Media exposure on condom use among adolescents age 12 – 19 in Ghana: Application of the TPB model

The purpose of this study is to examine the effects of HIV/AIDS prevention media campaigns on condom use among adolescents of age 12 to 19 in Ghana. In Ghana, 60 percent of the total population is below 18 years of age (National Report on the Progress of the United Nations General Assembly Special Session UNGASS of Commitment of HIV and AIDS, Ghana, 2006-2007). Additionally, the 2003 Ghana Demographic and Health Survey finds 7 percent of women and 4 percent of men had sexual intercourse before age 15; 46 percent of women and 27 percent of men had sexual intercourse by age 18. In 2007, more than 7,400 individuals were infected with HIV/AIDS every day. Of these 7,400 new infections, approximately 45 percent are amongst persons between the ages of 15 to 24, 50 percent occur among women (World Health Organization & UNAIDS, 2008, July). Consequently, most young individuals enter adolescence HIV negative; because adolescence is a phase of experimentation and engagement in riskier behaviors, youths are at a higher risk for HIV transmission (Bertrand & Anhang, 2006). In 2008, Ghana's HIV prevalence was 1.9 percent (Epidemiological Fact Sheet on HIV and AIDS, 2008), in 2006, HIV prevalence among teenagers ages 15 to 19 was 1.4 percent. Moreover, the HIV prevalence amongst teenagers of ages 15 to 19 increased from 0.8 percent in 2005 to 1.4 percent in 2006 (National Report on the Progress of the United Nations General Assembly Special Session UNGASS of Commitment of HIV and AIDS, Ghana, 2006-2007). Identifying the most effective media channel(s) to target Ghanaian adolescents during the beginning of their sexual life can help reduce the incidence of HIV infections amongst this young cohort. The objectives of this study are:

- 1: To examine the relationship between media exposure and condom use at last intercourse amongst adolescents of age 12 to 19 in Ghana.
- 2: To examine the relationship between media exposure modality and condom use at last intercourse amongst adolescents of age 12 to 19 in Ghana.

This study uses a subsample of the 2004 National Survey of Adolescents (NSA) in Ghana conducted by the Guttmacher Institute, Macro International Inc., and the Institute of Statistical, Social, and Economic Research from the University of Ghana. The NSA in Ghana uses a twostage stratified sample design; initially, the survey stratified by enumeration areas and then by households within the areas. Survey data was collected between January and May 2004. A total of 9,445 urban and rural households were selected and interviewed; all eligible respondents of ages 12-19 who were de jure or de facto members of the household were selected for the individual survey questionnaire, totaling up to 4,430 respondents. All participants from age 12-19 who were sexually active and responded whether a condom was or was not used at last intercourse were included in this study (n= 368). Sixty percent of the sample was between 18 and 19 years old; the remaining 40 percent were between 12 and 17 years of age (please see Table 1). More than 55 percent of the sample resided in rural areas, whereas 44 percent lived in urban areas. Approximately two-thirds of the participants were female. Close to 50 percent reported middle school as their highest level of educational attainment; 30 percent reported primary and 12 percent reported secondary school as their highest level of educational attainment.

The Theory of Planned Behavior (TPB) is used as the guiding framework to explain the relationship between media exposure and condom use at last intercourse among Ghanaian

adolescents age 12-19. Coined by Ajzen (1985, 1988, 1991), the TPB has three determinants of behavioral intention and behavior: attitudes, subjective norm, and perceived behavioral control. Specifically, subjective norm is measured through media exposure to radio, television, and print. Attitudes are measured using two items: 1) Is using a condom a sign of distrust toward your partner?, and 2) Does using a male condom reduce sexual pleasure? One item is used to measure perceived behavioral control: for female respondents, the question asks whether she is confident in her ability to influence her partner to use a male condom; and for male respondents, is he confident on knowing how to use a male condom if desired. Condom used during first intercourse is used as a proxy for intention. Finally, the outcome variable is condom use at last intercourse. Logistic regression is being used to explore the relationships between the different predictors of the TPB model and condom use at last intercourse. Specifically, this study examines whether media exposure as a measure of subjective norm significantly predicts actual behavior, condom use at last intercourse.

Preliminary analyses suggest subjective norm, attitudes, and perceived behavioral control partially predict condom use at last intercourse. Specifically, confidence to influence male condom use, media exposure to television, condom use during first intercourse, and individual perceptions of condom use as a sign of distrust of one's sexual partner significantly predict condom use at last intercourse. Findings from this study will help identify the most effective media channel(s) to reach adolescents in Ghana to increase condom use among a low condom use population at higher risk for HIV transmission. Furthermore, findings from this study will inform community-based interventions on the importance of counteracting youth's perceptions of condom use as a sign of partner distrust as a means to reduce HIV transmission.

Table 1. Socio-demographic characteristics of adolescents age 12-19 in Ghana, National Survey of Adolescents, 2004.

Characteristic	Percentage (N = 368)
Current Age	
12-14	4.0*
15-17	36.6
18-19	59.5
Type of Residence	
Urban	44.3
Rural	55.7
Gender	
Male	32.7
Female	67.3
Highest level of educations	al attainment
Primary	29.9
JSS/Middle	48.0
SSS/Secondary	12.4

Note: Sample sizes and percentages are weighted. * Sample size < 20.