

# The role of parental environment on age at sexual debut and risk profile of first sexual relationships in rural southwestern Uganda

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## Background

There is increasing recognition of role that parents and other primary caregivers play in shaping the sexual health of their children. However, most research evidence comes from Northern countries (Miller et al., 2001) and it is unclear how culturally-specific this is (WHO, 2007). In Africa most data on parent-child relationships are qualitative, and there is very little quantitative evidence to show how parent-child relationships influence sexual health. This study of young rural Ugandans allows us to analyse the influence of family structure and parental strictness on age at sexual debut.

## Methods

This longitudinal study was set in an ongoing population study cohort in 25 rural villages with a population of over 18,000 located in rural southwestern Uganda. Every year the population is censused and consenting residents aged 13 and above are asked to answer a survey questionnaire. In the 2004/5 round, a special survey module was designed for youth aged 13 to 18 who reported never having sex in the main adult medical questionnaire and administered by 6 youth interviewers aged 18 to 22. Respondents were asked questions about aspirations, social and family context, communication patterns, and HIV/AIDS knowledge and attitudes.

A second youth survey module was conducted two years later in the 2006/7 round, interviewing all resident youth aged 13 to 20 regardless of sexual experience. As in the first round, youth interviewers were specially hired to conduct the fieldwork. A total of 2023 youth interviews were conducted from 3705 residents aged 13 to 20 (54%). A total of 695 of the original sample were reinterviewed (47%). Of these, 138 (20%) reported having had first sex since the baseline round. (see Table 1)

**Table 1: Numbers Eligible, answered Youth Module, Re-interviewed and Started sex, Transition to first sex study**

Age at R16	Eligible	Completed Youth module		Age at R18	Reinterviewed		Reported first sex since baseline	
		No.	%		No.	%	No.	%
13	318	308	96.9	15	146	34.8	18	12.3
14	559	343	61.4	16	219	58.9	32	14.6
15	601	354	58.9	17	151	50.2	30	19.9
16	608	315	51.8	18	89	44.5	22	24.7
17	504	250	49.6	19	64	52.9	27	42.2
18	472	187	39.6	20	26	36.6	9	34.6
19	405	159	39.3	--	--	--	--	--
20	238	107	45.0	--	--	--	--	--
<b>Total</b>	<b>3705</b>	<b>2023</b>	<b>54.6</b>		<b>695</b>	<b>46.8</b>	<b>138</b>	<b>19.9</b>

## Results

Bivariate analyses for the final round alone suggested early sexual activity was strongly associated with not living with one's mother, for females not living with one's father, and not having a close relationship (translated as 'speaking freely') with either parent. Parental leniency was also strongly related to early sexual debut, in terms of being allowed to work, go to shops, go to play, sleep away, party and have a boy/girlfriend.

**Table 2: Unadjusted proportional Cox hazard ratios for age at sexual debut by selected parent characteristics (follow-up round only)**

Variable		Males			Females		
		HR	95% CI	P-value	HR	95% CI	P-value
Mother Alive	Yes	1		0.789	1		0.923
	No	1.054	(0.717,1.552)		1.021	(0.675,1.543)	
Live with her	Yes	1		0.034	1		0.004
	No	1.431	(1.033,1.982)		1.639	(1.172,2.293)	
speak freely with her	Yes	1		0.001	1		0.081
	No	1.719	(1.248,2.368)		1.403	(0.968,2.034)	
Father Alive	Yes	1		0.064	1		0.563
	No	1.341	(0.988,1.819)		1.109	(0.783,1.571)	
Live with him	Yes	1		0.072	1		0.001
	No	1.397	(0.974,2.003)		1.847	(1.286,2.652)	
speak freely with her	Yes	1		<0.001	1		0.862
	No	2.078	(1.454,2.970)		1.033	(0.717,1.489)	
Parents still married	Yes	1		0.599	1		0.192
	No	1.128	(0.723,1.759)		1.326	(0.875,2.010)	
Live same house with who take care of you	Yes	1		0.069	1		0.401
	No	1.573	(0.991,2.497)		1.352	(0.689,2.652)	
Strictness of guardians	Yes	1		0.001	1		0.001
	No	1.729	(1.257,2.377)		1.707	(1.249,2.333)	
allowed to work	Yes	1		<0.001	1		0.021
	No	0.279	(0.123,0.632)		0.666	(0.465,0.952)	
allowed to sleep away	Yes	1		0.093	1		0.017
	No	0.728	(0.497,1.066)		0.651	(0.452,0.937)	
allowed to go to shops	Yes	1		0.005	1		0.002
	No	0.429	(0.219,0.843)		0.535	(0.351,0.816)	
allowed to go play	Yes	1		0.002	1		0.008
	No	0.366	(0.171,0.781)		0.634	(0.447,0.900)	
allowed to party	Yes	1		<0.001	1		<0.001
	No	0.423	(0.307,0.581)		0.387	(0.283,0.529)	
allowed to have a boy/girlfriend	Yes	1		<0.001	1		<0.001
	No	0.367	(0.257,0.525)		0.437	(0.319,0.599)	
<b>N</b>		<b>1147</b>			<b>876</b>		

Proportional cox hazard models were conducted, predicting waiting time to sexual debut as a function of parental leniency/strictness (modelled as a scale variable from 0 to 6 for each item allowed), parental relationships, and AIDS awareness in the baseline round while controlling for current age. Parental leniency continued to be a significant predictor of earlier sexual debut (HR = 1.21, p=.004) controlling for current age and parental relationships. Among the latter, only closeness to father (HR = .547, p=.022) was significantly associated with delayed sexual debut, while closeness to mother proved inconsequential. Feeling anything less than greatly concerned about HIV/AIDS was non-significantly associated with earlier sexual debut (HR = 1.36, p=.173)

In the second part of the analysis, we will investigate whether and to what extent parental context are associated with relationship choices that may lead to sexual health risk. These will include type and duration of first relationship, prevalence of prior non-sexual courting relationships, degree of partner communication over health issues, ever use of condoms and consistent use of condoms. In this analysis, we test the hypothesis that overprotective home environments may delay sexual debut, but may disadvantage youth in terms of negotiation skills that may be needed

### **Conclusion**

This is one of the first quantitative studies in east Africa to examine the relationships between family structure and parental strictness/leniency on young people's sexual behaviour. The results should inform intervention development.

[ABSTRACT WILL CONTINUE TO BE REVISED OVER THE NEXT SEVERAL WEEKS]

Miller B, Benson B, Galbraith K. Family Relationships and Adolescent Pregnancy Risk: A Research Synthesis. *Developmental Review* 2001;21:1-38.

WHO (2007) *Helping parents in developing countries improve adolescents' health*. WHO, Geneva.

### Short abstract

We investigate the role of parental environment on transition to first sex and associated sexual health risks in rural southwestern Uganda. During the 2004/5 annual serosurvey round of a population cohort, 1369 youth aged 13 to 18 who reported never having sex in the main survey (est 60% of the census population) were interviewed by youth interviewers. A second youth module two years later interviewed 2023 youth aged 13 to 20 regardless of sexual activity. 695 baseline respondents (46%) were reinterviewed, of whom 135 (20%) had reported first sex. In cox hazard regressions, parental leniency was significantly associated with earlier sexual debut, while close relationships to fathers were significantly associated with later sexual debut controlling for age. Further influence

of parental environment on risk associated with partnership type and timing will be investigated. Conclusion: Parents should be informed on ways to protect children's sexual health.