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Evaluation on the Effectiveness of Peer-led Versus Adult-Led School-Based HIV and AIDS Education Approaches

By

Randall, Njoki M.
Catholic University of Eastern Africa
njoki.nn@gmail.com

Abstract
Proliferation of HIV and AIDS among the youth globally and particularly in sub-Saharan Africa continues to be fuelled by ignorance thereby attracting the attention of the social work researchers and professionals in HIV and AIDS prevention education. Social learning theory focuses on learning approaches that can impart knowledge and attitude change through instruction and imitational modelling. This theory provides the groundwork for this study. From this theory's vantage point, a Peer-led HIV and AIDS education training traditionally by an individual who belongs to the age, grade, and status as the student participant, while Adult-Led training is facilitated by a formally trained health professional. The purpose of this study is to compare the effectiveness of Peer-led versus Adult-led school-based HIV and AIDS education approaches. The primary data utilized in this study was collected in Mafeteng district in the Kingdom of Lesotho. This study included 180 youth participants attending two rural high schools. This quasi-experimental study was used. Analysis of covariance revealed that the type of training (Peer-Led versus Adult-Led) produced a statistically significant effect. Peer-Led education had a slightly higher mean score of knowledge of HIV and AIDS at post-test than students in Adult-Led training. This study showed that both boys and girls improved their knowledge, but their knowledge gain was conditional on the school.

Key words: Peer-led, Adult-Led, School-Based HIV and AIDS Counseling, Education Approaches

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Introduction

The World Health Organization (WHO) defines adolescents as individuals between 10 and 19 years of age. The broader term "youth" encompasses the 15- to 24-year-old age group. Almost half of the universal population is less than 25 years old, the largest in history (United Nations Population Fund, 2003) (UNFPA) that have never been acquainted with a world free from HIV and AIDS. Of the 37.8 million people estimated to be infected with HIV and AIDS, 12.1 million young people between the ages of 15 and 24 worldwide were infected at the end of 2003 (The Joint United Nations Programme on HIV and AIDS, 2004) (UNAIDS). Each day, nearly 6,000 more young people become infected with HIV (UNAIDS, 2001; WHO, 2001, United Nation Children's Fund: 2001). Gender differences in patterns of HIV and AIDS infection among young people vary substantially around the world. Globally, females aged 15 -24 are 1.6 times more likely than males of the same age group to become HIV positive (World Bank, 2006; UNFPA, 2005).

Background of the Study

Lesotho, with a population of nearly two million people, has an average of 270,000 adults living with HIV and AIDS, making it the third highest in the world (UNAIDS, 2004). The highest rates of the pandemic are among young people. Young women between the ages of 15 and 24 have been particularly hard hit, with a total of 38,070 individuals' infected compared tol5, 930 infected with HIV and AIDS males. Females are 2.39 times more likely to have HIV and AIDS than male adolescents (UNICEF, 2007). Ministry of Health and Social Welfare, Lesotho (2005) noted that Prevalence rates remained high at 38 percent in the 25–29-year age group among women attending antenatal clinics. Women aged 15-24 accounted for about 57 percent of people living with HIV.

A Lesotho Ministry of Health 2001 survey that included youth in and out of school indicates that young citizens of Lesotho are at high risk of HIV infection due to inaccessibility of sexuality and reproductive health information and services (Mturi & Hennink, 2005; Family Health International, 2003; Lesotho Ministry of Health, 2002). The pandemic already has had a profound effect that includes a drastic drop in life expectancy to 36 years, approximately 100,000 child orphans under 15 years of age, and a depletion of skilled and unskilled labor in the country that pose significant economic and development challenges to this very low- income nation (W. H. O, 2005; UNAIDS, 2004). Disturbingly, knowledge about the HIV/AIDS epidemic still lags among the youth. In a survey (Ministry of Health and Social Welfare, 2005) carried out nationally only 26 percent of women and 18 percent of men aged 15-24 years respectively demonstrated ample knowledge of HIV and AIDS.

World Health Organization (2006) stated that young people between 15-24 years old are at the center of the HIV and AIDS epidemic in terms of new infections. The WHO's review of data entailed examination of access to information, skills, and services, which are key factors for alleviation of HIV and AIDS. Young people have the greatest potential force for transformation if they can be provided with the right intervention. Proliferation of the

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HIV and AIDS epidemic continues to be fueled by ignorance in many regions of the world. Filling in knowledge gaps through HIV and AIDS education and prevention programs, particularly among the youth are regarded as keys to preventing future infections and reducing young peoples' vulnerabilities to the disease. Sexual health education, which includes HIV and AIDS for the youth, overlooked in school curriculums and health services in most sub-Saharan countries, is essential in alleviating HIV and AIDS in the region. It was not until 1997 that Lesotho's Ministry of Health and Social Welfare proposed the National Adolescent Health Promotion and Development program which was implemented in 1998.

Statement of the problem

Sub-Saharan Africa remains the region most affected by the AIDS epidemic, with more than two thirds (68 percent) of all people infected with HIV living in this region where more than three quarters (76 percent) of all AIDS deaths occurred. In 2007, the total number of people living with the HIV virus was 22.5 million, Females in this region are disproportionately affected; they represent 61 percent of the people living with HIV. They are three times more likely than males to be HIV positive. This is an indication of often highly unequal social and socioeconomic status of females and males (UNAIDS/WHO, 2008).

The sub-Saharan Africa region is home to 6.2 million youth between ages 15 -24 infected with HIV and AIDS. Even within sub-Saharan Africa, there are substantial differences in HIV and AIDS incidents. Southern Africa which includes eight countries that comprise the Republic of South Africa, Lesotho, Namibia, Swaziland, Zimbabwe, Zambia, Mozambique, and Botswana, among others. These countries remain the global epicenter of the HIV and AIDS epidemic. In 2007, Southern Africa accounted for 35 percent of all people living with HIV and almost one third (32 percent) of the total population of all new infections and AIDS-related deaths globally (UNAIDS/WHO, 2008). In terms of national adult prevalence ratio, Swaziland 26.1 percent), the highest in the world, followed by Botswana (23.9 percent) and then Lesotho (23.2 percent) About 1.4 million children under 15 years are living with HIV live in southern Africa as well as 6.8 million infected women 15 years and older.

The republic of South Africa, the country that surrounds Lesotho, the location of this research, has 10-12 percent of its young people living with HIV (Shisana et al. 2005). With 5-5 million people living with HIV, South Africa has the largest number of people infected in the world (UNAIDS/WHO, 2008). Currently, 15 percent of the global HIV and AIDS infected youth aged 15-24 live in South Africa, even though the country has less than one percent of the world's population in this age range (Hallman, 2004). Reflecting similar trends from other countries in sub-Saharan Africa, young women in South Africa face greater risks of becoming infected than men: among 15–24-year-olds, they account for approximately 90 percent of the populations' new HIV infections (UNAIDS/WHO, 2008). Population Council (2004) reported that South Africa had three females for every one male living with HIV among 15- 24-year-olds. The trend has not changed, as evidenced by a study by Pettifor, Rees, Kleinschmidt, Steffenson, MacPhail, Hlongwa-Madikizela, Vermaak and Padian, (2005) which estimated 15.5 percent of females of the same age group being HIV infected, compared to 4.8 percent of the males.

Research Objective

Education can be a prime channel in the dissemination of important social messages and issues as evidenced by the role education has played in Lesotho's overall socio-economic

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development and enhancement of individual lives since its introduction by the missionaries. Education can be utilized in combating the spread of HIV and AIDS as well as mitigating its impact. Education can be accomplished by fostering self enhancement of individuals as HIV and AIDS calls for constant and continuous learning. Sound education must be based on scientific underpinnings, contemporary attitudes and understanding of sound prevention methods. Additionally, HIV and AIDS education has a role to plays part of the mental and social well-being of individuals. Awareness of HIIV and AIDS since its' first diagnosis in early 1980s has led to detrimental attitudes and behaviours that stimulate the spread of the pandemic continue to prevail adversely impacting the efforts to halt its spread.

Challenges, such as discussion about sexuality being taboo and especially among the youth can be alleviated through sexual health education (UNESCO, 2007). Education is a prime conduit through which the socialization of the youth can be realized since it has the potential to push back the frontiers of ignorance and attitudes. This education can be achieved through curriculum reform and policies and making sure that there is re-enforcement in life skills education, and advocacy campaigns. The education sector can contribute to alleviation of HIV and AIDS pandemic through research and evaluation, peer education and counselling, material development, expertise and capacity building, and teaching material development among others. Availability of funding affects the degree to which these phenomena may be impacted.

The study identified student's knowledge of HIV/AIDS and attitude toward abstinence as two dependent variables. HIV and AIDS knowledge is defined conceptually as the understanding of the mode of transmission, symptoms, and prevention of the disease. The justification of including this variable is that knowledge of HIV and AIDS transmission is very low among the young population aged 15-34 years in sub–Saharan African (UNAIDS, 2005). A study (Clark, Jackson & Allen-Taylor, 2002), seeking to evaluate basic knowledge on sexually transmitted infections that include HIV among adolescents, reported deficiency in understanding HIV and AIDS despite the sexually transmitted diseases education they had received. HIV and AIDS knowledge can mitigate the spread of the disease.

Empirical Studies

Peer and Adult-Led Education

Peer education is a concept that implies an approach and a strategy. Peer refers to an individual belonging to the same group based on age, grade, or status. The word educate refers to giving training in a particular subject (Oxford English Dictionary, 2002). There is a consensus among scholars that suggests that knowledge and information about sexual health among adolescents are not sufficient to change behaviour (Stewart, 2001). Strategies that utilize peer to peer approaches to accompany sex education have reported positive results (Stephenson, Strange, Forrest, & Oakley, 2004; Strange, Forrest, & Oakley, 2002). In practice, peer education has been defined in a variety of ways. Peer education has become a promising strategy, particularly when combined with formal education to promote behavior change (Stephenson, Strange, Forrest, & Oakley, 2004; Strange, Forrest, & Oakley, 2002).

This approach has been used with various populations and age groups for different purposes such as promotion of healthy sexual behaviors (Agha & Rossem, 2004), teenage pregnancy (Brindis, Geierstanger, Wilcox, McCarter & Hubbard, 2005 & Hallfors, Bonita-Iritani, Chos, Khatapoush, Saxe, 2002) tobacco prevention programs in schools (Valente, Hoffman, Ritt- Olson, Litchman & Johnson, 2003) addiction, and sexually transmitted diseases (Green, 2001). Typically, in Peer-led education, the educator is approximately the

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same age and shares similar values in decision making and experiences of the student, while fulfilling the same kind of educational and role model functions as the adult educator (Sabella, 2003).

A study conducted by Rey (2002) noted that Peer-led education is effective in that high school students reported that being trained on HIV and AIDS preventive methods by an individual similar in age was helpful. Jekielek et al. (2002) investigated 10 after school Peer-led mentoring programs that included Big Brothers/Big Sisters, The Buddy System and Building Essential Life options through New Goals among others. The youth assigned to the experimental groups indicated higher scores in favourable youth development, which in this case means connecting based on similarity in "language" and values. Similarly, another study (Speizer, Tambashe & Tegang, 2001) with the goal of promoting HIV and AIDS preventive behaviours utilizing a Peer-led strategy in Cameroon indicated an increase in HIV and AIDS knowledge and practice of more safe sex behaviours. The main objective of the study was to evaluate whether adolescents exposed to Peer-led education increased more knowledge and engaged more protective behaviours.

Ergene, Cok, Turner and Unal (2005), in a study carried out in Turkey with the aim of assessing the impact of Peer-led education and Adult-led single session lectures on HIV/AIDS knowledge and attitude change, found that Peer-Led education had. Greater positive impact on attitude changes toward people affected with HIV and AIDS. However, the Adult-led approach was noted to be more effective in improving HIV and AIDS knowledge compared to the Peer-led approach. The findings in this study suggest that Peer-led education might be an effective approach for increasing youth's knowledge as well as engendering positive attitude change toward HIV and AIDS infected individuals.

Findings in a quasi-experimental study by (Stephenson, Strange, Forrest, & Oakley 2004) evaluated the long-term effect of Peer-led sex education on sexual health by comparing Peer-led versus Adult- led approaches in reducing unsafe sex and pregnancy. There was a large statistically significant difference in skill-based activities between the experimental and control groups that included practicing putting on a model condom. The experimental group had 76 percent success in applying the condom versus 27 percent in the control group. The experimental group reported more satisfaction with the Peer-led approach attributing it to similar values, use of familiar language, being less moralistic and making the sessions interesting. However, youth in Peer-led sessions also reported a lack of knowledge in important topics such as emergency contraception. The results suggest that the Peer-led approach may be effective in only certain areas.

Adult-led education is usually conducted by a health worker or a teacher if the intervention is school-based and includes information in sex and HIV and AIDS. Selection of an educator is usually based on assumed theory of teaching, prevailing culture, and infrastructure capacity (Kirby, Obasi & Laris, 2007). Both Adult and Peer-led approaches have pros and cons. Adults are more experienced, knowledgeable, and with appropriate skills. The limitations include the adult educator's discomfort in discussing sensitive topics such as youth's sexual behaviour and their authority status in relation to the adolescents. In contrast, peer educators have been substituted for adults based on the belief that they can relate closely to the youth than older adults (UNAIDS, 1999). The disadvantage of peer education is that peers are less likely to be as knowledgeable about these subjects and less likely to have the skills needed. However, Dancy et al. (2004) in an exploratory study of youth HIV and AIDS prevention in Malawi, noted that both Peer-led and Adult-led approaches have a place in both formal and informal HIV and AIDS education.

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Peer education may be a good approach in that the young individual's peer group often has a strong influence on how the individual youth acts, engaging both in safe and risky behaviours. Perez and Dabis (2003) used both Peer-led and Adult-led approaches in HIV and AIDS prevention programs implemented in three cities in urban marginal districts of three cities in Colombia. The results indicated that the program had positive effects on knowledge and attitudes related to promotion of risk awareness and safe sexual behaviours among adolescents aged 10 to 19 years. Speizer, Tambashe and Tegang (2001) evaluated the "Entre Nous Jeunes," an 18-month Peer-led intervention program for adolescents in Cameroon. The sample randomized 818 adolescents between the age of 12 and 25 years. The authors reported that the experimental group which was Peer-led acquired greater STIs including HIV and AIDS knowledge than did the control group.

Penetrating the youth culture is crucial to communicating effectively with adolescents. Consequently, Peer-led education has been used in health promotion programs such as HIV and AIDS prevention and tobacco prevention (Valente, Hoffman, Ritt-Olson & Johnson, 2003). Using peer education in promoting sexual health has started to address entrenched issues in youth culture. Peer education is being translated by integrating sexual health programs in the form of youth-specific sexual health services. Borgia, Marinacci, Schifano, and Perucci (2005) in their controlled randomized study conducted in Rome, Italy, with 18 high schools, examined the effects of HIV and AIDS prevention programs, also based on Peer- led or Adult- led approaches. Both groups noted significant improvements in knowledge, skills, attitudes, and risk perception. However, the Peer-led group reported 95 percent greater improvement in knowledge compared to the Adult-led group. These results reinforce the positive ability of peers to connect and communicate with each other. Similar positive findings in a Peer-led school-based HIV and AIDS education program on knowledge, attitudes, and behavior among elementary and secondary school students in Belize were found in a study conducted by Kinsler, Sneed, Morisky and Ang (2004). The experimental group indicated higher HIV and AIDS knowledge, was more likely to report condoms use, had more positive attitude toward condoms, and were more likely to report future intentions to use condoms than the students in the control group.

In Botswana and Nigeria, a study by Klindera, Oteng, Kebadire, Imayi and Shobane (2004) reported effective results in a Peer-led HIV and AIDS initiative. Advocates for Youth has been collaborating and partnering with two-youth-led organizations, the Youth Health Organization of Botswana (YOHO) and the Nigeria Youth Action Rangers of Nigeria (YARN) to implement successful youth-specific HIV and AIDS interventions. Consequently, youth are increasing their skills as educators by using peer education life skills-based, by promoting youth friendly sexual health services, as well as networking at conferences. These comprehensive Peer-led initiatives have produced effective and popular programs that boosted the numbers of youth mobilized for HIV and AIDS prevention and education activities and services. There has been improvement in youth participation in these programs nationally. These efforts translate to youth increasing their own skills and abilities around leadership in youth specific HIV and AIDS interventions.

Research Methodology

A randomized two group pre-post, quasi-experimental, exploratory design was used, the study population was high school students that included eleventh and twelve Grades in Johnson Baker and Masentle high schools in Mafeteng district in the kingdom of Lesotho. These are to public high schools in the same district with students from similar

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socioeconomic backgrounds. Both schools had a total of 17 streams of classes of eleventh and twelfth grade students. The number of students in each class ranged between 35 and 55 students. The convenience sample used in this study included 180 students. Two groups of 45 students were drawn from both grade levels. Those that picked a "No" would not participate. This way, the sample would be representative, and each participant had an equal chance of being selected. After obtaining a sample of 180 students with ninety from each school, six groups comprising 15 participants were randomized to a Peer-led or Adult-led approach five-hour active participatory type HIV and AIDS education training.

The Adult-Led classes were conducted by a registered nurse specifically trained in adolescent health and the Peer-Led group was conducted by a 20-year-old male high school student. The student had received peer education training prior to being selected to facilitate the HIV and AIDS education training. The researcher read the consent forms to all the participants before they started responding to the questions or statements from the three surveys to ascertain they were understood. The parents had been furnished with the consent forms which they signed and returned to school before the training began.

HIV and AIDS has been operationalized using the HIV-KQ scale (Carey & Schroeder, 2002). It is an 18-item, three-point Likert scale with internal consistency of Cronbach's Alpha of .83. The HIV-KQ measures HIV and AIDS knowledge. It was studied with a non- probability sample of 1,019 respondents (Carey & Schroeder, 2002). The purpose of the study was to evaluate the psychometric properties of the brief (HIV-KQ 18) self-report measure of HIV-related knowledge. The old version- HIV-KQ- 45 (alpha= .91)- is inconvenient due to its length to use in field surveys. Data from three clinical trials show that the HIV-KQ-18 scale detected gains in knowledge by treated respondents when compared to control groups that received no intervention. The instrument comprises 18 responses with answers in the form of a Likert scale. The responses choices are as follows: 1 = True, 2= False, 3= I do not know.

Research Findings

ANCOVA analysis examined whether the type of training influenced student knowledge of HIV and AIDS at post-test while controlling for students' age, gender, grade, school, and self-efficacy and attitude towards abstinence. The findings revealed the following information: The tested model showed an overall statistical significance ($p < .017$), explaining 18 percent of the variance in the posttest Knowledge of HIV and AIDS (Adj. R Square = .18). This model did not meet the expected assumption for homogeneity of variance through the Levene's test ($p = .03$). However, it did meet the assumption for homogeneity of regression slopes in a separate ANCOV A, which tested the multiple interaction between the independent variable (type of training) and the selected covariates on the dependent variable ($p=$. S3).

This model was, however, primarily driven by the following results: Students who had higher knowledge of HIV I AIDS at pretest also had significantly higher knowledge of HIV and AIDS at post-test (Pearson r = .48). This relationship explained 21 percent of the variance (Eta square = .21) in the post-test knowledge of HIV. The Meanpre = 39.06 (SD = 4.06), and Mean post = 40.18 (SD = 3.26), t-paired = 3.85, $p < 001$; effect size is small (eta square, T]2 = .08 (calculated as 112 = t2 I t2 + (N - 1), Green & Salkind, 2003, p. 147).

Type of training (Adult- vs. Peer-led training) revealed borderline statistically significant effect ($p = .051$). Students in peer-led training had very slightly higher mean knowledge of HIV and AIDS at posttest (Mean=40.75, SE=.36) compared to students in

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adult-led training (Mean=39.83, SE=39). This result must be viewed with caution since statistical significance level was of borderline value. The findings also showed a statistically significant interaction effect between students' gender and school (p=.015). That is, in the Johnson Baker High, the girls had a slightly lower mean posttest knowledge of HIV than boys ($Mean_{girlJB}$ =39.60, SE=.51; $Mean_{boysIJB}$=40.95, SE=.47), while at the Masentle High, the girls had a slightly higher mean post-test knowledge of HIV and AIDS compared to boys (($Mean_{girlMA}$=40.92, SE=.55; $Mean_{boysIMA}$=39.65, SE=.58). All other interactions among the selected variables had no statistically significant effects.

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Table 4.9 Ancova for pot-test on HIV knowledge (N=172)

Table 4: 9					
ANCOVA for Post-test on HIV Knowledge (N=172)					
		Mean			Partial Eta
Source	df	Square	Fa	p	Square
					112
Corrected Model	33	18.73[b]	2.149	.001	.34
Intercept	1	878.77	100.332	.000	.42
HIVKO[c]	1	319.25	36.450	.000	.21
DiffATA[d]	1	10.51	1.200	NS	
DiffRSS[e]	1	.01	.001	NS	
	1				
Gender		.11	.126	NS	
	1				
School		.56	.064	NS	
	1				
Grade		.31	.036	NS	
Age-group		2.91	.332	NS	
	1				
Type of training		33.80	3.859	051	.03
	1				
Gender x School		53.60	6.120	.015	.04
All other variable				NSt	
interactions					
Error	137	8.76			
Total	171				

a Computed using alpha = .017.
b R2 = .34 (Adjusted R2 = .18).
c Knowledge of HIV at pre-test.
d Change of attitude toward abstinence from pre-test to post-test.
e Change of self-efficacy from pre-test to post-test.
t Interaction among all covariates was not statistically significant; thus, meeting the assumption of homogeneity of regression slopes.

Theoretical Explanation

Peer education is rooted in Social Learning Theory with Albert Bandura as the leading proponent. The theory posits that certain individuals belonging to a particular peer group can inspire behaviour change among peers. Additionally, this theory asserts that individuals make

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changes not due to scientific or factual evidence or testimony but, because of subjective judgment of close, trusted peers who have embraced changes and act as credible role models for change. The main objective of this study was to compare the Peer- Led and Adult-Led approaches to establish which method yields better results in HIV and AIDS knowledge. The Peer-Led appeared to have been more effective than the Adult-Led. This finding confirms the theoretical basis and previous research findings of peer influences in HIV and AIDS training education.

The ability to learn by social modelling provides a highly effective method for increasing knowledge and skills. Applications of modelling principles to HIV and AIDS prevention focuses on how to manage interpersonal situations and one's own behaviour in ways that may afford protection against infection with the HIV and AIDS virus. The influence of modelling on beliefs about one's capabilities relies on comparison with others. It is universally normative that people judge their own capabilities comparing them with others. People judge their own capabilities, in part, from how well those whom they regard as like themselves exercise control over situations. Participants may have developed stronger beliefs in their capabilities and more readily adopt new behaviours after interacting with models like themselves. To increase the impact of modelling, the characteristics of models should be made to appear like the people's own circumstances, such as their age, sex, and status, the type of problems with which they manage or cope, and the situation in which they apply their skills. These requirements were met in this study.

Conclusion and Recommendations

Testing the hypothesis, which expected that Peer and Adult-led training, would have a differential impact on students' knowledge of HIV and AIDS revealed a weak support for this hypothesis. In other words, the type of training (Adult- vs. Peer-led training) revealed borderline statistically significant effect (p =.051). Students in Peer-led training had very slightly higher mean knowledge of HIV and AIDS at post-test (Mean=40.75, SE=.36) compared to students in adult-led training (Mean=39.83, SE=39). This result must be viewed with caution since statistical significance level was of borderline value.

Testing of the hypothesis also revealed that results on knowledge of HIV/AIDS at post-test were also driven by a significant interaction between school and gender (p=.015). Boys at Johnson Baker high school had a slightly higher mean post-test knowledge of HIV and AIDS (40.95, SE=47) than girls (39.60, SE=51). In Masentle high school, the girls had a slightly higher mean post-test knowledge of HIV and /AIDS knowledge (40.92, SE=.55) compared to boys (39.65, S£=58). All the other interactions among selected variables had no statistically significant effects on the student knowledge of HIV and AIDS.

This study supports the literature in that the youth participants readily identify with peers, members of such social groups demonstrate their commitment to the group and maintain the group's identity by conforming to the new health norms advocated by peer educators, Peer-led training uses a peer educator, who in this study refers to a student belonging to the same age, grade, values, experiences, and socioeconomic status as the youth study participants. The peer educator serves and functions as the role model and a teacher. In the study, the peer educator was a student in a neighbouring high school. Beginning research has suggested that peer educators may be effective in a broad array of helping situations (Stephenson et al., 2004). A peer health education approach is commonly utilized with various populations and age groups to communicate health information such as sexually transmitted diseases, teenage pregnancy, and addiction. Peer educators are believed to be

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effective because they can alter the normative and communication environment in informal social groups. Peer educators can marshal social support that may help others to overcome barriers to healthy behaviour and thus, reinforce youth decisions to adopt healthy behaviours.

Higher mean scores have been reported in studies (Stephenson et al., 2004, Jekielek et al., 2002) that have utilized the peer approach for sex education with the goal of reducing HIV and AIDS infection. Participants in these studies found that a Peer-led approach was particularly helpful given the fact that the youth connected with the facilitator who was their age and spoke the same "language" as them. Success in Peer-led training was mainly attributed to using familiar language, similar values, and in being less moralistic in presenting the dangers of HIV and AIDS or pregnancy, hence making the sessions more appealing to adolescents. Based on these observations, the Peer-led training and education in this study was thus geared towards enhancing the functional levels of knowledge and attitude in adolescents.

The Adult-led sex education approach in this study was facilitated by a trained registered nurse trained in adolescent health. Often Adult-led school-based sex education is conducted by a health worker or a teacher. The adult trainer was more skilled and knowledgeable since she was a formally trained health worker in a health institution. Nevertheless, adult trainers often have limitations that include feelings of discomfort discussing a sensitive subject that entails adolescents' sexual behaviour. One study (Ergene et al., 2005) compared the impact of a Peer-led and Adult-led session on HIV and AIDS knowledge and attitude change and found that the Adult-led training was more effective in improving knowledge while the Peer-led training had greater positive impact on attitude change toward HIV and AIDS infected individuals in the study.

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References

Agha, S. (2002) An evaluation of the effectiveness of a peer sexual health intervention among secondary-school students in Zambia. AIDS Education Prevention. 14(4), 269-281. The Guilford Press.

Ajzen, 1. & Fishbein, M. (1980) Attitude-behavior relations: A theoretical analysis and review of empirical research. Psychological Bulletin, (84), 888-914.

Ajzen, 1. & Fishbein, M. (1980) Understanding the attitudes and predicting social behavior. Englewood Cliff, New Jersey: Prentice-Hall Inc.

Best, J. W., & Khan, lV. (1998) Research in Education. Washington, D.C.: Allyn and Bacon

Bandura, A. (1989) Human agency in social cognitive theory. American psychologist, 44(9),1175-1184

Brieger, W. R., Delano, G. E, Lane C. G., Oladepo, 0., & Oyediran, K.A. (2001) African youth initiative: Outcome of a reproductive health education program. Journal of Adolescent Health. 29(6), 436-46.

Clark L.R., Jackson, Jackson, M. & Allen-Taylor, L. (2002) Adolescent's knowledge about sexually transmitted diseases. Sexually Transmitted Diseases, 29(8), 436- 43.

Cuijpers, Pim. (2002) Peer- led and adult-led school drug prevention: A meta- analytic comparison. Journal of Drug Education. 32(2), 107-119.

Devilly, G. L, Sorbello, L., Eccleston, L., & Ward, T. (2005) Prison- based peer- education schemes. Aggression and Violent Behavior. 10(2), 219 - 240.

Eaton, L. and A.J. Flisher (2000) HIV/AIDS knowledge among South African youth. Southern African Journal of Child and Adolescent Mental Health, (12), 97- 124.

Ebert, M. (2003) Peer programs in prevention of sexually transmitted infections. Acta Dermatoven AP A 12.

Education Sector Survey. (1983) Study of the teacher education system. Ministry of Education.

Fazio, R.H. & Roskos-Ewoldsen, (1994) Acting as we feel: When and How attitudes guide behavior in Shavitt and Brock, Persuasion, 71-94.

Fazio, R.H, Powell, M, Williams, C (1989) The role of attitude accessibility in the attitude-to behavior process. Journal of Consumer Research, (16),280-289.

Government of Lesotho (2003). Turning a crisis into an opportunity strategy for scaling up the national response to the HIVIAIDS pandemic in Lesotho. Government Press.

Government of Lesotho. (2001) National Youth Policy for Lesotho, Maseru Lesotho.

Green, J. (2001) Peer education. Promotion and education, 8(6),65-68.

Grinnell, JR., R.M. (Grinnell, 1994) Evaluation and quality improvement in the human services. Allyn and Bacon. Needham, Massachusettes.

Guba, Egon G. (1990) The paradigm dialogue. Sage Publications. Newbury Park, California.

Kay, IF & Jackson, A (2008) Sex, Lies and Stereotypes: How abstinence-only programs harm women and girls. Legal Momentum. New York, NY.

Kalichman S & Simbayi L. (2004) Traditional beliefs about the cause of AIDS and AIDS related stigma in South Africa. AIDS Care, 16 (5), 572-580.

Kirby, D. (2002b) Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. The Journal of Sex Research. Vol. 39 (1), 51-57.

Lesotho, Ministry of Education. (1995) A Report: Lesotho secondary education policy localization of the "O" Level curriculum.

Lesotho, Ministry of Education (1984). Secondary and high schools in Lesotho strategies for improvement.

Citation: Randall, N. M. (2021). Evaluation on the Effectiveness of Peer-led Versus Adult-Led School-Based HIV and AIDS Education Approaches.. *Journal of African Interdisciplinary Studies*, 5(3), 39 – 51.

Marick, J (2002) HIV I AIDS peer education: a rural health project. Journal of School Nursing. 18 (1),41-7.

Mantell, J. E, Divittis A T & Auerback ML (1997) Evaluating HIV prevention interventions. Plenum Press, New York.

Mturi, A.J & Hennink, M.M. (2005) Perceptions of sex education for young people in Lesotho. Culture, Health & Sexuality 7 (2), 129-143. Routledge.

National University of Lesotho, Institute of Education. (2000) Lesotho: A baseline study of the teacher education. system.

Soanes, C (ed.) (2002) Oxford English Dictionary, ninth edition. Oxford University Press, New York.

Park, LU, Sneed, C.D., Morisky, Alvear, S. and Hearst, Norman (2002) Correlates of HIV risk among Ecuadorean adolescents. AIDS Education and Prevention, 14(1), 73-83.

Pedersen, W. & Hegna, K. (2003) Children and adolescents who sell sex: community study. Social science and Medicine, 56(1) Elseveir science.

Perez, F. & Dabis, F. (2003) HIV prevention in Latin America: Reaching youth in Colombia. AIDS CARE 15(1), 77-87.

Sabella, R. (2003) From the editor. The Peer Facilitator Quarterly, 18(4), IV, V.

Scottish Executive (2000) The report of the working group on sex education in Scottish Schools. Edinburgh, Stationery Office.

Singh, S. (2003) Study of the effect of information, motivation, and behavioral skills (IMB) intervention in changing AIDS risk behavior in female university students. AIDS/Care 15(1),71-76.

Speizer, I. S., Tambashe, B. O. and Tegang, S. P. (2001) An evaluation of the " Entre Nous Jeusnes" Peer-educator program for adolescents in Cameroon. Stud Fam Plann. 32(4), 339-51.

UNAIDS/WHO (2007) Global AIDS Report 2008. Geneva.

UNAIDS, (2004) A Report on the Global AIDS Epidemic. Geneva.

UNAIDS, UNFPA and UNFPA. (2004) Women and HIV/AIDS; confronting the crisis. Tecnincal Report. Geneva.

UNICEF. (2004) The state of the world's children. Geneva.

UNESCO. (2007) The role of education and media in scaling up the response against HIV and AIDS. A workshop in Maseru Sun Hotel, 11 & 12 January 2007. Lesotho.

UNESCO. (2000) The encounter between HIV/AIDS and education.

WHO. (1997) Action for adolescent health: towards a common agenda. Recommendations from a joint study group. Geneva.

WHO. (1998a) The second decade: improving adolescent health and development. Geneva.

Zambuko, O & Mturi, A.I. (2005) Sexual risk behavior among the youth in the era of HIV/AIDS in South Africa. Journal of Biosocial Science. 37(5) 569-584.

Zwane, I.T., Mngadi, P.T, & Nxumalo MP (2004) Adolescents' views 01) decision- making regarding risky sexual behavior. International Nursing Review. 51 (1), 15-22.