Psychological Factors as Determinants of Sexual Attitude among Youths with Disabilities (YWD) in Three South-West Nigerian Institutions

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Abstract

The influence of perceived HIV/AIDS vulnerability, condom-use self-efficacy and attitude towards condom-use on sexual attitude among youths living with disability (YWD) was investigated. The cross-sectional survey involved YWD (N=181) and youths without disability (N=181). A 62-item structured questionnaire was used in gathering data. A 2 X 2 X 2 ANOVA revealed independent influence of condom use self- efficacy (F {1,181} = 10.83; p < .05), and attitude towards condom-use (F {1,181} = 16.26; p < .001). YWD reported liberal attitude to sex ($\bar{X}$=44.64, SD=13.65) compared to the comparison group ($\bar{X}$=72.28, SD=11.21). Among YWD, participants with low perceived HIV/AIDS vulnerability, low condom use self-efficacy with negative attitude to condom use reported the most liberal attitude to sex ($\overline{X}$ = 57.50, SD=12.31, n=26). This offers new insight for relevant stakeholders on attitude to condom-use and condom-use self-efficacy in improving attitude to sex, HIV control, and sexual health of YWD.

Key Words: Sexual attitude, determinants, psychological factors, youths with disabilities, cross-sectional survey study

Introduction

Despite that sexual relating is a complex web of emotions, attitudes, and behaviors (Hendrick, Hendrick, & Reich, 2006), members of the society with various forms of visual, auditory, or physical challenges are often neglected in sexuality-related researches (Maart & Jelsma, 2010; Enwereji & Enwereji, 2008). However, disabilities do not necessarily preclude potentials for sexual attraction, whether heterosexual or homosexual (Esmail, Walter & Knuppe, 2010). Sexual attitude and expression is a characteristic of both challenged and able bodied people. What remains unclear is whether there are differences between able bodied and challenged people in sexual attitude. Further, the role of psychological factors in such possible differences remains poorly understood. Esmail, et al (2010) investigated attitudes and perceptions towards disability and sexuality. Their findings suggest that individuals with disabilities are often viewed as asexual due to a predominant hetero-normative idea of sex and what is considered natural. Winder (1983) asserted that sexual expression should be viewed as natural and important to human life and existence. Therefore, seeing people with disabilities as asexual is not only erroneous but detrimental and counterproductive for a few reasons. First, it could impede effective communication of safe sex education among people living with disability (PLWD), therefore a disservice to global and regional

HIV/AIDS and STD control. Second, it could reduce the worth of PLWD as persons and sexual beings (Keywood, 2001). Concerning the role of self concept, Low and Zubir (2000) found that disabled themselves have a negative self-concept and a low self-esteem and these affect their attitudes towards sexuality and their sexual behaviour. Health care professionals tend to neglect this issue perhaps due to their insensitivity to the sexual needs of PLWD or a lack of understanding and expertise in this area.

A review of literature on disability and sexuality in Africa indicated that the only African countries in which at least three studies on HIV and disability in connection with their sexuality have been conducted are: thirteen cases of research work in South Africa; six in Zimbabwe, four in Kenya; three cases each in Uganda and Nigeria (Hanass-Hancock, 2009). No country from West and Central Africa is mentioned, suggesting that the information gap is critical. Lack of data darkens an already blurred area (Touko, Mbou, Tobmuntain & Perrot, 2010). These suggest that the problem of sexual attitude among youths with visual, auditory, or physical disability presents a double-barreled challenge. First, youths in many societies especially in developing countries are often stigmatized, isolated, deprived or out-rightly marginalized. Second, the attention of the society towards protecting the rights of PLWD in developing societies is scant to say the least. The probability for PLWD to become exposed to risks, and bio-psychosocial exploitations including rape is also likely to be higher compared to able-bodied youths even in the same society.

However, the amount of empirical evidence in this area is little. People with a higher perceived vulnerability to HIV were less likely to report unprotected vaginal sex (Brooks, Lee, Stover & Barkley, 2009). This suggests a relationship between perceived HIV vulnerability and attitude to sex (Napper, Fisher, & Reynolds, 2012). Social theory offered by Slovic, Fischhoff & Lichtenstein (1982) coupled with feminist theory presented by Gagnon & Simon (1973) also explains the relationship between attitudes to sex and perceived vulnerability to HIV infection. In reality, a 2012 government report in Nigeria reveals that a variety of programmes have been implemented to curtail the spread of HIV, leading to a reduction in prevalence from 4.6% in 2008 to 4.1 % in 2012. Despite this about 388,864 new infections were reported in 2012, 52485 higher than the 2008 figure (NACA, 2012).This suggests possible attitudinal and behavioural risks in the society, especially among youths (NACA, 2012). Some of the variables associated in existing literature with expression of sexuality and HIV/STIs in literature include: perceived vulnerability to HIV/AIDS, attitude towards condom use and condom use self-efficacy (Boyce, 2006). Gender differences in condom use, as well as the role of self-efficacy in condom use have also been reported by Sayles, et al (2006), while Villarruel, Jemmott, Jemmott, et al (2004) in a similar study found that gender and attitude to condom use should be considered in HIV/AIDS control.

As observed by Alarape, Olapegba, & Chovwen (2008), people's choice and most especially that of young adults, regarding whether to use condom or not is influenced by cultural and social norms, social networks, and gender roles. These factors largely influence adolescents' sexual behaviour (Earle & Parricone, 1986). For example, young sexually active adults often decide not to seek contraceptives because they do not want their parents or other adults to know that they are sexually active. In Nigeria, discussions related to sexual intercourse are perceived to be strictly private, therefore public discussion of sexual behavior with adolescents and young adults; worse still with youths with disabilities (YWD) is hardly ever acceptable. Yet, condom use efficacy has been found to influence sexual behavior among Nigerian university undergraduates (Alarape, et al, 2008).Considering in-school adolescents and young adults, especially YWD in government institutions with high vulnerabilities, it becomes pertinent to examine the psychosocial factors likely to affect their sexual attitude. To this end, this study seeks to find answers to two questions:

1. Is there any significant independent and interactive influence of perceived vulnerability to HIV/AIDS, condom use self-efficacy, and attitude towards condom use on sexual attitude among YWD?
2. Is there any significant difference between YWD and comparison group on attitude to sex?

Method

The comparative survey adopted a cross-sectional design. The independent variables of the study are perceived vulnerability to HIV/AIDS, condom use self-efficacy and attitude to condom use. The variables were considered at two levels, yielding a 2 X 2 X 2 factorial combination. The dependent variable is sexual attitude of YLWD.

The study took place in government institutions for PLWD in two cities, i.e. Ibadan and Oyo, South West, Nigeria. These institutions have a fairly balanced mix of normal youths as well as youths with disabilities. The major inhabitants of the study location are called *Yorubas*, the second largest ethnic group in Nigeria (National Population Commission, 2007). Youths with disabilities i.e. the blind, deaf and physically challenged were compared (as controls) with youths without any obvious disability in the institutions. They were purposively selected from the list of youths in the institutions. The protocol for the study was duly reviewed and ethical permission received from the State Ministry of Health Ethics Committee. Youths with disabilities were required to fulfill eligibility criteria including:

1. Living with a disability i.e. either deaf, blind or physically challenged.
2. Currently registered with any of the following institutions as a student, or trainee, i.e. the Federal College of Education (Special), Oyo; The State Rehabilitation Centre for the Disabled, or the Chesire Home for the Disabled in Ibadan.
3. English literate or able to read the English Braille research questionnaire and consent form.
4. Expression of autonomous desire (informed consent) to participate.
5. Confirmed by the instructor or class teacher to be between 16 and 30 years old. The comparison group i.e. normal youths in these institutions were also expected to fulfill conditions 2, 3, 4, and 5 above.

Following discussions on the scientific and ethical validity of the study, approval to have access to the participants was obtained. Subsequent discussions about the study were held with potential participants, while research assistants with special trainings in the areas of sign language and Braille facilitated communication with the deaf and the blind. Twenty-nine visually impaired youths in the institutions responded, fully-completed, and returned the questionnaires. In a similar manner 112 youths with hearing impairment as well as 40 physically challenged youths also participated. Thus, all the 181 YWD who expressed their willingness were purposively selected. In order to make comparisons; for the number of YWDs participating in each institution an equal number of youths without disability were systematically selected, making a total of 362 participants. Similar sampling method and sample size were adopted in similar local and foreign studies (Sangowanwa, Owoaje, Faseru, Ebong & Adekunle, 2009; Filolade, 2005; Hoffman, O'Sullivan, Harrison, Dolezal & Monroe-Wise, 2005).

Instruments

A 62-item structured self report questionnaire divided into Sections A to E was used to collect data. Section A contains 6 items seeking information on participants' bio-data. Section B contained the 7-item questionnaire assessing Perceived Vulnerability to HIV/AIDS, adapted from Koopman & Reid's (1998) work. It has a 5-point response rating scale of strongly agree to strongly disagree. A high score on the scale indicates high level of perceived vulnerability to HIV/AIDS, vice versa. The authors reported a Cronbach alpha reliability coefficient of 0.86, and a mean of ($\bar{X}$) 25.60 (Giles, Liddel & Bydawell, 2005). A revalidation of the scale yielded Cronbach alpha of 0.91; split half reliability of .87 for part one, and .76 for part two, indicating that the scale is very reliable in measuring perceived vulnerability to HIV/AIDS among YWD in Nigeria, while a Cronbach alpha of 0.83 was reported among normal youths. To establish norms, mean score of ($\bar{X}$) 14. 56, and S.D. 6.5 was reported among YLWD while a mean of ($\bar{X}$) 11.24, and S.D. of 5.41 were reported in the normal population.

Section C comprised the 5-item Condom Use Self Efficacy Scale adapted from a previously validated 14-item scale of condom self-efficacy (Hanna, 1999). It has a reliability coefficient of .64 for women and 0.60 for men. A high mean score indicates high self efficacy. The scale was revalidated during the study, yielding, reliability coefficient alpha of 0.64; means ($\bar{X}$) =15.43 for normal population, and Cronbach alpha of 0.69 and means ($\bar{X}$) = 14.64 for YWD Section D was made of the 13-item attitude towards condom use scale with a reliability coefficient of .86, and a mean score (norm) of ($\bar{X}$) = 40.10 with high scores indicating positive attitude, vice versa (Dehart & Birkimer, 1997). A revalidation yielded a mean score (norm) of ($\bar{X}$) = 34.69, SD =6.38, for normal population and a mean score (norm) of ($\bar{X}$) = 35.52, SD =8.58, and Cronbach alpha of 0.74 for YLWD. Section E contained the 25-item sexual attitude scale developed by Hudson, Murphy & Nurius (1983). The authors reported a reliability coefficient of 0.92. Score on the scale range between 0 (very liberal orientation) to 100 (very conservative orientation).

A revalidation of the scale yielded Cronbach alpha of 0.74; means ($\bar{X}$) =72.38, and SD = 11.23 for normal population and Cronbach alpha of 0.72; means ($\bar{X}$) = 70.01, and SD 11.82 for YLWD. The reliability for all the participants shows Cronbach alpha of .73, $\bar{X}$=71.20; SD=11.50; N=362. Data collection was done through the administration of questionnaires to different schools slated for the study. At every school visited, the researchers presented the letters of introduction and ethical approval to each of the school authorities. Thereafter the researchers met the class teachers and prospective participants with the help of the research assistants.

Questionnaires were given to consenting participants, allowed to read through the documents, complete the questionnaires and return same directly to the research assistants within two days. Data obtained from the field were coded, entered into the computer with SPSS 17. Both descriptive and inferential statistics were adopted with calculations done at 0 .05 level of significance. Descriptive and inferential statistics including 2 X2X2 ANOVA, LSD post hoc analysis, and t-test were used in analyzing the data.

Results

Following data analysis, the following results were obtained and presented in Tables.

Table 1: Descriptive Statistics Table showing the demographic characteristics of participants (YWD and control) and mean score on sexual attitude

Youths Living With Disability					**Comparison Group**			
Variables	n	Percentage (%)	$\bar{X}$ on Sexual Attitude	S.D	n	Percentage (%)	$\bar{X}$ on Sexual Attitude	S.D
Age								
Young	105	58	45.81	13.81	97	53.6	73.68	10.25
Old	76	42	43.47	13.48	84	46.4	70.87	12.16
Gender								
Male	105	58	47.69	12.11	117	64.6	72.43	10.81
Female	76	42	40.88	14.79	64	35.4	72.53	12.07
Religion								
Christianity	116	64.1	40.07	15.17	143	79	71.43	11.47
Islam	61	33.7	45.97	10.34	38	21	75.95	9.61
No Religion	4	2.2	49.50	14.06	-	-	-	-
Marital Status								
Married	12	6.6	49.42	17.42	37	20.4	68.30	14.16
Single	169	93.4	44.50	13.38	144	79.6	73.42	10.15
Education								
No Education	2	1.1	51.50	17.68	-	-	-	-
Primary	1	.6	40.00		2	1.1	65.50	0.71
Secondary	106	58.6	43.61	14.51	57	31.5	72.96	10.70
Tertiary	72	39.8	46.50	12.34	122	67.4	72.21	11.57
Disability					N = 181			
Physical	40	22.1	49.28	9.99				
Hearing	112	61.9	41.23	14.81				
Visual	29	16.0	52.59	7.24				

Table 1 reveals that of the 181 YWD, 112 were hearing impaired (61.9%), 40 were physically challenged (22.1%), while 29 (16.0%) were visually impaired. Their ages ranged from 23 to 30 years with average age of 20.49 years. In terms of gender, 105 (58%) were males while 76 (42%) were females. One hundred and sixty-nine (93.4%) of the participants were single, while the remaining 12 (6.6%) were married. Concerning the control group, 117 (64.6%) were males while 64 (35.4%) were females. Their ages ranged from 15 to 30 years with an average age of 27 years.

Table 2: 2X2X2 Cross-tabulation descriptive statistics Table comparing the influence of perceived vulnerability to HIV/AIDS, Condom use self-efficacy and attitude to condom use on Sexual attitude among YWDs and comparison group.

Youths Living With Disability

Perceived vulnerability to HIV/AIDS	Condom use self-efficacy	Attitude to condom use	Variable Interaction	$\overline{X}$	SD	N	Ranking
Low	Low	Negative	LLN	57.50	12.31	26	8th
		Positive	LLP	71.61	13.12	18	2nd
	High	Negative	LHN	69.50	5.63	8	6th
		Positive	LHP	76.46	6.12	46	1st
High	Low	Negative	HLN	67.04	10.67	26	7th
		Positive	HLP	71.61	7.05	18	3rd
	High	Negative	HHN	71.32	11.26	22	5th
		Positive	HHP	71.35	15.41	17	4th

Comparison Group

Perceived vulnerability to HIV/AIDS	Condom use Self-efficacy	Attitude to condom use	Variable Interaction	$\overline{X}$	SD	N	Ranking
Low	Low	Negative	LLN	74.71	10.15	21	2nd
		Positive	LLP	72.10	13.03	29	4th
	High	Negative	LHN	71.62	15.43	34	5th
		Positive	LHP	75.34	8.26	32	1st
High	Low	Negative	HLN	70.63	10.23	8	7th
		Positive	HLP	72.18	12.19	22	3rd
	High	Negative	HHN	70.18	6.21	11	6th
		Positive	HHP	69.54	6.61	24	8th

Key:

LLN = Low perceived vulnerability, Low condom use self -efficacy and Negative attitude to condom use
LLP = Low perceived vulnerability, Low condom use self-efficacy and Positive attitude to condom use
LHN = Low perceived vulnerability, High condom use self-efficacy and Negative attitude to condom use
LHP = Low perceived vulnerability, High condom use self-efficacy and Positive attitude to condom use
HLN = High perceived vulnerability, Low condom use self-efficacy and Negative attitude to condom use
HLP = High perceived vulnerability, Low condom use self-efficacy and Positive attitude to condom use
HHN = High perceived vulnerability, High condom use self-efficacy and Negative attitude to condom use
HHP = High perceived vulnerability, High condom use self-efficacy and Positive attitude to condom use

The Table 2 reveals that among YWD, participants with low perceived vulnerability to HIV/AIDS, high condom use self-efficacy and positive attitude to condom use (LHP) had the highest mean score ($\overline{X}$ =76.46, SD=6.12, n, 46) on sexual attitude, meaning that they have a very conservative orientation; in other words, more cautious about sexual issues. On the contrary, YWDs with low perceived HIV/AIDS vulnerability, low score on condom use self-efficacy with negative attitude to condom use reported lower mean scores on sexual attitude ($\overline{X}$ = 57.50, SD=12.31, n,26); meaning they are less cautious about sexual issues. Compared with controls, the Table also shows that able bodied youths with low level of perceived HIV/AIDS vulnerability, high condom use self-efficacy and positive attitude to condom use reported the highest means on attitude to sex ($\overline{X}$ = 75.34, SD=8.26, n, 32).

This means that they are most cautious about their sexual activities; while able bodied youths with high level of perceived vulnerability to HIV/AIDS, high condom use self- efficacy and positive attitude to condom use reported the least score on attitude to sex ($\overline{X}$ = 69.54, SD=6.61, n, 24).

Table 3: 2X2X2 ANOVA Table showing influence of perceived HIV/AIDS vulnerability, condom use self-efficacy and attitude to condom use on sexual attitude among YWD and comparison group

Youths Living With Disability Group					
Source	**SS**	**Df**	**MS**	**F**	**P**
Perceived Vulnerability to HIV/AIDS (A)	107.101	1	107.101	.700	.404
Condom Use efficacy (B)	1656.981	1	1656.981	10.827	.001
Attitude to Condom Use (C)	2488.820	1	2488.820	16.262	.000
A * B	193.525	1	193.525	1.265	.262
A * C	449.948	1	449.948	2.940	.088
B * C	419.639	1	419.639	2.742	.100
A * B * C	165.490	1	165.490	1.081	.300
Error	26476.605	173	153.044		
Total	397436.000	181			

R Squared = .214

Comparison Group

Source	**SS**	**Df**	**MS**	**F**	**P**
Perceived Vulnerability to HIV/AIDS (A)	283.844	1	283.844	2.229	.137
Condom Use efficacy (B)	19.385	1	19.385	.152	.697
Attitude to Condom Use (C)	9.262	1	9.262	.073	.788
A * B	23.359	1	23.359	.183	.669
A * C	.088	1	.088	.001	.979
B * C	38.447	1	38.447	.302	.583
A * B * C	163.366	1	163.366	1.283	.259
Error	22028.966	173	127.335		
Totals	970840.000	181			

R Squared = .30

Table 3 shows that among YWD, there was significant main influence of condom use self-efficacy (F {1,181} = 10.83; p < .05), and attitude towards condom use (F {1,181} = 16.26; p < .001) on sexual attitude. There was no significant main influence of perceived HIV/AIDS vulnerability (F {1,181V} = 0.70, p > .05) on sexual attitude. Finally, there was no significant 2-way or 3-way interactive influence of any of the independent variables on sexual attitude among YLWD. A look at the 2X2X2 ANOVA result from the comparison group reveals that condom use self-efficacy (F {1,181} = .152; p > .05), attitude towards condom use (F {1,181} = 0.73; p > .05) and perceived HIV/AIDS vulnerability (F {1,181} = 2.23, p > .05) had no significant independent influence on sexual attitude. There was also no significant interactive influence of any of the variables on sexual attitude in the comparison group.

Table 4: LSD multiple comparison test showing main effects of Condom Use Efficacy and attitude to condom use on sexual attitude among YWD

Condom Use Self Efficacy	**N**	**Mean**	**SD**	**1**
1. High	87	48.77	12.43	-
2. Low	94	41.18	13.84	7.59*

*P < .01

Attitude to Condom use	**N**	**Mean**	**SD**	**1**
1. Positive	96	49.06	11.40	-
2. Negative	85	40.05	14.51	9.02*

**P < .01*

Table 4 shows that participants with high condom use self-efficacy scored higher ($\overline{X}$ = 48.77; SD = 12.43: n = 87) than participants with low condom use efficacy ($\overline{X}$ = 41.18; SD = 13.84; n = 94) on sexual attitude. The mean difference was significant. It also shows that participants with positive attitude to condom use scored higher ($\overline{X}$ = 49.06; SD = 11.40: n = 96) than participants with negative attitude to condom use ($\overline{X}$ = 40.51; SD = 14.51; n = 85) on sexual attitude. The mean difference was also very significant.

Table 5: T-Test Comparison of Means of perceived HIV/AIDS vulnerability, attitude to condom use, condom use self-efficacy, age, gender, and total participants on sexual attitude among YWD

Dependent Variables	Levels	N	$\bar{X}$	SD	Df	T	P
Age	Young	148	69.43	11.91			
	Old	33	72.61	8.65	179	-1.402	>.05
Gender	Male	105	72.34	10.78			
	Female	76	66.78	12.49	179	3.207	<.05
Perceived Vulnerability to HIV/AIDS	Low	98	69.97	12.29			
	High	83	70.00	11.32	179	-0.45	>.05
Attitude to Condom Use	Negative	82	65.40	12.22			
	Positive	99	73.38	10.03	179	-5.088	<.01
Condom Use Self-Efficacy	Low	88	66.09	12.43			
	High	93	73.71	9.93	179	-4.539	<.01
Participants	PLWD	181	44.64	13.65	360	1.411	>.05
	Control Grp	181	72.28	11.21			

Table 5 reveals that old YWD scored above the norm ($\bar{X}$=72.61; SD=8.649; n=33), indicating a conservative attitude, while young YWD scored below the norm ($\bar{X}$=69.43; SD=11.911; n=148), indicating a liberal sexual attitude. However the mean difference between the two groups was not significant (t{179} = -1.402; p > .05). Male participants reported higher mean score ($\bar{X}$=72.34, SD=10.780, n=105) on sexual attitude than females ($\bar{X}$=66.78, SD=12.486, n=76). The t-value shows that the mean difference was significant ([t{179} = 3.207; p <.05). This means that female YWD have more liberal sexual attitude while males are more conservative.

Youths with disability with high levels of perceived HIV/AIDS vulnerability reported a higher mean value ($\bar{X}$=70.00, SD=11.315, n=83) on sexual attitude than participants with low perceived vulnerability to HIV/AIDS ($\bar{X}$=69.97, SD=12.288, n=98). The mean difference was however insignificant (t {179} = -0.45; p > .05). YWD with positive attitude to condom use had a high mean score ($\bar{X}$=73.38, SD=10.03, n=99) on sexual attitude, while participants with negative attitude to condom use scored lower ($\bar{X}$=65.40, SD=12.218, n=82). The difference was significant (t {179} = -5.088; p < .01). Concerning condom use self-efficacy, YWD with high mean score also reported high mean score on sexual attitude ($\bar{X}$=73.71, SD=9.934, n=93) compared to participants with low condom use self-efficacy ($\bar{X}$=66.09, SD= 12.430, n=88). The difference was also significant (t {179}= -4.539, P < .01). Even though the means reported by YWD on sexual attitude was higher ($\bar{X}$=44.64, SD=13.65) than that of the comparison group ($\bar{X}$=72.28, SD=11.21) yet, this was not statistically significant (t{360} = 1.411; p > .05).

Discussion

The major contribution of this study to the sexual attitude literature among YWD is the discovery of significant main influence of condom use self-efficacy and attitude towards condom use on sexual attitude, while perceived HIV/AIDS vulnerability had no significant independent influence.

There was also no significant interactive influence of any of the psychological variables considered in this study on sexual attitude among YWD. Compared with the comparison group, there was no significant main or interactive influence of the independent variables on sexual attitude. It was also established that there is no significant statistical difference between YWD and comparison group on attitude to sex, even though the means reported by YWD was lower than that of the comparison group. This study also revealed that YWD with dispositional traits such as perceived low vulnerability to HIV/AIDS, high condom use self-efficacy and positive attitude to condom use (LHP) are most likely to have very conservative sexual orientation, while YWD with perceived low HIV/AIDS vulnerability, low score on condom use self-efficacy with negative attitude to condom use are most likely to have liberal attitude or less cautious attitude to sexual issues. The finding that attitude towards condom use had significant influence on attitude to sex among PWD is supported by the outcome of a study conducted by Boyce, (2006), as well as the finding of Villarruel, et al, (2004) where they established that gender and attitude to condom use should be considered in HIV/AIDS control efforts; which includes considerations of the sexual attitude of people.

Even though only a few studies have been conducted in this area among YWD and members of the society without disabilities, yet the evidence suggests a relationship between the two variables. It means if a YWD has a positive disposition towards the use of condom before sex, it means such a person believes and would likely consider it necessary to use condoms before engaging in sexual intercourse. In relation to the focus on sexual attitude in this research, it suggests that such an individual will also be conservative or careful when confronted with issues about sex or sexuality related topics. However, attitude to condom use did not significantly influence attitude to sexuality among the comparison group, meaning that the attitude of the youths without disabilities in this study to the use of condom had no significant influence in determining their sexual attitude. An explanation for this difference between YWD and the comparison group could be that information about the purpose, process and prospects on insistence on use of condom during sexual intercourse is appreciated and acceptable better by YWD compared to the comparison group.

It could also be because, compared to the normal population people living with disabilities in many societies perceived to be relatively less sexually active and possibly more engrossed with other life and social challenges, in this case coping with disabilities. This study also revealed that condom use self-efficacy has a significant influence on sexual attitude among YWD, but not among the comparison group. This means that when considering factors that could determine sexual attitude among YWD, condom use self-efficacy is one of the variables that should be given attention. Self-efficacy is the measure of one's own ability to complete tasks and accomplish a desire or goal. It also has to do with an individual's capacity to deal with challenges of life. This means that the ability of YWD in this study to apply knowledge about the use and handling of condoms in such a way that they can safely and timely don it as and at when necessary significantly influenced their sexual attitude. This was not so with the comparison group where condom use self-efficacy did not determine their sexual attitude. There is paucity of literature relating condom use self-efficacy with sexual attitude among people living with disabilities or even among the normal population. Some of the fairly-related research findings reported in the literature include that of Boyce, (2006), on gender differences in condom use and also the finding of Villarruel et al, (2004) on the role of self-efficacy in condom use.

Comparing this finding with related studies, the relationship established between condom use efficacy and sexual behavior in the study conducted by Alarape, et al, (2008) in Ibadan, Nigeria, it should be noted that their focus was on able-bodied university undergraduates and the variables investigated might have accounted for their finding. Contrary to expectations, perceived HIV/AIDS vulnerability had no significant independent influence on sexual attitude in this study. Although virtually all major theories of health protective behavior assume that precautionary behavior is related to perceived vulnerability, the application of the assumption in certain cases could be called to question. This finding contradicts earlier positions on the association established between perceived vulnerability to HIV and tendency to avoid certain behaviours such as unprotected vaginal sex (Brooks, Lee, Stover & Barkley, 2009). It also fails to confirm the theoretical and moral- philosophical viewpoints such as feminism (Slovic, et al, 1982; Gagnon & Smith, 1973) which explains the relationship between attitudes to sex and perceived vulnerability to HIV infection.

Beliefs about personal risk for HIV infection are central to understanding not only what motivates people to engage in behaviours that reduce or increase their risk of HIV infection (Napper, et al, 2012) but what predisposes an individual to respond positively or negatively towards the idea or situation (Colman, 2003). While there are no clear or obvious explanations for failure of perceived vulnerability to influence sexual attitude in this study, possibilities exist that there may be an interplay of other mediating or moderating variables which were not explored in this study. Another unique contribution of this study to the literature is the establishment that YWD with dispositional traits such as perceived low vulnerability to HIV/AIDS, high condom use self-efficacy and positive attitude to condom use (LHP) are most likely to have very conservative sexual orientation, while YWD with perceived low HIV/AIDS vulnerability, low score on condom use self-efficacy with negative attitude to condom use are most likely to have liberal attitude or less cautious attitude to sexual issues.

This provides precise information about the factorial combination of people's individual peculiar characteristics that point to the possibility of otherwise of negative or positive attitude to sex.
This could be very useful in psychological prediction of attitude to sex among YWD. It is however limited in the sense that a further regression equation would have provided more specific predictive capacity of these variables when tested in an inferential sexual attitude analysis. One possible explanation for the similarity between YWD and the comparison group is that the socio-psychological factors considered in this study are impactful in determining sexual attitude. This notwithstanding, the means reported by YWD was lower than that of the comparison group meaning that YWD have more liberal sexual orientation compared to youths without disability who reported fairly conservative sexual attitude or orientation. The difference is however not statistically significant. In conclusion, this study has revealed that attitude to condom use and condom use self-efficacy are critical factors in determining sexual attitude among YWD while perceived HIV vulnerability is not. No significant interaction effects existed between perceived HIV vulnerability, condom use self-efficacy and attitude to condom use.

Even though YWD reported lower scores in attitude to sex, the finding is not statistically significant. From these, it could be concluded that an individual's attitude to sex and condom use self-efficacy influence sexual attitude among YWD. Although we do not equate sexual attitudes with sexual behaviour, behaviour and attitudes are often linked. It is therefore suggested that sexual health planners and people involved in the socio-psychological health of people living with disability should plan programmes targeted at improving condom use self-efficacy and attitude to condom use especially among YWD. It appears timely also to give more attention to the total sexuality of people living with disabilities as part of a holistic HIV/STD and teenage pregnancy reduction. This will no doubt improve the psychological health of the disabled and fulfilment as not only humans but sexual beings.

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