Poverty and Premarital Sex in Comparative Perspectives

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Introduction

The transition to sexual activity is a critical event for female adolescents, especially at this time of HIV/AIDS epidemic. This is mostly serious in situations where such sexual encounters are outside marital unions, and especially, in societies where condom use is still very low. Early sexual activity poses health risks especially for young women, who lack the power to negotiate safer sex with their partners, and whose youth or unsafe sexual behavior places them at high risk for unintended pregnancy or sexually transmitted infections including HIV/AIDS.

The focus of this paper is on the association between poverty and the transition to premarital sexual activity among female adolescents in three African countries of Kenya, Mali, and Zambia. These three countries were selected for several reasons. First, the Demographic Health Survey (DHS) data used in this paper were collected about the same time for the three countries: 2003 for Kenya, 2001 for Mali, and 2001-2002 for Zambia. Second, the transition to sexual activity is peculiar to each country. For example, Mali is known for early marriages. Mali (DHS, 2001) report indicates that 48 percent of women aged between 15 years and 19 years who ever had sexual intercourse were married and 15 percent never married. For Kenya and Zambia it is the reverse: Kenya, 20 percent were ever married, and 31 percent never married; Zambia, 26 percent were ever married, and 31 percent never married. Third, condom use among teen women in their last sexual encounter was quite varied, 12 percent in Kenya, four percent in Mali, and 20 percent in Zambia. Further, whereas 90 percent of young women in Kenya and Zambia have had some formal education, only 25 percent have some formal education. Education plays an important role

in imparting knowledge and skills to young people. These factors necessitate an examination of the association between poverty and the transition to premarital sexual activity in the selected countries.

Background

Since the inception of the concept of culture of poverty (see Roach and Gursslin 1967 for a review), social scientists have considered poverty as an essential factor of human behavior, especially when such behavior is different from mainstream culture. With the emergence of HIV/AIDS in the last decades, and borrowing from various economic assumptions of exchange and rational choice, social scientists have argued that poverty and sexuality, especially premarital sexual behavior of female adolescents are connected. The general discourse is that poorer women are more sexually permissive than richer ones (Djamba 2003).

This poverty-sexuality connection is even more theoretically appealing in explanations of STIs and HIV/AIDS transmission in poorer parts of the world. However, empirical studies are still sketchy and sometimes controversial. In African context, the main argument is that young women initiate premarital sex because of the existence of strong gender inequalities in the distribution of resources (Philipson and Posner 1995; Weiss 1993). To gain access to these resources, poor women have to exchange sexual services with prosperous men (Barker and Rich, 1992). This argument was first empirically tested in 1997 on a study that used the 1992 Zambia Demographic and Health Survey –ZDHS (Djamba 1997a). That study has become an icon on the World Bank's PovertyNet web page[1], primarily because its findings suggest a positive association between household

poverty and premarital sexual behavior. Yet, currently there are some indications that the widely held belief that poverty leads to sexual permissiveness could not be applicable to all societies.

This study has three objectives. First, it re-evaluates the poverty – sexual behavior association in Zambia ten years later by comparing the results from the 1992 ZDHS to the 2001-2002 ZDHS analyzed here. In doing so, it answers the question of whether household poverty is still associated with premarital sexual behavior in Zambia as it was ten years ago. Second, it compares the effects of current household poverty on premarital sexual behavior in Zambia to the situations of two other African countries, Kenya, and Mali using Demographic and Health Survey data collected during the same period. The goal here is to determine whether female adolescents in these three countries have the same sexual transition experience if they had the same level of poverty. Third, the paper also examines the paths followed by contemporary African female adolescents in terms of transition to premarital sex and marriage.

Theoretical Perspectives

Sexual behavior has been studied using different theoretical perspectives. However, a review of explanatory studies conducted in Africa suggests that the majority of research considers poverty and modernization as the key determinant factors of adolescent sexual behavior (Djamba 1997b; 2004). This consideration led to the construction of the two conceptual models explained below.

Financial capital model

The poverty explanation has its roots in the culture of poverty school, which holds that the poor have distinctive values and norms that condition their behaviors and actions. This explanation has been historically used in the United States under the umbrella of social stratification (Gordon 1947; Yinger 1960), and recently, it has been referred to as an economic explanation, rational adaptation, and financial capital (Djamba 1997a; 2003).

The key assumption of the financial capital model argues that because of the prevailing gender imbalances in wealth, poor women will exchange sexual favors for money and other socio-economic benefits that are traditionally held by men (Meekers 1994). This view received some support mostly from exploratory qualitative studies conducted decades ago in Kenya and Nigeria (Barker and Rich 1992), in which the term "sugar daddies" became the cornerstone concept. A limited number of quantitative research support this argument. For example, the premarital research based on the 1992 Zambia DHS, which has been on the World Bank's online poverty network site for nearly one decade (Djamba 1997a).

However, as more data have become available in recent years, researchers using these data are observing different patterns of association between poverty and adolescent sexual behavior. For example, a study conducted in 1998 on random samples of 12-19 year-old boys and girls in Cameron showed that poverty, thus positively associated with sexual behavior was not a consistent predictor of sexual initiation or safer sex (Rwenge 2004). Perhaps, more interesting is another quantitative study among female adolescents in the African city of Kinshasa in the Democratic Republic of the Congo (DRC), which showed that poverty did actually reduce the risk of premarital sexual behavior (Djamba 2003). This

finding, which may appear somewhat surprising to most Western scholars, is indeed correct

and significant in some African contexts. Similar findings have been echoed in the field of

HIV/AIDS, where unlike what most people think, the richer are at higher risk of HIV/AIDS

infection (Donnelly 2006). For instance, when asked directly about their motivations for

first sexual experience, the majority of African adolescents do not cite economic factors as

their main reason for engaging in sex (Gueye, Castle, and Konaté 2004). Thus, this study

evaluates the validity of the financial capital model in explaining the transition to premarital

sexual activity in Kenya, Mali, and Zambia.

Modernization model

Another important hypothesis that emerges from sexual behavior research in Africa

is modernization or social disorganization (Pillai and Barton 2004). According to this

model, sexual permissiveness is associated with the diffusion and adoption of Western

values of individualism and the avid pursuit of pleasure. Some of the factors usually cited

as correlates of this breakdown in sexual restrain are education (Meekers 1994),

urbanization (Le Blanc, Meintel, and Piché 1991), and mass media (Görgen, Maier, and

Diesfeld 1993).

Accordingly, education is said to provide opportunity for meeting and mating, but

also the knowledge to challenge traditional systems of social control. Yet, empirical

evidence from studies based on Demographic Health Survey data suggests that the

educational effect is not all linear and not consistently discernible across African countries

(Gupta and Mahy 2004). Also, Djamba (1997a) study based on the 1992 Zambia DHS

showed that the educational effect on female adolescents' transition to premarital sex was

insignificant, when other socio-demographic factors were included in the logistic regression model.

Similarly, there are inconsistent patterns of urbanization on female adolescents' transition to premarital sexual activity. Whereas some studies found no significant differences in the likelihood of having premarital sex (Djamba 1997a), and even the risk of having sex before age 17 (Addai 2004), others noted significant but different associations in other African countries (Gupta and Mahy 2004). It is worth mentioning that (Gupta and Mahy 2004) study's us of a methodological approach in which various interaction effects were forced between education and time of the surveys, and between urban residence and time of the surveys, may account for some of the inconsistencies reported in that cross-section comparative research.

Media exposure has been explained as one of the modernizing elements in these societies. The central thesis is that exposure to radio, newspapers, and television creates the state of "free spirit" and lack of decency, which promote the erosion of social control. As some authors noted "[…] whole families sit and watch love stories showing people fondling and caressing in the nude, and even having intercourse" (Görgen, Maier, and Diesfeld 1993, 289). Yet, the few studies that included the media exposure variables showed the lack of association, or significant negative effects (Djamba, 1997a; Gupta and Mahy 2004).

This study examines how these three variables – education, urbanization, and exposure to mass media – affect the likelihood of having premarital sexual activity in Kenya, Mali, and Zambia. Using the same conceptual framework, it will be possible to see whether the effects of these three variables have changed in Zambia where a similar study

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was conducted 10 years ago. In addition to re-examining the role of the financial capital (poverty) and modernization on the transition to premarital sexual activity, this study also investigates the possibility of selective effect of premarital sexual experience on marriage. More specifically, we test the assumption that premarital sexual activity is a precursor of marriage in these three countries.

Data and Methods

This study is based on data collected in Kenya, Mali, and Zambia through the Demographic and Health Survey (DHS), a program of the Measures DHS+, conducted by ORC Macro, a US based research firm, in collaboration with host country research institutions. DHS are household-based probability samples of male and female respondents of reproductive age interviewed by pre-trained survey personnel. The interviews are conducted face-to-face, with consent of the survey participants. Details about the sampling techniques and survey methodology are available elsewhere (Central Statistical Office [Zambia], Central Board of Health [Zambia], and ORC Macro 2003; Cellule de Planification et de la Statistique du Ministère de la Santé (CPS/MS), Direction Nationale de la Statistique et de l'Informatique (DNSI) et ORC Macro 2002; Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro 2004).

Consistent with the 1997 study (Djamba 1997a), the present analysis was limited to female respondents aged between 15 and 19 years. The dependent variable is premarital sex, defined as having had sexual intercourse before marriage. Premarital sex was constructed from questions on age at first sexual intercourse and age at marriage. Respondents were divided in two categories: (1) "no premarital sex," for virgins and those

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who had their first sex in marriage, and (2) "had premarital sex," which includes those who were never married but had sex, as well as those who were married but whose first sexual intercourse occurred before marriage.

Since this study focuses primarily on the influence of poverty, the main predictor is financial capital. The latter represents the level of household wealth, which was computed as an index of the sum of household amenities: ownership of car, motorcycle, bicycle, refrigerator, electricity, flush toilet, and a home with cemented floor. The ownership of a car/truck counted for 3, motorcycle counted 2, all other amenities counted as 1. The resulting index is the sum of scores on these seven items with the maximum score of 10 representing the highest level of wealth, and a minimum of zero representing the lowest level of wealth. This index was further divided into three categories: low (0-1), middle (2-3), and higher (4-10).

The variables of modernization were conceptualized as follows. First, media exposure was measured through an index showing the level of media exposure; with "low" meaning that the respondent did not listen to the radio, did not watch television, and did not read newspapers; "middle" means the respondent did listen to the radio and/or read newspapers, but did not watch television; "high" means the respondent watched television. Education was measured using the following three categories that indicate the level of schooling attained by the respondent: None, Primary, and Secondary and higher. The urban variable was measured by the respondent's type of place of residence (urban/rural).

Other control variables analyzed in this study are age and religion. Age is measured as a continuous variable, whereas religion has three categories: Catholic, Protestant (for

Kenya and Zambia) and Muslim (for Mali), and other or none. Marital status was also included in the analysis to account for its correlation with premarital sexual behavior.

Results

The socio-demographic characteristics of the samples are given in Table 1. An important pattern that emerges from this table is the lower levels of financial capital. Based on the household amenity measure used in this study, more than half of adolescents interviewed in each of the three countries lived in households with lower financial capital. Only 11 to 22 percent lived in households with higher financial capital. These countries are also predominantly rural, with 63 to 71 percent of respondents living in rural areas.

There are substantial differences in the levels of education, marital status, religious affiliation, and media exposure. Interestingly, although Malian adolescents had the lowest level of education and were the most likely to be married, they scored higher on financial capital and media exposure scales. This pattern suggests that marriage is probably associated with socio-economic mobility for Malian women.

Table 1 about here

The key question is: How do these socio-demographic characteristics affect the transition to premarital sex in these countries? The answer to that question comes from the data in Tables 2, 3, and 4, discussed below. Table 2 shows the bivariate relations between premarital sex and the socio-demographic variables. Overall, the percentage of respondents who had premarital sex, regardless of their marital status, was 35 in Kenya, 40 in Mali, and 50 in Zambia. This pattern remains constant even when marital status is taken into account. For example, among never married, the percentage of adolescents who had premarital sex

range between 27 in Kenya to 42 in Zambia. However, married respondents were significantly more likely to have had premarital sex than were the never married adolescents.

On examining Zambia, where a similar study was conducted ten years ago, current data show a decrease of about 6 percent in the percentage of never married adolescents aged between 15 and 19 years, who had premarital sex. According to the 1992 data from Zambia, 44 percent of never married adolescents had premarital sex (Djamba 1997a); compared to 42 percent in this study that uses the 2001-2002 ZDHS data set. This decline in premarital sex among never married can be attributed to a variety of factors, including awareness of HIV infection.

Other variables that show significant effects in all three countries are age and media exposure. Data in Table 2 show clearly that the risk of engaging in premarital sex increases significantly with age. In contrast, the effect of media is significant but not all linear. For example, the highest risk of premarital sex is found among respondents with a middle score on media exposure scale in Kenya (41%) and Zambia (55%), whereas the highest value is among those with the highest media exposure in Mali (42%). Education is statistically significant only in Kenya, though the association is not linear. The highest risk of premarital sex is observed among respondents with primary education. Religion appears significant only in Kenya, where Catholics lead with 40 percent, followed by Protestants (38%) and those in other denominations and those without any religious affiliation (16%).

The type of place of residence was significant only in Mali, where urban residents out score rural residents in the percentage of premarital sex (43 versus 38). Finally the

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effect of financial capital is significant only in Zambia. Like in the 1992 data (Djamba, 1997a), the data in the current study (Table 2) show a significant decrease in the risk of premarital sex at higher level of financial capital. In other words, this finding supports the view that poverty is positively associated with the transition to sexual activity before marriage. How much of these effects are due to differences in socio-demographic characteristics? This question is answered through the analysis of premarital sex in multivariate models.

Table 2 about here

In Table 3, because the dependent variable is dichotomous (have had premarital sex coded 1 versus have no premarital sex coded 0), we ran two series of logistic regression models predicting the likelihood of having had premarital sex, net of the effects of the socio-demographic characteristics discussed above. The first series of models includes all respondents and controls for marital status. The results show that financial capital significantly reduces the risk of premarital sex only in Zambia. In contrast, compared to those who were ever married, those who were single (never married) were significantly less likely to have premarital sex in all three countries. Similarly, the effect of age was positive and significant in all countries: compared to those who were 15 years at the time of the survey, all older respondents were more likely to have had premarital sex. Like age, education was significantly associated with premarital sex in all three countries. However, the risk was highest among those with primary education, followed by those with secondary education or higher.

Religion had a significant effect only in Kenya, where those outside the Catholic and Protestant groups were significantly less likely to have had premarital sex. On the other hand, media exposure was significantly associated with premarital sex in Kenya and Mali, where more exposure led to higher risk of premarital sex. There was no significant effect of place of residence on premarital sex in all three countries.

Table 3 about here

The second series of models includes only never married adolescents. The results are presented in Table 4. The effects of age, religion, media exposure and financial capital are similar to those in Table 3. Therefore, we will focus on relationships that are markedly different from those observed in Table 3. Data in Table 4 show that adolescents who had primary education were more likely to have had premarital sex than those in the other two educational categories. However, this educational effect was statistically significant only in Kenya and Mali. As for place of residence, rural residents were less likely to have had premarital sex in all three countries, but the association was only significant in Mali. For never married Malian adolescents, living in rural areas significantly reduces the risk of premarital sex. Here again, as shown in Table 3, financial capital is significantly associated with premarital sex only among Zambian adolescents. This result is consistent with findings from the 1992 ZDHS data, which confirms the thesis that poverty is positively associated with sexual permissiveness in Zambia (Djamba 1997a).

Discussions and Conclusion

The transition to premarital sex is one of the key factors of sexual health partly because of its association with the number of sex partners and risk of sexually transmitted

infections, including HIV/AIDS (Bongaarts 2006). In the past decades, scholars have

argued that poverty is an essential factor of sexual permissiveness, assuming that poor

women will exchange sexual favors for money and other goods that are most owned by men

(Djamba 1997b). This paper revisited this assumption by evaluating the influence of

poverty on the transition to premarital sex in Kenya, Mali, and Zambia. The results are

consistent with the poverty hypothesis only in Zambia.

The results of this study suggest that adolescent females in Zambia seem to be lured

by wealth. Both the present results and that of a similar study conducted 10 years ago

(Djamba 1997a) show that adolescents in poor families were more likely to have sex before

marriage than those in wealthier families. According to the present analysis, this pattern

remains significant even after controlling for marital status. The lack of significant effect in

Kenya and Mali suggests that African adolescents do not follow the same sexual path, and

in fact, sexual behavior among adolescents is quite peculiar to each country. In other

words, researchers are cautioned against over generalization of sexual models in the African

context. In fact, currently there is evidence indicating that in some African societies,

poverty is negatively associated with premarital sex (Djamba 2003)[2]. The study showed that

adolescents in richer families were significantly more likely to engage in sexual activity

before marriage than their counterparts in poorer households

Interestingly, for teens in all three countries, and net of the effects of all other

variables, being married is significantly associated with higher risk of premarital sex. This

finding suggest that African model of courtship may include "trial sex". This result is

consistent with that of a study conducted in the African city of Kinshasa, which showed that

"women who had initiated sexual activity before marriage were more likely to enter into marriage than those who had not" (Tambashe and Shapiro 1991: 37). However, without information on whether such premarital sexual relations were with the current husbands, it is impossible to provide adequate interpretation.

This study also showed that the level of premarital sex among never married Zambian female adolescents decreased by nearly 6 percent in the last 10 years. Although the causes of such a decline are not well known, it is possible that HIV/AIDS awareness played some role. Overall, the findings from this study show that neither poverty nor modernization models can be generalized in explaining premarital sexual behavior in the African context. Whereas the poverty hypothesis is supported in Zambia, the social disorganization hypothesis is only partially and differentially supported by current data.

In summary, this paper shows that African adolescents do not follow the same path to sexual activity. More important, the thesis that the poor is more sexual should not be generalized to all societies. As shown in the logistic regression models used in this paper, the transition to sexual activity has both biological components (e.g., age) and a variety of socio-cultural elements (e.g., religion, education, and media exposure) that go beyond the classic economic models. As Alex Opio said at the last US President's Emergency Plan for AIDS Relief meeting in South Africa in June 2006, people are so used to the idea that the poverty is positively associated with HIV that they do not want to hear anything different (Donnelly 2006). This is partly because accepting new evidence means admitting that many current programs of sexual health are focusing on the wrong targets. We need to rethink the models of sexual behavior, sexual practices, and HIV prevention that correspond to the

actual situations in the field, if we are to significantly improve the sexual health of our populations, especially young African women.

Notes:

[1]The 1997 Zambia study on the World Bank Poverty Net website
http://poverty2.forumone.com/library/view/6053/

[2]See the following link for an unpublished empirical study which disapproves the financial capital hypothesis.
http://paa2004.princeton.edu/abstractViewer.asp?submissionId=40386

References

Addai, I. 2004. Ethnicity and sexual behavior in Ghana, in Y.K. Djamba (ed.), *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa*, The Edwin Mellen Press, Lewiston, NY, pp. 189-221.

Barker, G.K. and S. Rich. 1992. Influences on adolescent sexuality in Nigeria and Kenya: findings from recent focus-group discussions. *Studies in Family Planning* 23: 199-210.

Bongaarts, J. 2006. Late marriage and HIV epidemic in sub-Saharan Africa. Policy Research
Division Working Paper No. 216. Population Council, New York.

Cellule de Planification et de la Statistique du Ministère de la Santé (CPS/MS), Direction Nationale de la Statistique et de l'Informatique (DNSI) et ORC Macro, 2002. *Enquête Démographique et de Santé au Mali 2001,* CPS/DNSI et ORC Macro, Calverton, Maryland.

Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro. 2004. *Kenya Demographic and Health Survey 2003,* CBS, MOH, and ORC Macro, Calverton, Maryland.

Central Statistical Office [Zambia], Central Board of Health [Zambia], and ORC Macro,

2003. *Zambia Demographic and Health Survey 2001-2002,* Central Statistical Office, Central Board of Health, and ORC Macro, Calverton, Maryland.

Djamba, Y.K. 1997a. Financial capital and premarital sexual activity in Africa: the case of Zambia. *Population Research and Policy Review* 16: 243-57.

Djamba, Y.K. 1997b. Theoretical perspectives on female sexual behaviour in Africa: a review and conceptual model. *African Journal of Reproductive Health* 1: 67-78.

Djamba, Y.K. 2003. Social capital and premarital sexual activity in Africa: the case of Kinshasa, Democratic Republic of Congo. *Archives of Sexual Behavior* 32: 327-37.

Djamba, Y.K. (ed.) 2004. *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa*, The Edwin Mellen Press, Lewiston, NY.

Donnelly, J. 2006. HIV hits Africa's rich hardest, study says analysis disputes long-held beliefs. *The Boston Globe*, June 14. Retrieved on 9 September 2006 from www.boston.com.

Gordon, M. 1947. The concept of the sub-culture and its application. *Social Forces* 26, 40-43.

Görgen, R., B. Maier, and H.J. Diesfeld. 1993. Problems related to schoolgirl pregnancies in Burkina Faso. *Studies in Family Planning* 24: 283-94.

Gueye, M, S. Castle, and M.K. Konaté. 2004. Timing of first intercourse among Malian adolescents: implications for contraceptive use, in Y. K. Djamba (ed.), *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa*, The Edwin Mellen Press, Lewiston, NY, pp. 123-47.

Gupta, N. and M. Mahy. 2004. Sexual initiation among adolescent girls and boys: trends and differentials in sub-Saharan Africa, in Y. K. Djamba (ed.), *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa,* The Edwin Mellen Press, Lewiston, NY, pp. 255-86.

Le Blanc, M.N., D. Meintel, and V. Piché. 1991. The African sexual system: comment on Caldwell et al. *Population and Development Review* 17: 497-505.

Meekers, D. 1994. Sexual initiation and premarital childbearing in sub-Saharan Africa.

Population Studies 48: 47-64.

Philipson, T. and R.A. Posner. 1995. The microeconomics of the AIDS epidemic in Africa. *Population and Development Review* 21: 835-848.

Pillai, V.K. and T.R. Barton. 2004. Modernization and teenage sexual activity in Zambia: a multinomial logit model, in Y. K. Djamba (ed.), *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa*, The Edwin Mellen Press, Lewiston, NY, pp. 165-186.

Roach, J.L. and O.R. Gursslin. 1967. An evaluation of the concept of poverty. *Social Forces* 45, 383-92.

Rwenge, M. 2004. Sexual risk behaviors among young people in Bamenda, Cameroon, in Y.

K. Djamba (ed.), *Sexual Behavior of Adolescents in Contemporary sub-Saharan Africa*, The Edwin Mellen Press, Lewiston, NY, pp. 9-31.

Tambashe, O. and D. Shapiro. 1991. Employment, Education, and Fertility Behavior: Evidence from Kinshasa. Study Report prepared for the Rockefeller Foundation. Université de Kinshasa, Kinshasa.

Weiss, B. 1993. Buying her grave: money, movement and AIDS in North-West Tanzania. *Africa* 63: 19-35.

Yinger, M. 1960. Contraculture and subculture. *American Sociological Review* 25: 625-35.

Table 1. Percentage Distributions of the Study Samples: Female Adolescents in Kenya
(2003), Mali (2001), and Zambia (2001-2002)

Characteristics	Kenya	Mali	Zambia
Age			
15	18.8	18.8	20.6
16	19.4	20.8	18.1
17	19.7	17.3	18.0
18	21.1	28.0	22.5
19	21.0	15.0	20.9
Level of education			
No education	10.3	73.0	8.7
Primary	66.1	13.2	59.4
Secondary+	23.6	13.8	31.8
Marital status			
Never married	79.2	54.0	74.8
Ever married	20.8	46.0	25.2
Religious affiliation			
Catholic	26.1	---	23.7
Protestant (Muslim for Mali)	59.3	92.0	74.8
Other or none	14.6	8.0	1.5
Type of place of residence			
Urban	29.0	37.4	35.4
Rural	71.0	62.6	64.6
Media exposure			
Lower	14.6	19.5	37.4
Middle	46.7	32.2	33.2
Higher	38.6	48.3	29.4
Financial capital			
Lower	69.2	54.6	70.1
Middle	20.2	23.6	15.9
Higher	10.6	21.8	14.0
Total percentage	100.0	100.0	100.0
Total number of cases	1,820	2,542	1,806

Table 2. Percentage of Female Adolescents Who Have Had Premarital Sexual Experience by Socio-Demographic Characteristics: Kenya (2003), Mali (2001), and Zambia (2001-2002)

Characteristics	Kenya	Mali	Zambia
All	35.4	39.8	49.6
Marital status			
Never married	26.7***	29.3***	41.8***
Ever married	68.7	47.4	68.8
Age			
15	14.0***	20.8***	23.2***
16	21.6	32.1	40.4
17	33.2	42.5	53.1
18	49.0	47.3	64.8
19	55.8	57.2	64.1
Level of education			
No education	19.4***	38.9	45.2
Primary	41.2	42.2	50.8
Secondary+	26.3	42.5	48.5
Religious affiliation			
Catholic	39.5***	---	46.7
Protestant (Muslim for Mali)	38.4	40.0	50.3
Other or none	16.2	36.9	55.6
Type of place of residence			
Urban	38.1	42.8*	48.7
Rural	34.3	38.0	50.1
Media exposure			
Lower	20.4***	32.4***	48.9**
Middle	41.0	41.0	54.5
Higher	34.5	42.0	45.0
Financial capital			
Lower	34.7	38.5	52.5***
Middle	35.9	44.3	50.2
Higher	30.1	39.7	33.8
Number cases	1,818	2,533	1,800

Notes: Levels of significance for the corresponding Chi-Square values are:
    * p ≤ 0.05   ** p ≤ 0.01   *** p ≤ 0.001

Table 3. Odds of Having Premarital Sexual Experience: All Female Adolescents in Kenya
(2003), Mali (2001), and Zambia (2001-2002)

Characteristics	Kenya	Mali	Zambia
Marital status			
Never married	0.150***	0.539***	0.526***
Ever married	1.000	1.000	1.000
Age			
15	1.000	1.000	1.000
16	1.706*	1.616**	2.234***
17	2.975***	2.819***	3.293***
18	4.997***	3.075***	5.442***
19	6.617***	4.270***	4.575***
Level of education			
No education	1.000	1.000	1.000
Primary	3.052***	1.354*	1.872**
Secondary+	1.293	1.191	1.729*
Religious affiliation			
Catholic	1.217	---	0.890
Protestant (Muslim for Mali)	1.000	1.000	1.000
Other or none	0.221***	0.978	1.460
Type of place of residence			
Urban	1.000	1.000	1.000
Rural	0.785	0.801	0.787
Media exposure			
Lower	1.000	1.000	1.000
Middle	2.165***	1.278	1.212
Higher	1.996**	1.467**	1.100
Financial capital			
Lower	1.000	1.000	1.000
Middle	1.108	1.223	0.776
Higher	0.857	0.896	0.425*
Constant	0.362***	0.657***	0.879
Model Chi-Square	478.440***	215.803***	239.706***
Number of cases	1,716	2,276	1,652

$* \ p \leq 0.05$ $** \ p \leq 0.01$ $*** \ p \leq 0.001$

Table 4. Odds of Having Premarital Sexual Experience: Never Married Female Adolescents
in Kenya (2003), Mali (2001), and Zambia (2001-2002)

Characteristics	Kenya	Mali	Zambia
Age			
15	1.000	1.000	1.000
16	1.835*	1.718**	2.424***
17	3.373***	3.509***	4.123***
18	6.082***	5.009***	7.216***
19	9.093***	9.920***	5.930***
Level of education			
No education	1.000	1.000	1.000
Primary	2.490*	1.623**	1.407
Secondary+	0.980	1.136	1.114
Religious affiliation			
Catholic	1.321	---	0.882
Protestant (Muslim for Mali)	1.000	1.000	1.000
Other or none	0.423**	0.991	0.993
Type of place of residence			
Urban	1.000	1.000	1.000
Rural	0.850	0.671*	0.893
Media exposure			
Lower	1.000	1.000	1.000
Middle	1.703*	1.554	1.212
Higher	1.633	1.781*	1.154
Financial capital			
Lower	1.000	1.000	1.000
Middle	1.199	1.029	0.750
Higher	0.944	0.734	0.406***
Constant	0.189***	0.492***	0.603*
Model Chi-Square	188.066***	158.325***	159.178***
Number of cases	1,369	1,230	1,239

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$