Does community physical activity protect urban poor youth in Accra from sexual risk taking beyond their own participation in physical activity?

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Introduction

The early onset of sexual activity among youth exposes them to the risk of sexually transmitted infections and unwanted pregnancies at a developmental stage where they are incapable of estimating and managing these risks (Keating 1990). The risk associated with the early initiation of sexual intercourse among youth is disproportionately high in sub-Saharan Africa given that more than one-third of the total population of the sub-region is aged 10-24years (UNFPA, 2012). Urban poor youth in sub-Saharan Africa are particularly vulnerable to the early initiation of sexual activity and the negative outcomes of risky sexual behavior due to the increasing concentration of poverty in urban areas and the marginalization of the urban poor (Greif et al., 2011; Dodoo et al., 2007).

Research into the risky behavior of adolescents and young adults has transcended the exclusive focus on risk factors to a consideration of protective factors that buffer youth from engaging in risky behavior (Jessor et al. 1998). Jessor et al. (1998) posit that protective factors interact with risk factors in such a way that when protection is high, risk factors have little impact on risky behavior. This emerging research on the factors that protect adolescents and young adults from engaging in risky behavior has generated interest on the role of organized physical activity in protecting the youth from risky sexual behaviors (Wade 1998). The main argument advanced in the literature to explain how organized physical activity protect young people from risky sexual behavior is that organized physical activity diverts the youths' attention and leaves them with less time to engage in sexual activity (Jones-Palm & Palm, 2004). The other argument is that physical activities enhances personal resilience, self-reliance, self-confidence and self esteem and helps young people to resist social pressures to engage in sex for approval or popularity (Jones-Palm & Palm, 2004).

We are yet to come across any study that attempts to investigate whether the presence of organized physical activity groups in communities predicts a later initiation of sexual activity beyond the youths' own participation in organized physical activity. A plausible reason why this issue has gone largely unexplored is the focus on the direct benefits of physical activity to participating youth to the exclusion of the potential of organized physical activity groups to generate social ties that protect youth from initiating sexual intercourse beyond those directly participating in physical activity (Wade 1998). In this paper, we examine the hypothesis that organized physical activity groups in urban poor communities predicts a later onset of sexual intercourse among the youth beyond the youths' own participation in physical activity groups.

Theoretical bases of the study

The theoretical perspective guiding this study is the collective socialization model which emphasizes the importance of the social control function of parents and other adult role models in supervising and monitoring the behavior of young people (Jencks & Meyer, 1990). The presence of organized physical activity groups in communities may generate and glue ties between parents, caregivers, teachers, coaches and leaders of interconnected youth and thus supplement the supervisory capacities of parents (Sampson, Raudenbush, & Earls, 1997; Bianchi, Robinson, & Milkie, 2006).

Data and Methods

The current study analyzed data from the second wave of a longitudinal study conducted by the Regional Institute for Population Studies, University of Ghana on urban health and poverty in three urban poor communities in Accra (RIPS survey, 2011). Data on 264 unmarried youth aged 15-24 years has been analyzed. This dataset has questions concerning the participation of the youth in organized physical activity as well the presence of organized physical activity groups in the three communities. The initiation of sexual intercourse was measured by a dichotomous variable (Yes or No) that asked the respondents about whether they have ever had sexual intercourse. On the analytic approach, frequencies and percentages have been used to show the proportion of adolescent who have ever had sexual intercourse, the proportion who participate in organized physical activity and the proportion who indicate the presence of physical activity groups in their community. Bivariate analysis, using the chi-square statistic, is used to show the association between the two physical activity variables and the initiation of sexual intercourse. A binary logistic regression model is used to predict the effect of the physical activity variables on the initiation of sexual intercourse among the youth, controlling for key demographic and psychosocial characteristics of the youth as well as their household characteristics. The test for significance was done at; *p <0.05, **p <0.01, ***p <0.001.

Preliminary findings, discussion and recommendation

The preliminary findings of this study show that 51.1 percent of the respondents have ever had sexual intercourse, 16.7 percent of them participate in organized physical activity while 52.3 percent of them indicated that there were organized physical activity groups in their community. The bivariate analysis found a statistically significant association between both the youth's participation in physical activity as well as the presence of physical activity groups in their community and the initiation of sexual intercourse ($p<0.05$). However, after controlling for the youth's demographic, psychosocial and household characteristics at the multivariate level, it was only the presence of physical activity groups in the community that predicted the initiation of sexual intercourse. Youth in communities with organized physical activity groups were 66 percent less likely to have had sex compared to those in communities without physical activity groups ($p<0.05$). This result provides evidence that supports the hypothesis that physical activity

groups predicts the late onset of sexual activity beyond youth's own participation. Interestingly, there is relatively little support for the most commonly cited explanations of the link between participating in physical activity and the initiation of sexual intercourse among the youth in this study. We recommend further studies on the specific mechanisms by which physical activity groups in communities predict youth sexual activity and the formation of these groups in urban poor communities to regulate risky youth sexual behavior.

Table 1. Participation in physical activity and the initiation of sexual intercourse

	Ever had sexual intercourse			
Physical activity participation	**Yes**	**No**	χ^2	**Sig.[a]**
No	53.6	46.4	3.302	*
Yes	38.6	61.4		
Total	**51.1**	**48.9**		

Source: Urban Health and Poverty Survey **Sig.[a]** ***p <0.05, **p <0.01, ***p <0.001**

Table 2. Presence of physical activity groups in community and initiation of sex

	Ever had sexual intercourse			
Presence of physical activity groups in community	**Yes**	**No**	χ^2	**Sig.[a]**
No	62.0	38.0	7.636	*
Yes	44.2	55.8		
Don't Know	46.2	53.8		
Total	**51.1**	**48.9**		

Source: Urban Health and Poverty Survey **Sig.[a]** ***p <0.05, **p <0.01, ***p <0.001**

Table 3. Logistic regression model on the predictors of the initiation of sexual intercourse

Predictors of Sexual Intercourse	Exp[B]	S.E.
Presence of physical activity groups in community		
No *(Reference category)*	1.000	-
Yes	0.340*	0.483
Don't Know	0.348	0.687
Youth participation in physical activity		
No *(Reference category)*	1.000	-
Yes	0.949	0.608
Control variables		
Age		
15-19 *(Reference category)*	1.000	-
20-24	13.857***	0.493
Sex		
Male *(Reference category)*	1.000	-
Female	3.116**	0.435
Currently attending school		
No *(Reference category)*	1.000	-
Yes	0.170***	0.442
Refusal self-efficacy		
Never *(Reference category)*	1.000	-
Sometimes	0.517	0.809
Often	0.103**	0.819
Always	0.077**	0.806
Alcohol use in past 30 days preceding the survey		
No *(Reference category)*	1.000	-
Yes	6.906**	0.647
Highest education of father		
No education *(Reference category)*	1.000	-
Primary	1.776	1.114
Middle/JHS	3.335*	0.530
Secondary/Higher	3.587*	0.592
Household received social support in past 12 months		
No *(Reference category)*	1.000	-
Yes	0.192**	0.490
Sample size(n)	264	
Negelkerke R^2	0.646	

***p <0.05, **p <0.01, ***p <0.001** **Source: Urban Health and Poverty Survey (RIPS, 2011)**

Note: other variables included in the model: frequency of religious attendance, co-residence with biological parent(s) or parent figure(s), household wealth quintile and locality.

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