaching implications.

The positive relationship between the verbal persuasion observed in the current study is also consistent with the one conducted in Cameroon by Van Rossem and Meekers (2011), which examined the association between perceived social approval and condom use with casual partners, among youths in urban areas. Whereas the current study found that there was a weak relationship, the one in Cameroon found a strong relationship between adolescents' verbal persuasion and condom use (r = .078, p-value = 0.002). Additionally, adolescents in Cameroon were more likely to be verbally persuaded to use condoms by their parents than their peers.

On the other hand, the current study found that adolescents were more likely to be persuaded to use condoms by their peers than by their parents. Moreover, the study results signal a weak association between the adolescents' verbal persuasion and condom use (r = .266), as opposed to that of Van Rossem and Meekers (2011), which found a strong relationship between these variables. This variation appears to be attributable to the data collection tools Van Rossem and Meekers (2011) used on adolescents' verbal persuasion. Their tools restricted adolescents to indicate one mutually exclusive person whose words were persuasive regarding condom use, whereas the verbal persuasion construct in this study involved multiple individuals; including adults, peers and significant others. In other words, the results could have differed had peers and significant others been integrated into Van Rossem and Meekers' tool as sources of verbal persuasion in condom use.

To some degree, the results of the current study also match those of a research conducted in Ethiopia by Melaku et al. (2014) on sexual and reproductive health communication regarding condom use among secondary school female students. That study established that persuasive words about condom use with parents were strongly associated with condom use among adolescent girls (r = 0.76, p-value .001). In contrast, communication with peers was moderately associated with condom use (r = .532, p-value .001). This study suggests that persuasive words from parents and peers about condom use help boost adolescents' self-efficacy in condom use.

However, the current study found a weak relationship between such verbal persuasion and adolescents' self-efficacy in condom use. In contrast, Melaku et al. (2014) reported strong relationship between adolescents' self-efficacy in condom use. The slight variation in the results can be attributed to the demographic characteristics of the respondents used in both studies. Whereas the current study involved adolescent boys and girls aged 15–21, that of Melaku et al. (ibid.) only engaged adolescent girls aged 13–21. Such a sex variation among adolescents might have contributed to the variation of the results since gender norms and roles also suggest that adolescents' self-efficacy in condom use also vary by gender. For instance, Mizuno et al. (2007) argued that boys were more likely than girls to validate the conviction that condoms use made sex feel 'artificial'.

Similar results on the relationship between parents and peers on condom use were also obtained in a study in the US by Asare and Heights (2015) among college students, which found an association between verbal persuasion from peers and parents on adolescents' condom use (p-value = >.005). The results further indicated that about half of the respondents (51%) reported that it was vital for them when they were verbally persuaded to use a condom by their peers, whereas 49% reported that they were more likely to use a condom after their parents had verbally persuaded them. Both studies reflect the influence of verbal persuasion from peers and parents on condom use. The nearly equal split suggests that both peer and parental influences are important, although their impact may vary depending on the context or the strength of the relationship.

These results imply that verbal persuasion by parents and peers conveys invaluable ideas, values, convictions, expectations, information, and knowledge on condom use to adolescents; consequently being able to easily persuade adolescents to use condoms. Similar results were also obtained by Aspy et al. (2007) in the US in a study on parents' verbal communication and youth sexual conduct, which found that there was an association between adolescents' verbal persuasion and condom use (p-value = >0.05). As such, the results from the current study and those of Asare and Heights (2015) and Aspy et al. (2007) affirm that adolescents' self-efficacy in condom use is more likely to rise if they receive positive comments on condom use, particularly from their peers and parents.

However, the study results contradict those of Teye-Kwadjo et al. (2017) in Ghana, which found that there was no association between verbal persuasion from peers and significant others and condom use among adolescents (p-value = .007). The difference in the results might be attributable to cultural and societal limits: discussing adolescent sexual conduct in Ghana was considered a taboo, with adolescents' sexual relations strictly remaining private and confidential (Darteh & Esia-Donkoh, 2014). In this context, the absence of conversations about reproductive health topics such as condom use among peers, parents, and significant others restricted adolescents' access to crucial information on condom use. Consequently, this left them more vulnerable to unsafe sexual practices.

### *4.2 Relationship between Adolescents' Verbal Persuasion and Utilization of HIV Testing and Counselling Services*

Moreover, the Spearman's rank-order correlation coefficient revealed a weak, positive, significant relationship between verbal persuasion and adolescents' efficacy in HIV testing and counselling ($r = .131$, p-value = .002). Impliedly, increased adolescents' verbal persuasion levels were lowly associated with increased self-efficacy in utilizing HTC services. In other words, the more adolescents received positive comments and encouragement from their peers, adults, and significant others on using HTC services, the more their conviction to utilize HTC services increased. Regarding the influence of communication from parents, peers, and important others on adolescents, descriptive analyses showed that most adolescents (87.8%) were likely to be convinced by their parents to use HTC services. This suggests that adolescents' confidence in using HTC services has stronger association with encouragement from parents and peers rather than from significant others.

These findings highlight the importance of engaging parents and peers in promoting HIV testing and counselling for adolescents. Health communication strategies and intervention programmes should be tailored to provide parents and peer groups with accurate information and practical communication skills enabling them to offer consistent encouragement and support. By cultivating a culture that normalizes open and constructive discussions about HIV testing and counselling, communities can boost adolescents' confidence in accessing these services; ultimately leading to better health outcomes and more proactive HIV prevention behaviours among the youth.

In addition, evidence from the current study vouches that verbal persuasion —eg., feedback and judgments—received from others on utilizing HTC services plays an essential role in developing adolescents' self-efficacy in using these services. Such feedback statements to adolescents impact their self-efficacy in utilizing HTC services (Bandura, 1997). As Sanders (2013) pointed out, one's belief in one's capability materializes when one receives positive comments from significant others. In this regard, Christopher and Sheng (2017) associated verbal persuasion with transforming expectations and societal values, role-modelling sexual health risk reduction strategies, and raising adolescents' use of HTC services. On the whole, the current and other previous studies associate the extent to which adolescents are verbally persuaded by parents, peers and significant others on high-risk sexual activities, and the value of utilizing HTC services with an increase in adolescents' self-efficacy in using HTC services. Similarly, Trinh et al. (2014) contended that persuasive words from peers positively impacted adolescents' self-efficacy in using HTC services. Indeed, results from the current study have revealed that most adolescents (82%) are more likely to be verbally persuaded by their peers than by others to use HTC services. These results suggest adolescents are sensitive to peer approval, and often look to their friends for

guidance on behaviour. Therefore, when peers offer verbal encouragement or support to use HIV testing and counselling services, adolescents are more likely to respond positively. In other words, positive feedback from peers has a profound effect on adolescents' sexual decisions and the use of HTC services.

The results of the current study confirm the social cognitive theory by Bandura (1977) about the influence of verbal feedback and judgments an individual receives from others regarding their capability to perform a particular task: that positive statements about an individual's conduct impact one's self-efficacy. Similarly, negative comments or appraisals weaken one's self-efficacy. Thus, peers, parents, and schoolteachers must encourage students using verbal persuasion—through words and positive feedback—on the importance of sexual and reproductive health services to enhance adolescents' use of HTC services.

To some degree, the weak positive relationship between adolescents' verbal persuasion and the the utilization of HTC services observed in the current study contradicts the results of a study by Kusumaningrum et al. (2021) from Malaysia, on the dominant factors of voluntary counselling and testing intention among adolescents. The study by Kusumaningrum et al. (2021) found that adolescents' verbal persuasion from parents (r = 007, p-value 0.003) and significant others such as teachers, relatives, and community members (r = 605, p-value 0.027) was strongly associated with their utilization of HTC services. Kusumaningrum et al. (ibid.) further revealed that positive comments and judgment from parents constituted the most influential factor in the utilization of HTC services among adolescents. This is contrary to the findings of this study, which found that adolescents were more likely to be verbally persuaded by their parents, peers, and significant others. Also, while the current study found a weak relationship between adolescents' verbal persuasion and the use of HTC services, Kusumaningrum et al. (2021) found a strong relationship between adolescents' verbal persuasion and the use of HTC services

Such differences might be attributable to the high knowledge and experience of parents in Indonesia on adolescents' HIV testing and counselling, where most parents have the chance and time to discuss with their children reproductive health issues; including puberty, teenage pregnancy, the impact of risky sexual behaviour, STIs and HIV/AIDS, and information about the utilization of HTC services (ibid.). In contrast, most parental communications in Tanzania consist mainly of warnings and intimidations: that having sex would result in HIV infection and death; and that attending HIV testing is a sign that one has been engaging in inappropriate behaviours (Kajula et al., 2014).

On the other hand, the results of this study tally with those of Abamecha et al. (2013), whose study in Ethiopia on the intention to use voluntary HIV counselling and testing services among health professionals, found that verbal persuasion from significant others had a stronger influence on the decision to utilize HTC

services than persuasion from peers or parents ($\beta = 0.39$, $p < 0.001$). This similarity suggests that, in both contexts, significant others may play a more influential role in shaping decisions on the utilisation of HTC service.

The results of the current study also concur with those of Omer and Haidar (2010), who investigated the relationship between subjective norms and the use of voluntary HIV counselling and testing services among teachers in Ethiopia. The study established a positive and weak correlation between verbal persuasion and the utilization of HTC services (r = 0.45, p-value = <0.001). Similarly, Mekonen et al.'s (2018) research on the influence of verbal persuasion stemming from significant others on adolescents' use of HTC services among high school students in Woldia town, Ethiopia, found that there was a weak association between verbal persuasion and adolescents' utilization of the services. Similar results also emerged in a study by Manyaapelo et al. (2021) in South Africa on the psychosocial determinants of the intention to test for HIV among youths, which associated the intention to utilize HTC services with persuasive words (r = 0.67, *p* = value <0.001). However, while the current study revealed a weak correlation between verbal persuasion and the utilization of HTC services, Manyaapelo et al. (2021) found a strong correlation. This might be linked to the age of the respondents: Manyaapelo et al.'s (ibid.) study involved participants aged 18–35 years who might have affected their self-efficacy in utilizing HTC services vis-à-vis the extent of verbal persuasion. This implies that younger adults (aged 18–35) may be more responsive to verbal persuasion (e.g., encouragement, advice from peers or professionals), which in turn influences their self-efficacy to seek and use HTC services.

Generally, the findings of this study suggest that adolescents' belief in their capability to utilize SRHS was cultivated when they received positive comments from peers, parents, and significant others. On the contrary, negative comments or appraisals weakened their self-efficacy. These results imply that adolescents heed affirmative statements given to them by peers, adults, and significant others regarding their willingness to use condoms and utilise HTC services to support their beliefs. This implies that, although parents desire the best for their children, their aspirations should also be geared towards making adolescents aware of the utilization of SRHS to instil feelings of self-efficacy in them. In addition, adults and significant others should build on this to continuously increase adolescents' self-efficacy in using SRHS.

## 6. Conclusion

Persuasive communication is crucial in shaping behaviours, especially among adolescents regarding health-related practices. Providing positive reinforcement and feedback encourages young individuals to adopt safer practices, such as consistent condom use and utilizing HIV testing and counselling (HTC) services.

This encouragement fosters a sense of self-efficacy, empowering adolescents to feel more confident in their decision-making. When peers, adults, and significant figures in an adolescent's life express approval and support for such actions, there is likely to be heightened awareness and acceptance of these healthy practices. The cycle of positive reinforcement serves not only to motivate adolescents to use condoms and seek out HTC services, but also to develop essential skills that contribute to their overall confidence and capability in managing their sexual health. In essence, persuasive messages can effectively influence adolescent behaviour; leading to healthier choices vital for their well-being.

Moreover, the study found that verbal persuasion is a self-efficacy component reasonably related to condom use and the utilization of HTC services among secondary school students, with the adolescents relying on—and communicating more freely with—peers on health issues. Therefore, this study recommends that schools should establish and run student health clubs, mainly with students' leadership and peer educators. Such establishments should deal with self-efficacy issues related to the SRHS components on which students can share knowledge, beliefs, and skills. The study recommends that the existing national policy, particularly the *Guidelines for Implementing HIV/AIDS and Life-Skills Education Programmes in Schools*, be reviewed to integrate aspects of verbal persuasion as a source of self-efficacy. The proposed integration of the sources in the policy will, in turn, enable self-efficacy to be an integral part of implementing life-skills education that is expected to effectively empower adolescents' utilization of SRHS in secondary schools in Tanzania.

**References**

Abamecha, F., Godesso, A. & Girma, E. (2013). Predicting intention to use voluntary HIV counselling and testing services among health professionals in Jimma, Ethiopia, using the theory of planned behaviour. *Journal of Multidisciplinary Healthcare, 6*(21): 399–407.

Ajayi, A. I., Awopegba, O. E., Adeagbo, O. A. & Ushie, B. A. (2020). Low coverage of HIV testing among adolescents and young adults in Nigeria: Implication for achieving the UNAIDS first 95. *PloS One*, 15(5): 233–368.

Asare, M. & Heights, H. (2015). Using the Theory of Planned Behaviour to determine the condom use behaviour among college students. *American Journal of Health Psychology,* 30(1): 43–50.

Aspy, C. B., Vesely, S. K., Oman, R. F., Rodine, S., Marshall, L. & McLeroy, K. (2007). Parental communication and youth sexual behaviour. *Journal of Adolescence*, *30*(3): 449–466.

Ary, D., Jacobs, L. C., Razavieh, A. & Sorensen, C. (2006). *Introduction to research in education*. Belmont, CA: Wadsworth.

Bandura, A. (1986). *Social foundations of thought and action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Social cognitive theory*. *Routledge handbook of adapted physical education,* 6*:* 280–295. https://doi.org/10.4324/9780429052675–22.

Baruch, Y. (1999). Response rate in academic studies - A comparative analysis. *Human Relations*, 52(4): 421–438.

Binu, W., Marama, T., Gerbaba, M. & Sinaga, M. (2018). Sexual and reproductive health services utilization and associated factors among secondary school students in Nekemte Town, Ethiopia. *Reproductive Health,* 15(1): 1–10.

Brafford, L. J. & Beck, K. H. (1991). Development and validation of a condom self-efficacy scale for college students. *Journal of American College Health*, 39(5): 219–225.

Brega, A. G., Pratte, K. A., Jiang, L., Mitchell, C. M., Stotz, S. A., Loudhawk-Hedgepeth, C., Morse, B. D., Noe, T., Moore, K. R. & Beals, J. (2013). Impact of targeted health promotion on cardiovascular knowledge among American Indians and Alaska natives. *Health Education Research,* 28(3): 437–449.

Bryan, A. E., Norris, J., Abdallah, D. A., Zawacki, T., Morrison, D. M., George, W. H., ... & Stappenbeck, C. A. (2017). Condom-insistence conflict in women's alcohol-involved sexual encounters with a new male partner. *Psychology of Women Quarterly*, 41(1): 100–113.

Centre for Disease Control. (2015). *HIV/AIDS among youth.* New York, NY: Centre for Disease Control and Prevention.

Christopher, M. & Sheng, A. M. L. (2017). 21st Century parent-child sex communication in the U.S.: A process review. *Physiology & Behaviour*, 176(1): 100–106.

Darteh, E. K. M. & Esia-Donkoh, D. T. D. (2014). Reproductive health decision making among Ghanaian women. *Reproductive Health*, 11(1): 1–8. https://doi.org/ 10.1186/ 1742-4755-11-23.

Field (2014) Methods and data analysis of comparative research. *Handbook of cross-cultural psychology*, 1: 257–300.

Honig, A. S. (2012). Teen pregnancy. *International Journal of Adolescence and Youth*, 3843(4): 181–187. https://doi.org/10.1080/02673843.2012.655912.

James, C. E. (2016). Negotiating school: Marginalized students' participation in their education process. In *Race, racialization and antiracism in Canada and beyond* (pp. 17–36). University of Toronto Press.

Jeckoniah, J. N. (2018). Access to sexual and reproductive health and rights: Youth experiences in Handeni District, Tanzania. *Journal of Psychology and Behavioural Science,* 6(1): 43–51. https://doi.org/10.15640/jpbs.v6n1a6.

Kajula, L. J., Vries, H. de, Kaaya, S. F. & Aarø, L. E. (2014). Dynamics of parent-adolescent communication on sexual health and dynamics of parent-adolescent communication on sexual health and HIV / AIDS in Tanzania. *AIDS and Behaviour,* 18(1): 69–74.

Kusumaningrum, T. A. I., Rohmawaty, N. & Selena, H. (2021). Reproductive health information from parents: A dominant factor of voluntary counselling and testing (VCT) HIV intention on adolescents. *Journal of Medicinal and Chemical Sciences,* 4(2): 172–182.

Kwok, Q. M., Chau, J. P. & Holroyd, E. A. (2010). Examining the relationships between condom use self-efficacy and condom use among mainland Chinese sex workers in Hong Kong. *Journal of Nursing*, 28(2).

Lavrakas, P. J. (2008). Cross-sectional survey design. In *Encyclopaedia of Survey Research Methods*, 173–174.

Manyaapelo, T., Ruiter, R. A., Sifunda, S., Nyembezi, A., van den Borne, B. & Reddy, P. (2021). The psychosocial determinants of the intention to test for HIV among young men in KwaZulu-Natal Province, South Africa. *African Journal of AIDS Research*, 20(1): 42–52.

Masinde, J. M. & Chege, K. G. (2017). Assessment of adolescents' perception on the implication of sexual relationships on girls in higher learning institutions of Arusha City, Tanzania. *International Journal of Educational Policy Research and Review*, 6(4): 138–150.

Mathews, C., Eggers, S. M., Townsend, L., Aarø, L. E., de Vries, P. J., Mason-Jones, A. J., De Koker, P., McClinton Appollis, T., Mtshizana, Y., Koech, J., Wubs, A. & De Vries, H. (2016). Effects of PREPARE, a multicomponent, school-based HIV and Intimate Partner Violence (IPV) prevention programme on adolescent sexual risk behaviour and IPV: Cluster randomised controlled trial. *AIDS and Behavior*, 20(9): 1821–1840.

Mbeba, R. M., Mkuye, M. S., Magembe, G. E., Yotham, W. L., Mellah, A. O. & Mkuwa, S. B. (2012). Barriers to sexual reproductive health services and rights among young people in Mtwara District, Tanzania: A qualitative study. *The Pan African Medical Journal,* 13(1): 13. *https://doi.org/*10.11604*/pamj.supp*.2012.13.1.2085.

Meiberg, A. E., Bos, A. E., Onya, H. E. & Schaalma, H., P. (2008). Fear of stigmatization as barrier to voluntary HIV counselling and testing in South Africa. *East Africa Journal of Public Health*, 5(2): 49–54.

Mekonen, M. T., Dagnew, H. A., Yimam, T. A., Yimam, H. N. & Reta, M. A. (2018). Adolescent-parent communication on sexual and reproductive health issues and associated factors among high school students in Woldia Town, North-eastern Ethiopia. *Pan African Medical Journal,* 31(3): 1–15. https://doi.org/ 10.11604/ pamj.2018.31.35.13801.

Melaku, Y. A., Berhane, Y., Kinsman, J. & Reda, H. L. (2014). Sexual and reproductive health communication and awareness of contraceptive methods among secondary school female students, Northern Ethiopia: A cross-sectional study. *BMC Public Health,* 14(1): 1–11. https://doi.org/10.1186/1471-2458-14-252.

Ministry of Health, Community Development, Gender and Children, (2014). *Global AIDS response country progress report*. http://www.unaids.org/sites/ default/files/ country/ documents/TZAnarrativereport.

Mizuno, Y., Purcell, D. W., Latka, M. H., Metsch, L. R., Gomez, C. A. & Latkin, C. A. (2007). Beliefs that condoms reduce sexual pleasure - gender differences in correlates among heterosexual HIV-positive injection drug users (IDUs). *Journal of Urban Health*, 84(4): 523–536.

Mrema, N. F. *(*2015*).* Factors nfluencing access to sexual and reproductive health services among a*dolescents* in Tanzania. MA dissertation*,* Vrije Universiteit Amsterdam Amsterdam, The Netherlands.

Mugisha, E., Rensburg, G. H. Van, & Potgieter, E. (2011). Strategic framework for increasing accessibility and utilization of voluntary counselling and testing services in Uganda. In *AIDS Research and Treatment,* 2011. https://doi.org/ 10.1155/ 2011/912650.

National Adolescent Health and Development Strategy (2018–2022). (2018). *National Adolescent Health and Development Strategy,* 2057.

Njau, B., Mtweve, S., Barongo, L., Manongi, R., Chugulu, J., Msuya, M., Mwampeta, S., Kiwale, B., Lekule, J. & Jalipa, H. (2007). The influence of peers and other significant persons on sexuality and condom-use among young adults in Northern Tanzania. *African Journal of AIDS Research*, 6*(*1): 33–40.

Omer, S. & Haidar, J. (2010). Applicability of the Theory of Planned Behaviour in predicting intended use of voluntary HIV counselling and testing services among teachers of Harari Region, Ethiopia. *Journal of Health Development*, 24(2): 96–102.

Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS*. New York: Open University Press.

Roy, K. P., Mahapatra, B., Bhanot, A., Kapoor, A. & Narayanan, S. S. (2012). Psychosocial correlates of HIV-related sexual risk factors among male clients in Southern India. *Documentation of HIV prevention research and programmatic learning from India*, 309.

Sam-Agudu, Folayan, M. O. & Ezeanolue, E. (2016). Seeking wider access to HIV Testing for adolescents in sub-Saharan Africa. *Paediatric Research,* 6(76): 838–845. https://doi.org/10.1038/pr.2016.28.

Shariati, M., Babazadeh, R., Mousavi, S. A. & Najmabadi, K. M. (2014). Iranian adolescent girls' barriers in accessing sexual and reproductive health information and services: A qualitative study. *Journal of Family Planning and Reproductive Health Care,* 40(4): 270–275. https://doi.org/10.1136/jfprhc-2013-100856.

Tanzania Commission for AIDS (TACAIDS) and Zanzibar AIDS Commission (ZAC) (2018). Tanzania HIV Impact Survey 2016–2017: Final Report. Dar es Salaam: TACAIDS and ZAC.

Teye-Kwadjo, E., Kagee, A. & Swart, H. (2017). Predicting the intention to use condoms and actual condom use behaviour: A three-wave longitudinal study in Ghana. *Applied Psychology: Health and Well-Being*, 9(1): 81–105.

Tlaye, K. G., Belete, M. A., Demelew, T. M., Getu, M. A. & Astawesegn, F. H. (2018). Reproductive health services utilization and its associated factors among adolescents in Debre Berhan Town, Central Ethiopia: A community-based cross-sectional study. *Reproductive Health,* 15(1): 1–11.

Trinh, S. L., Ward, L. M., Day, K., Thomas, K. & Levin, D. (2014). Contributions of divergent peer and parent sexual messages to Asian American college students' sexual behaviours. *Journal of Sex Research*, *51*(2): 208–220.

United Nations Population Fund. (2015). The qualitative study on assessing supply side constraints affecting the quality of adolescent friendly health services and the barriers to service utilization in Nepal. In *UNFPA Nepal* (Issue January). https:// nepal. unfpa.org/en/publications/qualitative-study-assessing-supply-side.

United Nations (1995). *Report of the International Conference on Population and Development.* (Issue September 1994). https://www.un.org/en/development/ desa/population/ events/ pdf/expert/27/Supporting.

Van Rossem, R. & Meekers, D. (2011). Perceived social approval and condom use with casual partners among youths in Urban Cameroon. *BMC Public Health,* 11(1): 1–11. https://doi.org/10.1186/1471-2458-11-632.

World Health Organization (2014). *Report of an adolescent health services barriers assessment (AHSBA) in the United Republic of Tanzania with a focus on disadvantaged adolescents* (Issue October). http://apps.who.int/iris.

Zelenak, M. S. (2010). Development and validation of the music performance self-efficacy scale. *Music Education Research International*, 4(1): 43–56.