



ISSN:2229-712X

Available online at [www.elixirjournal.org](http://www.elixirjournal.org)

## Psychology

*Elixir Psychology* 52 (2012) 11367-11372Elixir Online  
Journal

# Moderating effects of age gender and orphan hood on Social Exclusion and Sexual risk-taking Behaviors associated with HIV/AIDS among youth in Bondo District, Kenya

Lylian Ayiro, Lucas Othuon and Paul Oburu

Department of Educational Psychology, Maseno University, Kenya.

### ARTICLE INFO

#### Article history:

Received: 3 September 2012;

Received in revised form:

30 October 2012;

Accepted: 6 November 2012;

#### Keywords

Social exclusion,

Gender,

Age,

Orphanhood,

Sexual risk-taking behavior.

### ABSTRACT

Numerous studies on adolescents have explored factors associated with sexual risk-taking behaviors among youth. However, few studies have examined the link between social exclusion of youth in social and sexual matters and sexual risk-taking behaviors associated with HIV/AIDS infection. This study was carried out using cross sectional design among 365 students randomly selected in secondary school in Bondo District, Kenya in order to determine the link between social exclusion and sexual risk-taking behavior associated with HIV/AIDS infection. The study also examined the moderating effect of age, gender and orphanhood on the relationship between social exclusion and sexual risk-taking behaviors. The findings of the study revealed positive correlation between social exclusion and sexual risk-taking behavior associated with HIV/AIDS infection. The study found out that age, gender and orphanhood moderates the relationship between social exclusion and sexual risk-taking behavior. Conclusion drawn from the study was that an increase in exclusion of youth on basis of age, gender and orphanhood could hamper efforts to slow down the spread of HIV infection in successive generations. Current best practice emphasizes the need for multilevel inclusion of youth in the family, schools, church and societal decision making processes in social and sexual matters that affect them.

© 2012 Elixir All rights reserved.

### Introduction

Globally, HIV/AIDS and risky sexual behaviors remains a critical problem particularly among the youth. Studies have shown that every day, more than 6000 young people of ages 13-25 years get infected and over a million children have been orphaned by HIV/AIDS (Aggleton et al, 2004; Nkam 2001). The principle mode of HIV/AIDS transmission is sexual intercourse that is initiated at an age earlier than 15 years with multiple partner's sexual partners (UNAIDS, 2010). Premarital sexual intercourse has therefore been singled out to be the major risk-taking behavior among youths in Kenya (NACC& NASCOP, 2007). Youth who engaged in pre-marital sex and suffered from Sexually Transmitted Infections (STI) were 17 %. This represented 170 youth for every 1000 who sought medical attention for STI annually (UNICEF, UNAIDS&WHO, 2002). The report noted that cases that went unreported were unknown. This indicated that a large number of youth were likely to have engaged in risky sexual activities. Nearly half of all new infections in 2008 were transmitted during heterosexual sex (UNAIDS & WHO, 2009). However, drug injection, blood transfusion and prenatal infections also play a part in HIV/AIDS transmission. It is worth noting that the high infection rates among youth can likely lead to depletion of savings, reduced productivity, HIV/AIDS related deaths and consequently interfering with existing struggles to eradicate poverty (USAID, 2011). In Kenya, HIV/AIDS prevalence in general population has reportedly increased from 6.7 % in 2003 to 7.4 % in 2007 to 8.5 % in 2009 and Nyanza Province was leading with a prevalence of 14.9 % (NASCOP, and EAC, 2009). At same time, youth accounted for 60% of new HIV/AIDS infections and

girls were 6 times more affected than men (Odinga, 2011). According to the HIV/AIDS Surveillance survey of 2006, it was reported that Homa Bay and Suba Districts in Nyanza province had prevalence rates of 21 %; they were followed by Kisumu with 10.8 % and Migori 8.2 %. Bondo District was the fourth with a prevalence of 7.8 %; 6.1% in male and 9.5 % among female adults (NACC&NASCOP, 2007). By 2009, the HIV/AIDS prevalence rate in Bondo District had increased to 23.6 %. The infection rates among youth in the district aged 15-24 also rose from 7.0 % to 11% in 2007 (EAC, 2009) whereas the general prevalence in 2009 was triple that reported in the district in 2006 and double the Province's prevalence.

This high HIV/AIDS infection rates could be due to the sexual risk-taking behaviors that are a characteristic of the adolescence stage and a biological predisposition of youth to sexual risk-taking behaviors. Previous researchers involved in adolescent research for example, Steinberg (2008) have suggested that at this stage in life, young people underestimate their likelihood of being hurt by potential harmful activities and get overwhelmed with sexual and emotional changes, hence, succumb to risky sexual activities. Studies have also shown that every day, more than 6000 young people of ages 13-25 years get infected and over a million children have been orphaned by HIV/AIDS (Aggleton et al, 2004; Nkam 2001). This high HIV/AIDS infection rates could be due to the sexual risk-taking behaviors that are a characteristic of the adolescence stage and a biological predisposition of youth to sexual risk-taking behaviors.

Literature related to global spread of HIV/AIDS, for example, [Terence Higgin Trust, (2001)] and Francis, (2002)

Tele:

E-mail addresses: [ayirililian@yahoo.com](mailto:ayirililian@yahoo.com)

© 2012 Elixir All rights reserved

suggests that vulnerability related to HIV/AIDS infection and ultimate death of youth who are productive members of the society increases when victims are excluded from mainstream social matters that affect them. The authors reported that social exclusion make people to develop low self esteem and may in turn lead to risk-taking behavior. Social exclusion of youth in the society by adults has been related to loss of control and subsequent rise of HIV/AIDS infection amongst the youth. It has been reported that such discriminatory practices and subsequent loss of control reduces the youths' ability to participate wholly or partially in activities available to the majority within the society in which they live (Kohler, 2009).

However, not much documented data is available on the presumed link between social exclusion and sexual-risk taking behavior. While commendable attempts have been made to increase HIV/AIDS awareness, previous researches and intervention programs aimed at stemming the increasing rates of HIV/AIDS infections especially in this hard hit district are either misplaced by laying more emphasis on the biomedical and behavioral change strategies while giving little attention to the social factors that could increase vulnerability possibilities amongst the youth. Some intervention strategies have overly concentrated on targeted groups considered to be at a high risk of HIV/ AIDS infection such as long distance drivers, 'jaboya' fishermen and women traders while leaving out large groups of youth who are equally at a greater risk of contracting HIV/AIDS. It is also worth mentioning that existing prevention strategies might not be effective in all populations. This study therefore aimed at finding out the moderating effect of age, gender and orphanhood on social exclusion and sexual risk-taking behaviors amongst the youth.

Ogot (2004) reported that apart from the suggested biological link to risk-taking behavior, other socially exclusionary practices were equally responsible. For example, the author noted that social exclusion of the youth by adults was the underlying reason why debates on whether to include Sex Education as a way of curbing sexual risk-taking behavior in schools had always raised a critical debate by the church and the Kenyan community. The author further observed that most moralists argued that inclusion of sex education in schools could lead to automatic experimentation. Such socially derived exclusionary practice by adults based on their morality could lead to a general lack of relevant knowledge on the part of the youth that could likely increase their own vulnerability and misinformation on sexual related matters. However, these studies did not find out the strength of the relationship between social exclusion and sexual risk-taking behavior among youth in this age bracket which will be the focus of the current study.

Akunga, Kwamboka and Muia (2004) reported similar findings from a study which focused on primary school students using focus group discussions. The study noted that parents and Primary school teachers in Garissa and Kibera slums offered guidance and counseling only on academic matters while avoiding sex-related issues that critically affect learners on assumption that the youth were not mature enough to be involved in sexual intercourse. However, the reviewed study data was obtained from focus group discussions which are basically qualitative in nature. Thus, an important aspect of quantitative data collection and analysis was not explored. The current study aimed at filling this gap by collecting and analyzing the data both qualitatively and quantitatively. The current study will also investigate whether teachers avoid

addressing sexual issues affecting students in secondary schools who are relatively older and presumed to be sexually active compared to those in primary schools targeted in previous study.

Literature reviewed, for example, Malanda (2008) noted that in many African societies including Kenya, the right age of discussing issues related to HIV/AIDS is socially constructed based on the social norms and beliefs. The author observed that free talks on sexuality had always been termed as "bad manners" and taboo especially to youth in early adolescence stage of 13-15 years. The study also noted that there were conflicting sexual norms and values emanating even from the same family, culture and religious communities. This complicated the actual experiences of the youth especially in situations where expectations and values connected to sexuality were rarely discussed and cultural norms dominated what the youth should know against the expectations of their peers. Such a situation created anxiety among the youth. The present study's potential lies in the fact that it focused on a highly vulnerable but invisible group of youth who have not been targeted by previous researches nor singled out as a socially marginalized group especially when developing preventive measures that could likely reduce HIV/AIDS infections.

The gap that exist between the youth and adults in most societies was also noted by Okwesio (2002) who reported that most parents of students in secondary schools in Bondo district feared to discuss sex with their children, hence, excluded them in such forums. The study noted that the students were involved in various forms of sexual risk-taking behaviors due to peer pressure. For example, 82 % of the sampled students who had had their first sex at 12 -15 years were highly admired by their peers. This was an indication that sexual risk-taking behavior was common among youths in this age bracket. The study also noted that those who had never had sex were seen as being timid, coward, outdated, immature and abnormal. This suggest that such misplaced attitudes and peer pressure could play a big role in directing the youth towards experimenting with sexual intercourse and consequently increasing their chances of being infected with HIV/AIDS. However, the study done by Okwesio (2002) did not explore empirically the magnitude of the exclusion of young people in sexuality related issues and the consequent sexual risk-taking behavior, which was the main area of focus of this study.

Aggleton et al (2004) also attributed youth's sexual risk-taking to adults' negative perception of the youth. This could further affect their self esteem and make them feel inferior and vulnerable to any sexual advances that could likely expose them to HIV/AIDS infection. These authors similarly noted that when one is either excluded or devalued from desired relationships, he/she reacts with pain, by avoiding sources of rejection and moving towards sources of acceptance. Thus, when one is excluded from a desired group, he/she reacts by feeling embarrassed, ashamed and guilty. They asserted that the socially devalued individuals will always look for solace from other receptive groups or individuals who are able to accommodate their views. These authors noted that such negative perceptions and need for acceptance reduced the youth's sense of identity in the society. Thus, they become susceptible to pressure from their peers, became impulsive and increased their orientation towards the present satisfying factors rather than on the future requirements. These prepositions suggest that when youth are socially excluded by adults they are more likely to take any risk

as long as they are provided with a sense of acceptance or belongingness.

It is worth noting that the impact of social exclusion was higher in societies where adults had a role in increasing youths' vulnerability towards HIV/AIDS infection by regarding them as being young, inexperienced and lacking the knowledge on how to make important decisions that impacted on their lives (Aggleton et al., 2004). However, the above reviewed studies also indicated that for many years, researchers have not been keen to find out whether the social predisposing factors such as the exclusion of the youth by the adults from discussing topics like sexuality, non involvement of youth in decision making and role allocation were in any way associated with their increased risk-taking behavior. Furthermore social exclusion was not considered a major social problem leading to the high HIV/AIDS prevalence rates. The present study builds on previous studies by determining whether the various forms of exclusion were in any way related to sexual risk-taking behavior associated with HIV /AIDS infection among youth in Bondo District.

It is worth mentioning that researchers of the above studies had adopted either Behavioral Decision Theory or Health Model Theory to investigate factors which influenced risk-taking behavior associated with HIV/AIDS infections. The Behavioral Decision Theory postulates that all decisions even the risky ones can be seen as rational depending on how an individual estimates and evaluates their consequences. This theory, therefore, seems to rationalize risk-taking behavior among youth and does not attribute it to circumstances in the individual's social environment. Likewise, the Health Belief model postulates that the likelihood of an individual engaging in a particular action is a function of his perception of the relationship between behavior and subsequent illness and involves making a conscious effort to weigh the cost and benefits of its action. This model ignores other underlying social factors that could escalate HIV/AIDS infection amongst the youth. Instead, it presupposes that the likelihood of taking preventive measures is high when the threat of HIV/AIDS is also high (Odutolu, 2005). This therefore presented an urgent need to refocus on the previously assumed social exclusionary factors in investigating the forces behind the persistence of sexual risk-taking behavior.

### Methods

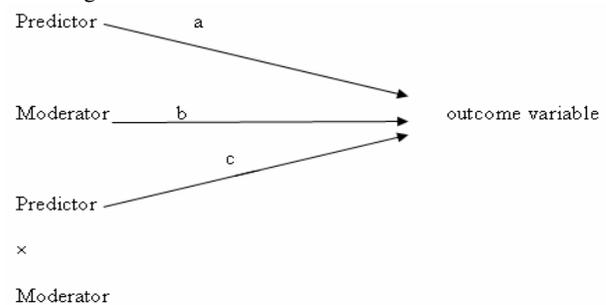
This study was conducted using the cross-sectional research design across students aged between 13-18 years in Bondo District. The district was selected as a study area because it records high HIV/AIDS prevalence and infection rates. While the main focus of the study was students, Guidance and counseling teachers were also identified as key people in schools who discuss personal issues with students. The study therefore targeted a population of 25 Guidance and counseling teachers and 7,301 students; 2900 boys and 1575 girls who formed the total population of students and Guidance and counseling teachers in secondary schools in Bondo District. Stratified sampling was used to select 183 boys and 182 girls from the total population of 7,301 students in Boys schools, Girls schools and mixed schools. A total of 8 guiding and counseling teachers from 8 randomly selected schools also formed the study sample. Permission to conduct the study was sought from the National Council for Science and Technology through the Department of Educational Psychology, Maseno University. Permission was also sought from the District Education Officer (Bondo) and the

Head Teachers of the relevant schools. Consent of the respondents to participate in the study was sought and instructions about how to respond to the items by ticking in the right column were given to them. They were then assured confidentiality of the information they would provide.

The social exclusionary behaviors investigated included: not being involved in decision making, not getting social support, not being involved in discussions on sexuality, not being valued and not being involved in roles in society. The presumed indicators of sexual risk-taking behaviors were; age at first sexual intercourse, unprotected sexual intercourse, multiple sexual partners and sexual intercourse for gifts.

Questionnaires, Interview schedules and Focus group discussion guides were used to collect data. Cronbach's alpha of 28 items based on Likert sub scale questionnaire were  $\alpha = .76$  (social exclusion) and  $\alpha = 0.8$  (sexual risk-taking behavior). Consistency of responses on the dichotomous scaled items, interview schedule and focus group discussion guides was assessed using test retest method.

Scatter plot was used to show the relationship between social exclusion and sexual risk-taking behaviors across age, gender and orphanhood. A Moderator Model developed by Baron and Kenny (1986) which has three causal paths that feed into the outcome variable was adopted to test the moderating effect of age, gender and orphanhood. According to Baron and Kenny a moderator effect was assumed when there was a significant relationship between interaction of predictor variable, moderator variable and outcome variable as indicated in (path c) in Figure 1. In this study, when the interaction of independent variable; Social exclusion behavior and moderator variable; age, gender or orphanhood and outcome variable sexual risk-taking behavior was significant it was concluded that there was a moderating effect.



**Figure 1: Moderator model**

Based on this model, the relationship between social exclusion; (Predictor variable) and sexual risk-taking behaviors; (outcome variable) was computed using Pearson Product Moment Correlation. Relationship between the moderators; age, gender and orphanhood was computed using Point Biserial Correlation and the relationship between interaction of social exclusion and each moderator; age, gender and orphanhood was computed using Bivariate Correlation.

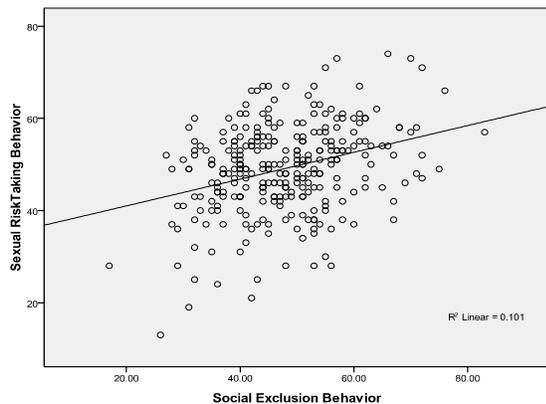
Qualitative data from focus group discussions and interview schedules was transcribed, organized and structured based on the consistencies, similarities and differences in the responses. The findings were presented thematically as per the study objectives.

### Results and Discussions

#### Relationship between Social Exclusion and Sexual Risk-Taking Behaviors of youth

This study examined the relationship between social exclusion and sexual risk-taking behavior among youth. Before establishing the coefficient of correlation, a scatter plot was

drawn to determine the existence of linearity and direction of the relationship between social exclusion and sexual risk-taking behaviors (see Figure 2). The findings indicated that an increase in social exclusion was correlated to an increase in sexual risk-taking behavior associated with HIV/AIDS infection. The regression line on the scatter plot indicated that 10% of the variance in dependent variable (sexual risk-taking behavior) was explained by the independent variable (social exclusionary behavior). It is plausible to suggest that when one is excluded, he/she develops low self esteem that may in turn lead to high sexual risk-taking behaviors (Terrence Higgins Trust, 2011).



**Figure 2: scatter plot of social exclusion and sexual risk taking behaviors of youth**

Pearson's Product Moment Correlation was used to find out the strength of relationship between the two variables. The results obtained indicated a positive statistically significant correlation between social exclusion and sexual risk-taking behavior ( $r = .32, p < .01$ ). This suggested that increased exclusion of youth could increase their likelihood to engage in sexual risk-taking behavior associated with HIV/AIDS infection. Simple Linear Regression Analysis computed found that a unit change in social exclusion increases sexual risk-taking behavior by .29 points.

This observation supported findings from previous study by Sarazua and Mas (2005) that suggested that though there is no specific personality profile in the excluded population, there may be certain situations in which the segregated groups present similar behaviors as adaptive responses to complex reality. In this case the adaptive behavior in search of belonging could be the construed sexual risk-taking behavior. The obtained findings are also in line with observations by some earlier researchers, for example, Aggleton et al (2004) who reported that when youth are perceived negatively, it affects their self esteem and their sense of identity in the society reduces. This makes them feel inferior to any advances that expose them to HIV/AIDS infection. Terrence Higgins Trust, (2011) also noted that social exclusion may make people not to make health choices in relation to safe sexual intercourse; some may have more pressing concerns than HIV prevention or sexual health. The author also noted that for those who are worried about money and food for their family or living in a hostile environment, HIV can be a relatively distant concern.

During interviews 70% of teachers interviewed reported that students in their schools were vulnerable to early sexual behavior irrespective of their gender, age or orphans. Each group faced certain challenges that reinforce indulging in sexual risk-taking behaviors because of lack of parental control, guidance, love and basic needs. At least 50% of the teachers pointed out

that excluding the youths from discussing sexual matters make them seek for information from friends who are also not any better. This observation concurs with earlier findings by Wilson and Donenberg (2004), who reported that when young people are excluded in most communication on issues disturbing them, they feel some form of rejection and become troubled. This makes them suffer from an array of deficits including poor interpersonal relationships, cognitive deficits, impulsivity, self destructive tendencies and adverse life circumstances. These conditions predispose them to health-compromising behavior which more likely escalates HIV/AIDS infection. The authors observed that the youth whose parents had more direct communication on sexuality matters were at less risk of engaging in sexual risk-taking behavior.

#### **Moderating effect of gender on the relationship between Social exclusion and sexual risk- taking behavior**

A three path Moderator Testing Model by Baron and Kenny (1986) was adopted to investigate the moderating effect of gender on social exclusion and sexual risk taking behavior. There was a significant correlation between social exclusion and sexual risk-taking behaviors ( $r = .32, p < .01$ ) suggesting that 10% variance in Sexual Risk taking behavior is explained by social exclusion. Point Biserial Correlation Coefficient between gender and sexual risk- behavior was insignificant ( $r_{pb} = .09, p > .01$ ) whereas Bivariate correlation between interaction of social exclusion, gender and sexual risk-taking behavior was significant ( $r = .35, p < .01$ ) suggesting that 12% variance in sexual risk-taking behavior is explained by interaction between social exclusion and gender. The significant relationship indicated an interaction between social exclusion, gender and sexual risk-taking behavior suggesting that gender moderates the relationship between social exclusion behaviors and sexual risk-taking behaviors associated with HIV/AIDS infection.

The findings concur with previous researchers for example, Aggleton et al (2004); Akwara, Madise and Hinde (2003) who observed that male respondents were rarely included in talks about sexuality because it was culturally believed that they could not control their sexual desires and they greatly got involved in sexual risk-taking behavior as a sign of manhood. In addition, Terrence Higgins Trust (2011) observed that African women, though relatively more likely to access a range of HIV services than African men, often express fear of discovery because they will be judged as having brought shame on their family and may risk abandonment by their husbands, with all the financial and social consequences. This may lead them to easily giving in to risky sexual advances.

#### **Moderating effect of orphanhood on the relationship between social exclusion and sexual risk-taking behaviors**

This study sought to find out whether orphanhood moderated the relationship between social exclusion and sexual risk-taking behaviors associated with HIV/AIDS infection. The data revealed that there was a significant correlation between social exclusion and sexual risk-taking behaviors ( $r = .32, p < .01$ ) suggesting that 10% variance in Sexual Risk taking behavior is explained by Social Exclusion.

Point Biserial Correlation Coefficient between orphanhood and sexual risk-behavior was insignificant ( $r_{pb} = .08, p > .01$ ). Bivariate Correlation between interaction of social exclusion, orphanhood and sexual risk-taking behavior was significant ( $r = .33, p < .01$ ). This indicated that 11% variance in sexual risk-taking behavior is explained by interaction between social exclusion and orphanhood. The significant relationship indicated

an interaction between social exclusion, orphanhood and sexual risk-taking behavior suggesting that orphanhood moderates the relationship between social exclusion behaviors and sexual risk-taking behaviors associated with HIV/AIDS infection.

#### **Moderating effect of age on the relationship between social exclusion and sexual risk-taking behaviors**

Data indicated that there was a significant correlation between social exclusionary and sexual risk-taking behaviors ( $r = .32, p < .01$ ) suggesting that 10% variance in Sexual Risk taking behavior is explained by Social Exclusion.

Point Biserial Correlation Coefficient between age and sexual risk- behavior was insignificant ( $r_{pb} = .06, p > .01$ ). Bivariate correlation between interaction of social exclusion, age and sexual risk-taking behavior was significant ( $r = .24, p < .01$ ). This indicated that 5.7% variance in sexual risk-taking behavior is explained by interaction between social exclusion and age. The significant relationship indicated an interaction between social exclusion, age and sexual risk- taking behavior and also suggested that age moderates the relationship between social exclusion behavior and sexual risk-taking behavior associated with HIV/AIDS infection.

#### **Conclusion**

This study suggested that age, gender and orphanhood moderates the relationship between social exclusion behavior and sexual risk-taking behavior associated with HIV/AIDS infection. Targeting youths' behavior alone may not sufficiently reduce risk-taking behaviors associated with HIV/AIDS among secondary school students in Bondo District.

A multifaceted approach must be employed through the involvement of the society (Parents, schools and the entire community) in creating opportunities and an inclusive environment for healthy development of youth. Inclusion of youth in all aspects of the society may also help them to increase their perception of well being, sense of belonging, self efficacy and worthy.

This will ultimately lead them to make informed choices of healthier lifestyles which would likely reduce their propensity to sexual risk-taking behaviors.

The limitation of this study was that it mainly focused on social exclusion and sexual risk-taking behavior associated with HIV/AIDS infection while leaving out other factors which could be attributed to sexual risk- taking behavior for example one's personality were not investigated.

#### **Acknowledgement**

The data used collection was supported by the Kenya Female Advisory and Development Organization. The authors wish to thank all participants who supported the study and provided feedback.

#### **References**

Aggleton, P., Elaine, C., & Kim, R. (2004). *HIV/AIDS Prevention and Care among Especially Vulnerable Young People; A framework For Action*. Retrieved from [www.safepassages.soton.ac.uk/pdfs/evypframework.pdf](http://www.safepassages.soton.ac.uk/pdfs/evypframework.pdf) on 16/6/ 2010

Akwara, P.N., Madise, N.J., & Hinde, A. (2003). Perception of Risk of HIV/AIDS and Sexual Behavior in Kenya. *Journal of Biosociological Science*, (35), 385-411. Doi: 10.1017/150021932003003857

Akunga, A., Kwamboka, E., & Muia, D. (2004). *Finding Voices of young Kenyans Gender, Sexuality and HIV/AIDS in Education*. Nairobi: UNICEF.

Baron, M. R., & Kenny D, A. (1986). Mediator Variable Distinction in social Psychological Research: Conceptual, Strategic and Statistical Consideration. *Journal of Personality and Social Psychology*, 51 (6), 1173-1182. American Psychological Association.Inc.

East Africa Community-EAC (2009, May). *Cross border transport corridor*. Press release during multi sectoral stakeholders meeting in Kisumu. Retrieved from <http://www.eac.int/about-eac/eacnews/257-pressrelease-eac-cross-border-transportcorridor-hiv-andaids-multisectorial-meeting-endsinksm.pdf>

Francis, P. (2002). *Social capital, Civil society and Social exclusion; Development Theory and Practice*. Palgrave: Macmillan.

Kohler, G., (2009) *Social Policy in South Asia towards Universal Coverage and Transform for Achieving the Millennium Development Goals*. South Asia: UNICEF. Retrieved from [http://www.unicef.org/rosal/Social\\_Policy\\_Workshop\\_Report.pdf](http://www.unicef.org/rosal/Social_Policy_Workshop_Report.pdf) on November 19<sup>th</sup>, 2010

Malanda, N. M. (2008). *Effectiveness of HIV/AIDS Education Program in Promoting Interventions among Youth in Secondary Schools in Vihiga District*. (Unpublished Master's Thesis). Maseno, University, Kenya.

NACC&NASCOP (2007). *National HIV Prevalence in Kenya*. Retrieved from [http://www.fpfk.or.ke/fpfk%20projects/aids/images/Resources/Rsources/national\\_hiv\\_prevalence\\_in\\_kenya.\\_released\\_jun\\_2007.pdf](http://www.fpfk.or.ke/fpfk%20projects/aids/images/Resources/Rsources/national_hiv_prevalence_in_kenya._released_jun_2007.pdf) on 24-3-2012

NASCOP. (2009). *Kenya AIDS Newsletter; A Publication of Ministry of Health*. Nairobi: Author.

Nkam, T.E. (2001). *Social Cultural Determinants of Teenage Pregnancy and Spread of STI among adolescents in Kakuma Refugee Camp*. (Unpublished Master's thesis). Kenyatta University, Kenya.

Odinga, R., (2011, November, 30). Let's take charge on war against HIV/AIDS. *The Star*. p4.

Odotolu, O. (2005). Convergence of behavior change models for AIDS risk reduction in sub-Saharan Africa. *International Journal of Health Planning and Management*, 20, 239-252. doi:10.1002/hpm.812

Ogot, A.B (2004). *Politics and the AIDS Epidemic in Kenya 1983-2003*. Nairobi

Okweso, J.A.(2002). *Factors influencing Risky Sexual Behavior among the Youth in selected Secondary schools in Bondo district, Kenya*. (Unpublished Master's Thesis), Kenyatta University. Kenya.

Sarazua, F. E., Mas, B.M., and Gregoria, A. P. (2005). AIDS and Social Exclusion: Personality Features or Adaptive Behaviors. *Spanish Journal of Psychology*, 8(1), 45-55 Retrieved from [http://www.ucm.es/info/Psi/docs/journal/v8\\_n1\\_2005/art45.pdf](http://www.ucm.es/info/Psi/docs/journal/v8_n1_2005/art45.pdf) on 20-5-2011

Steinberg, L. (2008). *Adolescence*. 8<sup>th</sup> Edition. London; Mac Graw Hill Publishers.

Terence Higgins Trust (2011). *Social Exclusion and HIV/AIDS Report*. Author.

UNAIDS (2010). *Global AIDS Epidemic* (UNAIDS Report, 2010). Author.

UNAIDS & WHO, (2009). *HIV/AIDS Epidemic updates Sub Saharan Africa*. Geneva, Switzerland: Author.

UNICEF, UNAIDS & WHO (2002). *Young People and HIV/AIDS; Opportunity in crisis*. Geneva: Author

Wilson, H., W., & Donenberg, G.,(2004). Quality of Parent communication about Sex and its Relationship to Risky Sexual Behavior among Youth in Psychiatric care: A pilot Study.

*Journal of Psychology and Psychiatric*, 45(2), 387-395.USA: Blackwell Publishing.