

# **SOME PSYCHO CULTURAL AND PHYSIOLOGICAL FACTORS AS PREDICTORS OF IN-SCHOOL ADOLESCENTS' RESPONSE TO HIV/AIDS PREVENTIVE PRACTICES IN NIGERIA**

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## **ABSTRACT**

This study sought to find out the extent to which some psycho cultural and physiological factors affects the attitudinal disposition to HIV/AIDS preventive practices among in-school adolescents in Nigeria. Specifically, the study investigated the composite and relative contribution of the following psycho cultural and physiological variables (gender, age, traditional beliefs about HIV/AIDS and sexuality attitudes), to adolescence response to HIV/AIDS preventive practices in Cross River State, Nigeria. Data was generated from 316 fifth year students in 12 secondary schools in Cross River state, Nigeria using a questionnaire. Result of data analysis, using multiple regression procedure indicated that only two factors were effective in explaining adolescents' response to HIV/AIDS preventive practices. Traditional beliefs about HIV/AIDS made the greatest contribution to adolescents' response to HIV/AIDS preventive practices, followed by sexuality attitudes. Age and gender were not significant. The implications of the research findings are addressed.

## **INTRODUCTION**

The increase in adolescent and young Adult sexual behaviour during the last decade has considerably attracted the concern and anxiety of parents and scholars alike (Uwakwe, 1998; Olley and Ogumbanjo, 2000). These anxieties are not unconnected with the high incidence of unwanted pregnancies and sexually transmitted diseases (STDs), which is more prevalent among the adolescent group (Buga, Amoko, Ncharam, 1996). The recent increase in epidemic proportion of the Acquired Immune Deficiency Syndrome (AIDS) has further heightened the concern and anxiety of parents (National AIDS & STD control Programme Fact Sheet, 1999). Many preventive methods of unhealthy sexual behaviour have been employed over the years to avert this pandemic; but it does seem however that tangible behaviour changes in terms of HIV risk behaviours have been marginal (Carabassi, 1992; and Diclementi, Zorn and Temoshok, 1994).

Being totally free from the disease depends largely on how one perceives and reacts to the preventive measures. It is, our

awareness of HIV/AIDS education campaigns and response to the preventive practices. Awareness influences our attitudinal dispositions, which in turn influences our actions. It follows that possession of adequate knowledge of the mode of transition and prevention of the diseases will significantly and positively influence responsive actions to risk reduction behaviour. An understanding of some factors that could be useful in explaining adolescent awareness and reactions to HIV/AIDS preventive measures/practices is therefore very vital.

In Nigeria, emerging health and sociology literature reveal that possible relationships do exist between some psycho cultural and physiological factors and HIV preventive measures (Anojulu, 2002; Asuquo, Ekuri, Asuquo and Basse, 2004). These studies however focused more on physiological factors of adolescents, such as, age gender etc. They also failed to provide data on the cultural-related factors and the interrelationship among adolescents' physiological factors and attitudinal disposition to HIV AIDS prevention practices. This is in spite of the fact that the cure of this disease is still a mirage. Besides the effect of

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cultural dimensions of this scourge on the prevention of HIV/AIDS is rarely explored. Health Educators and social science scholars maintain that the only way out of this health hazards is abstinence from sex or application of prescribed preventive measure, which could better be achieved by developing favourable attitudes and the right type of perception and knowledge of HIV/AIDS preventive measures/practices.

This background underscores the need to undertake the present study, which explains attitudinal dispositions of in-school adolescents to HIV/AIDS preventive practices from the point of view of psycho cultural and physiological factors. It is hoped that this study will provide a picture of possible contributions of the set of psycho cultural and physiological factors to HIV/AIDS preventive practices among adolescents in Nigeria. The outcome of the study will likely form a basis for practical techniques for counselling secondary school adolescents on HIV/AIDS prevention in a developing country, such as Nigeria. Such counselling intervention strategies could impact greatly on fostering positive attitudinal dispositions and response to HIV/AIDS preventive practices.

**Purpose of the study:** The general purpose of this study is to find out the extent to which some psycho cultural and physiological factors affects the attitudinal disposition to HIV/AIDS preventive practices among in-school adolescents in Nigeria. Specifically, the study sought answers to the following research questions:

- 1) To what extent can gender, age, traditional beliefs about HIV/AIDS and sexuality attitudes, collectively predict

adolescence response to HIV/AIDS preventive practices?

- 2) What is the contribution of each of the psycho cultural and physiological factors to the prediction?

**METHODOLOGY**

**Subjects:** The subjects for this study involved 316 students from 15 secondary schools in Cross River state (142 males and 174 females), selected through stratified random sampling procedure. Their ages range from 13 up to 18 with a mean age of 14.34 and standard deviation of 3.41.

**Instrumentation:** A questionnaire was used for data collection. The questionnaire consisted of four major parts, with a total of 35 items. A Cronbach co-efficient alpha internal consistency reliability of .89, 0.65 and 0.72 was obtained for the three sub-scales associated with the questionnaire (*adolescent response to HIV/AIDS preventive practices scale*, *traditional beliefs about HIV/AIDS scale* and *sexuality attitude scale*), respectively. The instrument was administered to subjects with the assistance of two research assistants.

**Procedure for Data Analysis:** Multiple regression analysis procedure (utilizing the statistical package for the social science programme SPSS) was computed to provide answers to predict adolescence response to HIV/AIDS preventive practices, from some psycho-cultural and physiological factors.

**RESULTS**

**Table 1:** Multiple Regression Analysis of the collective contributions of some Psycho cultural and physiological variables to the prediction of Adolescents' response to HIV/AIDS preventive practices

R = .268					
R square (R <sup>2</sup> ) = .072					
Adjusted R square (Adj. R <sup>2</sup> ) = .060					
Std. Error of estimate = 5.778					
<b>ANOVA</b>					
Source of Variance	Sum of squares	df	Mean square	F-ratio	
Regression	746.338	4	186.585	5.997*	
Residual	9575.738	311			
Total	10422.076	311	31.112		
*Significant at p< .05 level					

Table 1 show that a combination of the psycho-cultural and physiological variables in predicting adolescents' response to HIV/AIDS preventive practices yielded a coefficient of multiple regression (R) of .268 and a multiple R-square ( $R^2$ ) of .072. The table also shows that analysis of variance for the multiple regression data produced an F-ratio of 5.997, which was significant at .05 level. Thus, when these variables are taken together, they significantly predicted adolescents' response to HIV/AIDS

preventive practices. This implies that the psycho cultural and physiological variables, when taken together are significant predictors of adolescents' response to HIV/AIDS preventive practices. A multiple  $R^2$  of .072 implies that the psycho cultural and physiological variables jointly explain 7.2% of the variance in the dependent variable.

The results of the significance of the regression weights of each of the psycho cultural and physiological variables are presented table 2.

**Table 2:** Contributions of each of the psycho cultural and physiological variables to the prediction of adolescents' response to HIV/AIDS preventive practices

Variables	Standardised Regression Weights(Beta)	p-Level
Gender( $X_1$ )	.012ns	.836
Age ( $X_2$ )	.015ns	.795
Traditional beliefs about HIV/AIDS( $X_3$ )	.175**	.004
Sexuality attitudes( $X_4$ )	.147*	.016

Ns Not significant at .05 level

\*Significant at .05 level (  $P < .05$ ,  $t = 1.96$  )

\*\*Significant at .01level (  $P < .05$ ,  $t = 1.96$  )

Table 2 shows the regression weights (standardized and unstandardized), standard error of estimate, t - ratio and level at which the t-ratio is significant for each psycho cultural and physiological variables. As can be seen, the standardised regression weights (B) ranged from .012 to .175, unstandardized regression weights (b) ranged from .113 to .214, standard error of estimate ranged from .059 to .657 and t-ratio from .208 to 2.942. The table reveals that the t-ratios of two variables (gender and age) were not significant at .05 level. This result implies that when taken individually, only two (traditional beliefs about HIV/AIDS and sexuality attitudes) out of the psycho cultural and physiological variables significantly predict adolescents' response to HIV/AIDS preventive practices. The result further shows that traditional beliefs about HIV/AIDS make the highest contribution to adolescents' response to HIV/AIDS preventive practices, followed by sexuality attitudes.

## DISCUSSION OF FINDINGS

The result of multiple regression analysis in table 2 revealed that the psycho cultural and physiological variables when taken together were effective in predicting adolescents' response to HIV/AIDS preventive practices among students

who participated in this study. The observed F-ratio of 5.997 was significant at .05 level, indicating that the joint contribution of the psycho cultural and physiological variables in predicting adolescents' response to HIV/AIDS preventive practices among subjects could not have occurred by chance. The magnitude of the relationship between adolescents' response to HIV/AIDS preventive practices and the psycho cultural and physiological variables is reflected in the values of coefficients of multiple correlation (R) of .268 and multiple correlation square ( $R^2$ ) of .072. Thus, the results reveal that the psycho cultural and physiological variables when taken together accounted for only 7.2% of the total variance in adolescents' response to HIV/AIDS preventive practices. The result in table 2 shows the contribution made by each psycho cultural and physiological variable to the prediction. The values of t-ratio associated with each variable showed that two variable (traditional beliefs about HIV/AIDS and sexuality attitudes) out of the four variables, contributed significantly to the prediction of adolescence response to HIV/AIDS preventive practices. This result tends to collaborate previous research findings of Prince and Bernard (1998), who showed that gender did not significantly affect adolescent attitude to HIV/AIDS preventive measures. On the other hand, the result tends to contradict the research

findings of Asuquo, Ekuri, Asuquo and Bassey (2004), who showed that gender significantly affect adolescent attitude towards HIV/AIDS preventive measures. This study revealed that male subjects tend to demonstrate more favourable attitude and perception of HIV/AIDS preventive practices.

However, the effect of age ( $X_2$ ) was not significant; suggesting that, age factor within the sample considered for this study is not a significant factor in explaining in-school adolescent responses to HIV/AIDS preventive practices. This result tends to agree with the research findings of Asuquo, Ekuri, Asuquo and Bassey (2004), which reported that age, was not a significant factor in explaining adolescents' perception of, and attitude to HIV/AIDS preventive measures. This result is expected, considering the sample distribution in this study, with regard to age. There seem to be somewhat homogeneous in age, since their age range is quite narrow (13-18years). It is therefore possible that if the age range is increase, to between 11-20years, age may likely contribute significantly on adolescents' response to HIV/AIDS preventive practices. The result associated with sexuality and adolescent response to HIV/AIDS preventive practices corroborate the research findings of Romer, Back and Ricardo (1994) and Kon (1995), which attributed adolescent actions towards HIV/AIDS prevention to their knowledge, perception and sexuality. Furthermore, the study also revealed that traditional belief about HIV/AIDS is a significant factor in explaining adolescent response to HIV/AIDS. This aspect of the research finding is in agreement with previous studies (Williams, Ng'anga and Ngugi (1997), which found strong relationship between cultural contexts and adolescent response to HIV/AIDS preventive practices.

## CONCLUSION AND IMPLICATIONS

Based on the results of these findings, it could be concluded that traditional belief about HIV/AIDS and sexuality attitudes had the most significant influence on adolescents' response to HIV/AIDS preventive practices. Judging from the fact that cultural indices (e.g. traditional belief about HIV/AIDS) is effective in predicting adolescent response to HIV/AIDS preventive practices; it is therefore important that conventional educational programmes aimed at young people should not only focus on warning young people of the dangers of premarital sex and the need to live according to a set of moral or

religious precepts, but should also focus on the cultural context in which the people live. Since adolescent actions towards HIV/AIDS prevention is associated with their sexuality, further research should examine what adolescent know, think and do with their sexuality.

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