Full Length Research Paper

Influence of self-concealed psycho-social factors as predictors on the effectiveness of sexual self-disclosure during voluntary counseling and testing among university students in Kenya

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Four hundred and fifty six third year undergraduate students from the University of Nairobi, Kenyatta University and Egerton University were studied to find out the influence of self-concealed psycho-social factors as predictors on the effectiveness of sexual self-disclosure during voluntary counselling and testing among university students in Kenya. Results revealed there is a significant relationship between self-concealed psycho-social factors and sexual self-disclosure. Students' marital status, relational mobility and cues that relate to privacy were found to be the best predictors of sexual self-disclosure by determining details of how much sexual information they disclosed during voluntary counselling and testing. Implications of these findings and recommendations for further research are discussed.

Key words: self-concealed, psycho-social factors, sexual self-disclosure.

INTRODUCTION

Numerous HIV prevention efforts have been designed and implemented in different parts of the world. Such efforts are most effective and impactful when targeted to places where many people are living with HIV and the populations are at high risk of HIV infection. In the year 2014, the Joint United Nations Programme on HIV AIDS, UNAIDS emphasized the need to embrace the locations and populations (LAP) approach to understanding and responding to the AIDS epidemic. UNAIDS (2014) recommends that countries, large cities, selected districts

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and localized areas that have a higher HIV prevalence than others should adapt the LAP approach. This differentiated approach is informed by the fact that existing and new uncustomized approaches to HIV prevention have not yet provided the gateway to a measurable and sustained decline in new infections at the high-risk population level.

The problem addressed in this study was based on the rather paradoxical Kenyan HIV statistics. The nation has the fourth-largest HIV epidemic in the world. In Kenya, the HIV epidemic shows a stabilizing epidemic among the general population and an elevated epidemic among the key populations. According to the 2012 Kenya AIDS Indicator Survey (National AIDS and STI Control Programme, NASCOP, 2014), the national prevalence rate among adolescents and adults aged 15 to 64 years was 5.6 per cent. Although the general prevalence rate has been on the decline in the last few years, the number of people living with HIV and AIDS has been on the increase translating into around 1.6 million Kenyans living with HIV. Worryingly, the national HIV incidence is around 0.5 new infections per 100 persons per year, representing an estimated 106,000 new infections. In 2012, roughly 57,000 people died from AIDS-related illnesses. Moreover, there are now over one million orphans due to the epidemic. These figures paint an ideal arena for the LAP approach.

Data based on key populations demonstrate the need to address the vulnerability factors increasing the risk of HIV infection among young people in Kenya. For the last 10 years, the highest number of new infections occurred in persons aged 25-34 years. According to the National AIDS Control Council, NACC (2014), prevalence among young people 15-24 years can largely be attributed to new infections as opposed to the impact of the scale up of HIV treatment. This demographic has also been associated with risky lifestyles. For example, over the last 10 years, one in five youths aged 15 to 24 years, reported sexual debut before the age of 15 years. In addition, men and women with multiple sexual partners are on upward trend; while less than 40% of men and women who engaged in risky sex use a condom (NACC, 2014). The current trajectories of HIV prevalence in Kenya may dim the nation's skilled human resource aspirations as enshrined in the Vision 2030 (Government of Kenya, GoK, 2007).

Consonant with the spirit of the LAP approach, the programmatic response to the HIV epidemic in Kenya has evolved over the years leading to more focus on the key HIV transmission areas and populations in order to reduce new infections (NACC, 2014). Due to their unique characteristics, universities constitute key arenas in the fight against HIV/AIDS. For example, the university brings together large numbers of students from different backgrounds, majority of whom are aged between 16 and 35 years. This is the age that has globally been characterized as bearing the highest risk of HIV (Mbatha, 2014; UNAIDS, 2014). In addition, university students' lifestyle predisposes students to enhanced risks for contracting HIV/AIDS. For instance, university students are relatively free from parental supervision as they are deemed to have attained adult status. In addition, a large number of students live away from university premises and are, therefore, relatively not bound by the students' residential code of conduct. Such a context coupled with the young people's psychological, social and economic challenges as well as their tendency to test boundaries, may lead students to experiment with casual sexual relationships, drugs, and other risky lifestyles (Pengpid et al., 2013). The above characteristics have led some scholars to use the metaphor of the university's social context as a fertile breeding ground for the HIV virus (Asante and Oti-Boadi, 2013; Mwamwenda, 2014).

Existing HIV prevention efforts in the universities include: university HIV/AIDS policies; literature on HIV/AIDS in universities; and institution-based HIV prevention services like voluntary counselling and testing (VCT). Research on HIV among university students in Kenya has pursued two key themes: One group of studies have investigated the nature, scope, barriers, and factors promoting students' uptake of interventions especially VCT services (Mokua, 2011; Mwangi et al., 2014). The second group of studies has examined the sexual behavior of university students (East African Community/ AMREF Lake Victoria Partnership Programme, EAC/EALP, 2010; Gitonga et al., 2012). These studies emphasize that young people's attitudes and behaviours are critical in the success of HIV prevention services. The studies also emphasize the need to support the various safeguards that protect young people from contracting HIV.

Self-disclosure has been singled out as an essential safeguard and a valuable tool in many forms of counselling (Levitt and Piazza-Bonin, 2011). Self-disclosure is the process of revealing information about oneself to another person. The process is most therapeutically effective if it is matched to the client's psychosocial characteristics (Jooma, 2013). According to Bradford and Rickwood (2015), when young people disclose what is happening for them early in the treatment process, counsellors and mental health professionals are able to work collaboratively with the young person to provide holistic and personalized treatment plans. In addition, self-disclosure can serve to open clients up to self-reveal without excessive shame, a feeling that tends to shut clients down. The importance of client self-disclosure is further outlined by UNAIDS (2014) as a critical component of behavioural HIV prevention interventions such as VCT. Existing counselling interventions rely on the assumption that they are likely to get the young persons to feel comfortable enough to disclose their highly intimate and personal issues to a relative stranger (Bradford and Rickwood, 2015). However, the

process of client self-disclosure may be complicated when the counselling relationships are not based on trust, honesty, openness, safety, or good communication. Consequences of self-disclosure may also compound clients' willingness to self-disclose. In addition, self-disclosure is rather complex when discussing issues related to sex, sexual orientation, sexual acts, drug use, and disease (Bohle et al., 2014; Tang et al., 2013). In most societies, these subjects are often tabooed making them quite difficult to talk about openly and honestly (Yoo et al., 2012). This complexity may be the reason why client self-disclosure has received minimal research attention in specialized therapeutic interventions. According to UNAIDS, (2014), many clients seeking HIV counselling are concerned about whether to tell others and if so, what to tell, and how. In most cases, people living with HIV are discouraged from disclosing their status to family members and sexual partners due to fear of stigma and discrimination directed either to themselves or to their loved ones. This suggests that disclosure is related to cues that relate to privacy. However, there is a dearth of research on how cues that relate to privacy predict clients' sexual self-disclosure in HIV counselling.

In VCT counselling literature, a lot of focus has been on clients' HIV status disclosure (Bohle et al., 2014; Mwangi et al., 2014). Client's sexual self-disclosure, its effects on therapy outcomes, as well as the client variables that predict it seem to have received marginal research attention. Clients' level of sexual self-disclosure during VCT is crucial in exploring opportunities available to keep them safe despite their HIV status. The extent of sexual self-disclosure may depend on certain self-concealed psychosocial aspects such as the client's, marital status, religious affiliation, identity crisis, relational mobility; cues related to privacy and the wellbeing of significant others. However, the predictive value of these psychosocial variables on client's sexual self-disclosure during VCT remains an underexplored area in the studies among university students in Kenya.

To address this information gap, this study examined self-concealed psycho-social factors (marital status, relational mobility, and cues that relate to privacy) as predictors of sexual self-disclosure among university students in Kenya. The study hypothesized that there are significant relationships among the self-concealed factors and sexual self-disclosure.

This study was guided by the psychoanalytic theory (Freud, 1964; Erikson, 1970; Adler, 1964), social penetration theory (Altman and Taylor, 1973) and the communication privacy management theory (Petronio, 2004)). This eclectic approach informed the study on the role of childhood experiences especially an individual's needs, irrational forces, unconscious motivations, relational development and privacy boundaries upon students' self-concealment and subsequent sexual self-disclosure during VCT session.

METHODS AND PROCEDURES

Research design

The study adopted an *ex-post facto* design. The independent variables in this study were: marital status, religious affiliation, identity crisis, relational mobility; cues related to privacy and the wellbeing of significant others. The dependent variable was sexual self-disclosure.

Location

The study was carried out between January and February 2015 in three public universities in Kenya namely: Egerton University, Kenyatta University and the University of Nairobi. In Kenya, public universities have a larger proportion of students than private universities. In addition, students in public universities are likely to have lesser parental supervision as well as lesser accommodation within university premises than their counterparts in private universities. In addition, majority of the students in the universities reside in premises outside their campuses. Such students are relatively not bound by the university regulations for residential students and are likely to be involved in casual sexual relationships. According to the 2012 KAIS, Women and men in casual partnerships reported the highest proportion of partners with unknown HIV status. Therefore, the social context of public universities presents more students to high risk of HIV infection in Kenya (Gitonga et al., 2012; Mokua, 2011; Mwangi et al., 2014).

Participants

The study involved 600 undergraduate students (240 males and 216 females). Of these 456 participants returned the instruments satisfactorily filled accounting for a 76% instrument return rate. The average age of the participants was 22.19 (SD=3.42). 420 participants were single; 13, married and 23, divorced.

Measures

The independent variables (marital status, religious affiliation, identity crisis, relational mobility; cues related to privacy and the wellbeing of significant others) were measured using a students' questionnaire. Self-disclosure was measured using the revised sexual self-disclosure scale (SSD-R) developed by Snell et al. (1993). A pilot study confirmed the students' questionnaire had a Cronbach alpha of .93 and the SSD-R had a Cronbach alpha of .96.

RESULTS

To evaluate the relationships among the self-concealed factors and sexual self-disclosure, Pearson product moment correlation analyses were computed. The results are summarized by the correlation matrix presented in Table 1.

The correlations shown in Table 1 ranged in magnitude from very low $r= -.02$) to moderately strong Pearson's r $(359)=.43$; $\alpha = .05$. and were all statistically significant $(p<.05)$ and positive in direction, with the exception of the correlation between relational mobility and marital status

Table 1. Summary of intercorrelations for scores on self-concealed psycho-social factors and sexual self-disclosure (N = 361).

		A	**B**	**C**	**D**
	A	-	.43**	.30**	.28**
Pearson	B	.43**	-	-.02	.17**
Correlation	C	.30**	-.02	-	.12**
	D	.28**	.17**	.12**	-

Key: A= Sexual self-disclosure; B= Marital status; C= Relational mobility; D= Cues that relate to privacy. **= significant at α = .05.

Table 2. Model summary of the regression equation.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.457	.209	.207	.66428
2	.599	.359	.356	.59860
3	.626	.391	.386	.58424

Note: Model 1= Predictors: (Constant), Marital status; Model 2= Predictors: (Constant), Marital status, Relational mobility; Model 3= Predictors: (Constant), Marital status, Relational mobility, Cues that relate to privacy; .Dependent Variable: Sexual self-disclosure during VCT session.

Table 3. Coefficients of Self-concealed Psycho-social Variables in Voluntary Counselling and Testing.

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.659	.087		19.169	.000
	Marital status	.665	.068	.457	9.746	.000
2	(Constant)	.861	.117		7.379	.000
	Marital status	.640	.062	.439	10.390	.000
	Relational mobility	.485	.053	.388	9.184	.000
3	(Constant)	.507	.140		3.620	.000
	Marital status	.597	.061	.410	9.792	.000
	Relational mobility	.452	.052	.363	8.693	.000
	Cues that relate to privacy	.407	.094	.184	4.343	.000

(r = -.02). The strongest correlation was between Marital status and sexual self-disclosure (r=.43, p<.001). The weakest correlation was between relational mobility and marital status (r = -.02). Collectively, the correlation results between the self-concealed factors and sexual self-disclosure provide rather consistent, but moderately strong support for the general hypothesis of the study. Through the stepwise multiple regression, the authors evaluated whether marital status, relational mobility, and cues that relate to privacy were all necessary for predicting student's sexual self-disclosure. The theoretical model entered was: $Y = a + b_1X_1 + b_2X_2 + b_3X_3$ where: Y is sexual self-disclosure and 'a' is the constant while X_1, X_2, X_3 are marital status, relational mobility, and cues that relate to privacy respectively. See the model summary in Table 2. As presented in Table 3, at step 1 of the analysis, marital status was entered into the regression equation and was significantly related to student's sexual self-disclosure $F(1,360) = 94.988$, p<.001, r^2=.26. The multiple correlation coefficient was R=.46 indicating approximately 21% of the variance of students' sexual self-disclosure could be accounted for by marital status. Relational mobility entered into the regression equation at step 2 of the analysis and its linear combination with marital status was significantly related to students' sexual self-disclosure $F(2, 359)$= 100.66,

$p<.001$, $f^2=.56$. The multiple correlation coefficient for step 2 was $R=.60$ indicating approximately 36% of the variance of students' sexual self-disclosure could be accounted for jointly by marital status and relational mobility. The effect size for the two variables was moderate. At step 3, cues that relate to privacy was entered into the regression equation and its linear combination of the marital status and relational mobility was significantly related to students' sexual self-disclosure $F(3, 358)=76.73$, $p<0.001$, $f^2=.64$. In step 3, the multiple correlation coefficient was $R=.63$ indicating that the three independent variables could account for approximately 39% of the variance in students' sexual self-disclosure. The effect size for the three variables was strong. The Thus the most robust regression equation for predicting students' sexual self-disclosure was:

$$\grave{y} = .507 + .597(MS) + .452(RM) + .407(CRP) \ldots \ldots \ldots \ldots \ldots \ldots (i).$$

Where: $\grave{y}$= predicted sexual self- disclosure; MS= Marital status; RM= relational mobility; CRP= cues that relate to privacy.

Three psychosocial variables (religious affiliation, identity crisis, and cues that relate to wellbeing of others) that had initially been conceptualized as predictors in the regression equation for sexual self-disclosure did not enter into the regression equation are not addressed in this article.

DISCUSSION

The study revealed that self-concealed psycho-social factors effectively predict sexual self-disclosure during voluntary counselling and testing. However, the degree of effect occasioned by the individual psycho-social factors upon sexual self-disclosure differed significantly. The stepwise regression analysis identified marital status, relational mobility and cues that relate to privacy as the best predictors of sexual self-disclosure during voluntary counselling and testing among university students. In the prediction model, marital status made the largest when relational mobility and cues that relate to privacy are controlled for. However, when considered together with relational mobility and cues that relate to privacy, its accuracy in predicting sexual self-disclosure during voluntary counselling and testing declines.

The results suggest that marital status may be linked to sexual responsibility and openness in individuals. Paradoxically, in this study, married students were more disagreeable than the other students on whether they had discussed their past sexual behaviour, desires, responsibility, attitudes, and deviance with VCT counsellors. In contrast students who were divorced had more open sexual self-disclosure and they easily created rapport with VCT counsellors. It is probable that married

students fear disclosing personal sexual experiences as this may contravene their sexual obligations in marriage with such a contravention being a potential source of societal ridicule and shame. Such a possibility would be consistent with previous research among daters that suggests that sexual self-disclosure is a function of relationship rewards and quality (MacNeil and Byers, 2009; Rehman et al., 2011; Sprecher and Hendrick, 2004).

The trend bin acquisition and retention of new friendships and termination of older ones among university students was important in determining the extent of their sexual self-disclosure during voluntary counselling and testing. The study found that relational mobility was significantly related to university students' sexual self-disclosure. Thus, easier it was for university students to enterm into new friendship, the easier it was to sexually self-disclose. These results corroborated those of studies among dating undergraguate students in the USA and Nigeria (MacNeil and Byers, 2009; Ogunleye, 2013; Stephenson and Meston, 2011). However, this interpretation should be tempered with the suspicion that other personality variables may influence relational mobility. For instance people who easily make friends are generally more outgoing and can easily converse with strangers.

The findings that cues relating to privacy could motivate disclosure of private information be interpreted from the communication privacy management theory perspective (Petronio and Reierson, 2009). According to the theory, people cherish privacy in their communication in order to relieve a burden, prevent a wrong, make an impression, gain control, or simply enjoy self-expression. In this regard, the finding could be seen as an indicator that students feel they have a right to own private information. It could be that among university students, privacy boosts their sense of autonomy thereby making them feel less vulnerable in their sexual life and during VCT sessions. The theory further postulates that ownership of private information could turn out to be a liability. In this study, students who did not discuss their past sexual experiences with VCT counsellors may have focused on the benefits of their privacy more than those of sexual self-disclosure to their health. This contradictory position may corroborate the finding from other studies among Kenyan youth that high levels of knowledge have neither resulted to the much needed sexual behaviour change (Mumah, 2003) nor to increased uptake of VCT interventions (Ireri et al., 2012). Efforts aimed at reducing such contradictions in young people's self-disclosure may offer the potential answer to translating awareness into behaviour change.

Conclusion

The study resulted in three main conclusions: First,

marital status is key factor in university students' sexual self-disclosure during voluntary counselling and testing in Kenya. Second, students who have relative ease to initiate relationships self-disclose more that those who have challenges in forming relationships. Thus, social skills and interpersonal confidence may be more beneficial to students in Kenya. Three, VCT service providers for university students should put in place measures that guarantee the clients their privacy to enhance more sexual self-disclosures.

Conflict of Interests

The authors have not declared any conflict of interests.

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