Absent Fathers and their Children's Reproductive Decisions and Outcomes in South Africa: Are the Consequences of Paternal Orphanhood Different than "Abandonment?"

Lloyd D. Grieger, Ph.D.
Yale University

Abstract

A large body of research links parental absence to negative sexual/reproductive outcomes such as early adolescent sexual debut, teen childbearing, non-marital fertility, and inconsistent contraceptive use; however, few studies focus specifically on fathers, and even fewer examine whether the effects of paternal orphanhood are more severe than "abandonment." I use retrospective and prospective data from four waves of the Cape Area Panel Study, a longitudinal study that followed youth aged 14-22 in Cape Town, South Africa, to examine the extent to which paternal "abandonment" and orphanhood are associated with negative reproductive outcomes in children throughout the period of young adulthood. Because of the large variation in reasons for father absence (including the large number of deceased fathers) and because of the panel structure of the data, this research has the potential to clarify the role of the father in children's lives with regard to sexual and reproductive behavior.

Background

Few studies distinguish between father absence due to the death of the father compared to his living elsewhere, in part because parental death is relatively uncommon in more developed social contexts. A few studies suggest that orphans are at heightened risk of depression, are more likely to leave school, and are more likely to engage in behaviors that put them at higher risk of early sexual debut and other negative sexual and reproductive outcomes (Foster and Williamson 2000; Guma and Hendra 2004; Hutton et al 2004; Makame et al 2002; Rau 2003; Williams and Latkin 2005) and that they initiate sex earlier than non-orphans (Forster and Williamson 2000; Thurman et al 2006), but only one study (limited to Zimbabwe) distinguishes between maternal and paternal orphanhood (Gregson et al 2005).

Research on the effects of orphanood is limited in developed contexts because of relatively low prevalence; however, in South Africa, paternal orphanhood is relatively common, especially in non-white subpopulations (Brookes, Shisana and Richter 2004; Thurman et al 2006; UNAIDS, UNICEF and USAID 2004). Because of the extremely high prevalence rate of HIV/AIDS, South

African youth are at a particularly acute risk for contracting the disease. Thus, understanding the factors known to contribute to negative sexual behaviors (like contraceptive use consistency and early sexual debut), is especially important. Secondly, examining the affects of paternal "abandonment" versus orphanhood on fertility timing and completion has the potential to clarify long-running debates about the role of fathers (economic vs. supervisory) in shaping their children's reproductive choices.

Data and Methods

In this paper, I use retrospective and prospective data from four waves of the Cape Area Panel Study (CAPS), a longitudinal study that followed 4,752 children aged 14-22 in Cape Town, South Africa from 2002 until 2006, to examine whether living-father absence and paternal orphanhood are associated with children's early sexual debut. The CAPS data are ideal for this analysis because they include detailed retrospective and prospective information about the timing of sexual debut, contraceptive use, fertility timing, marital/relationship status, parental absences from the home, and whether these absences were due to parental death or not.

The Cape Area Panel Study

The Cape Area Panel Study (CAPS) is a longitudinal study of young adults living in metropolitan Cape Town, South Africa. The first wave collected information from 4,752 young people aged 14-22 and was conducted during the last half of 2002. About one-third of the sample was interviewed in 2003 for wave 2a, and the remaining two-thirds were interviewed in 2004 as a part of wave 2b. The full sample was re-interviewed in 2005 for wave 3, and again in 2006 for wave 4. The same core questions on household composition, parental characteristics, education, work, sexual behavior, and childbearing are asked in waves 1, 3, and 4.

Measures

The first key independent variable for this analysis broadly measures father absence in the household. To construct this measure, I utilize retrospective information on whether or not a respondent co-resided with his or her biological father from the wave 1 calendar, which documents the presence or absence of a biological father from respondents' households for every year of their life prior to the wave 1 interview. At subsequent waves 3 and 4, respondents were asked whether their biological fathers were present in their households. Information about biological mother and father presence for the period covered by wave 2 was taken from the wave 2 household roster. From this information, a person-year level variable is created, indicating father presence for every year of the respondent's life (1=father present this year; 0=father absent this year).

The second key independent variable is a four-category person-year level variable that measures whether or not a father is present or absent from the household in a given year, and whether the absence is due to parental death or not (0=father present; 1=father absent and alive; 2=father absent and dead; 3=father absent, but it is unknown if he is alive). Information used to construct this variable is taken from waves 1, 3, and 4. In each wave, respondents were asked whether their father was a member of the household and, if not, whether the father was deceased. Respondents with missing data in one wave had values imputed from subsequent waves. In cases of disagreement across waves, reports from earlier waves were favored. Several time-invariant and time-varying measures are constructed for inclusion as controls in the analysis.

Some respondents experienced a father absence during the panel observation period. These respondents will be used to test hypotheses regarding the specific ways in which father's absence contributes to negative outcomes (i.e. changes in supervision, changes in household resources, emotional shocks of losing a father either to "abandonment" or orphanhood).

The key dependent variables for this analysis will include a variety of measures relating to the sexual and reproductive choices of respondents during young adulthood. These measures include timing of sexual debut, contraception use (at first and most recent sexual encounter), timing of first birth, relationship with children's other parent, and completed fertility by age 18.

Preliminary Results (for early sexual debut outcome)

Currently, I have run analyses on the effect of father absence on early sexual debut. Over the next several months, the other key dependent variables will also be examined. Table 1 documents descriptive statistics for the 4,338 respondents who comprise the analytic sample, pooled and separately by race. Over half the respondents (51%) lived without their biological father for at least one year by age 16, again concentrated mostly among black respondents (72% versus 48% for coloured and 27% for white respondents). About one-fifth of these absences (representing 11% of all respondents) were because the father died. Again, black respondents make up the largest share of paternal orphans (19% versus 10% of coloured and 3% of white respondents). Overall, 35% of respondents had sex by age 16 with wide variation by racial subgroup (60% of black respondents, compared to 30% of coloured and 13% of white respondents had sex by age 16). The age by which most of the respondents had sex was 16.6 years. Black respondents debut on average at 15.9 years, coloured respondents at 16.9 years, and white respondents at 17.7 years.

[Table 1 about here]

Table 2 documents the proportion of males and females who reached sexual debut by age 16 for each category (father always present, father absent but alive, father absent and dead) by race group. According to the top portion of the table (for black respondents), a significantly larger share of black males who were paternal orphans had sex by age 16 (75.4%) than did black males whose fathers were present (65.2%). The results are similar for females; with a larger share of black females who were paternal orphans having sex by age 16 (57.4%) than black females with present fathers (48.9%). According to the center portion of the table, a significantly larger share of coloured males with absent living fathers had sex by age 16 (48.3%) than did coloured males whose fathers were present (33.8%) or deceased (33.4%). A larger share of coloured females with absent fathers (24.7% of those with absent and living fathers, 29.2% with deceased fathers) had sex by age 16 than did coloured females with present fathers (17.9%). According to the bottom portion of the table, a larger share of white males with absent fathers (21.4%) had sex by age 16 than did white males with present fathers (11.5%). Unfortunatly, the sample of white males included too few paternal orphans to conduct separate statistical analyses. A larger share of white females with absent fathers had sex by age 16 than did white females with present fathers, but the differences were not statistically significant. Thus, these descriptive statistics indicate that early sexual debut is more common among individuals whose fathers were absent at some point during their adolescence.

[Table 2 about here]

Tables 3-5 document the results from Cox proportional hazards models estimating the hazard of initiating sex by age 16 as a function of covariates, stratified by gender for black, coloured, and white respondents. In Model 1 a simple version of the father presence variable is used (1=father present this year, 1=father absent this year). In Model 2 the more detailed version of father presence is used with the omitted category set to "Father Present." I shift the reference category to "Father Absent – Alive" (not shown) to determine whether respondents who are paternal orphans are statistically different in terms of sexual debut from respondents with fathers who are absent and alive.

[Table 3 about here]

Table 3 documents the results of Cox proportional hazard models for the subsample of black respondents, stratified by gender. According to Model 1, there is no statistically significant association between father presence and sexual debut by age 16 for black males or females, although the results are in the expected direction (black males and females with present fathers are 7% and 10% less likely than those with absent fathers to initiate sex by age 16, respectively). However,

model 2 shows that males and females who are paternal orphans are more likely (20% for males and 23% for females) to debut early than those with present fathers. For males, the effect of paternal orphanhood is statistically different from the effect of living father absence, implying that the effects of paternal orphanhood compared to living father absence are stronger for males but not for females. This could indicate that for black respondents father absence alone is unassociated with sexual debut, except in cases in which the father has died.

[Table 4 about here]

Table 4 documents the results of Cox proportional hazard models for the subsample of coloured respondents. According to Model 1, there is no statistically significant association between father presence and sexual debut by age 16 for coloured males or females, although the results are in the expected direction (coloured males and females with present fathers are 15% and 14% less likely than those with absent fathers to initiate sex by age 16, respectively). However, model 2 shows that males whose fathers are absent and alive are 25% more likely to debut early than those with present fathers, while paternal orphans are no more likely than those with present fathers to debut early. For females, there is no significant difference in the likelihood of early sexual debut depending on whether a father is present, absent and alive, or deceased.

[Table 5 about here]

Finally, Table 5 documents the results of Cox proportional hazard models for the subset of white respondents. According to Model 1, there is no statistically significant association between father presence and sexual debut by age 16 for white males, but white females with present fathers are 54% less likely than white females with absent fathers to sexually debut early. Unfortunately, there is not adequate variation in father absence to estimate model 2 for males. However, model 2 shows that females who are paternal orphans are 4.5 times more likely to debut early than those with present fathers, indicating that most of the positive effect of father absence on early sexual debut for white girls is due to paternal orphanhood.

References

Brookes, H., Shisana, O., and Richter, L. 2004. *The National Household HIV Prevalence and Risk Survey of South African Children*. Cape Town: Human Science Research Council.

Foster, G. and Williamson, J. 2000. A review of current literature on the impact of HIV/AIDS on children in sub-Saharan Africa. *AIDS* 14(3): S275-284.

Gregson, S., Nyamukapa, C., Garnett, G.P., Wambe, M., Lewis, J.J.C. and Mason, P.R. et al. 2005. HIV infection and reproductive health in teenage women made vulnerable by AIDS in Zimbabwe. *AIDS Care* 17(7): 785-794.

Guma, M and Hendra, N. 2004. The socio-cultural context of child abuse: the betrayal of trust. In L. Richter, A. Dawes and C. Higson-Smith (Ed.), *The sexual abuse of young children in southern Africa.* Cape Town: Human Science Research Council Press.

Hutton, H. E., Lyketsos, C. G., Zenilman, J. M., Thompson, R. E., & Erbelding, E. J. (2004). Depression and HIV risk behaviors among patients in a sexually transmitted disease clinic. *American Journal of Psychiatry, 161*(5), 912–914.

Makame, V., Ani, C., & Grantham-McGregor, S. (2002). Psychological well-being of orphans in Dar El Salaam, Tanzania. *Acta Paediatr*, *91*(4), 459–465.

Rau, B. (2003). *HIV/AIDS and child labour. A state-of-the art review with recommendations for action. Synthesis report, Paper No. 6*. Geneva, Switzerland: International Labour Organization, International Programme on the Elimination of Child Labour.

Thurman, Tonya R., Lisanne Brown, Linda Richter, Pranitha Maharaj, and Robert Magnani. 2006. Sexual risk behavior among South African adolescents: Is orphan status a factor? *AIDS Behavior*, 10: 672-635.

UNAIDS, UNICEF, and USAID. (2004). *Children on the Brink 2004. A Joint Report of New Orphan Estimates and a Framework for Action.*

Williams, C. T., & Latkin, C. A. (2005). The role of depressive symptoms in predicting sex with multiple and high-risk partners. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*, *38*(1), 69–73.

Table 1: Descriptive Statistics for Analytic Sample.

	Pooled	Black	Coloured	White
Unweighted n	4338	1914	1884	540
% Male	0.47	0.42	0.48	0.47
% Religious	0.90	0.79	0.96	0.91
% Urban Born	0.86	0.58	0.98	0.95
Completed Education of Parent				
% < Secondary	0.18	0.26	0.20	0.00
% Some Secondary	0.42	0.48	0.50	0.11
% Matric	0.33	0.16	0.23	0.87
% Missing	0.07	0.10	0.07	0.02
Ave. Negative Homelife Index	1.07	1.04	1.13	0.94
% Mother Ever Absent by Age 16	0.26	0.43	0.23	0.09
% Father Ever Absent by Age 16	0.51	0.72	0.48	0.27
% Father Deceased by Age 16	0.11	0.19	0.10	0.03
% Had Sex by Age 16	0.35	0.60	0.30	0.13
Average Age of Sexual Debut*	16.6	15.9	16.9	17.7

* Average age of sexual debut is calculated for respondents who had sex at age 18 or earlier.

Table 2: Proportion of respondents who reached sexual debut by age 16 by father presence, race group membership and gender.

	Black	
Father Presence	Males	Females
% Always Present	0.652 [b]	0.489 [b]
% Absent but Alive	0.717	0.521
% Absent and Dead	0.754 [a]	0.574 [a]
	Coloured	
Father Presence	Males	Females
% Always Present	0.338	0.179 [b]
% Absent but Alive	0.483 [a,b]	0.247 [a]
% Absent and Dead	0.334	0.292 [a]
	White	
Father Presence	Males	Females
% Always Present	0.115	0.101
% Absent but Alive	0.214 [a]	0.172
% Absent and Dead	--	0.265

[a]The estimate is significantly different from "Father Always Present" at the 95% level.
[b]The estimate is significantly different from "Father Absent and Dead" at the 95% level.
-- = Not enough variation

Table 3: Results from Cox proportional hazard model of sexual debut on covariates for black respondents by gender.

	Males		Females	
Covariates	Model 1	Model 2	Model 1	Model 2
Reached Puberty	1.65 ***	1.64 ***	3.31 ***	3.29 ***
Religious	0.86 **	0.86 **	0.99	0.98
Urban Born	1.04	1.03	0.99	0.99
Enrolled in School	0.90	0.89	0.69 ***	0.70 ***
Completed Education of Parent				
< Secondary (Omitted)				
Some Secondary	1.10	1.12	0.83 **	0.83 **
Matric	1.16	1.18	0.55 ***	0.56 ***
Missing	1.22 *	1.21	0.82	0.81
Negative Homelife Index	1.08	1.08 *	1.16 *	1.17 *
Mother Present	1.15 *	1.13	0.93	0.91
Simple Father Presence	0.93		0.90	
Detailed Father Presence				
Father Present (omitted)				
Father Absent - Alive		1.03		1.07
Father Absent - Dead		1.20 **^		1.23 **
Father Absent - Unsure if Alive		1.05		0.83
Number of Respondents	793	793	1121	1121
Number of Person Years	3130	3130	4434	4434

*=p<.10, **=p<.05, ***=p<.01

^Estimate is significantly differs from "Father Absent - Alive" at the 95% level of significance.

Table 4: Results from Cox proportional hazard model of sexual debut on covariates for coloured respondents by gender.

	Males		Females	
Covariates	Model 1	Model 2	Model 1	Model 2
Reached Puberty	0.43 ***	2.13 ***	5.31 ***	5.33 ***
Religious	0.67 **	0.66 **	0.55 **	0.54 **
Urban Born	1.11	1.13	0.62	0.59
Enrolled in School	0.72 **	0.72 **	0.57 ***	0.58 ***
Completed Education of Parent				
< Secondary (Omitted)				
Some Secondary	0.92	0.91	0.57 ***	0.58 ***
Matric	0.68 **	0.67 **	0.33 ***	0.34 ***
Missing	0.95	0.98	0.97	0.93
Negative Homelife Index	1.22 **	1.21 **	1.51 ***	1.50 ***
Mother Present	0.92	0.94	1.30	1.30
Simple Father Presence	0.85		0.86	
Detailed Father Presence				
Father Present (omitted)				
Father Absent - Alive		1.25 **		1.09
Father Absent - Dead		0.90		1.25
Father Absent - Unsure if Alive		1.33		1.74
Number of Respondents	860	860	1024	1024
Number of Person Years	3424	3424	4072	4072

*=p<.10, **=p<.05, ***=p<.01

Table 5: Results from Cox proportional hazard model of sexual debut on covariates for white respondents by gender.

	Males		Females	
Covariates	Model 1	Model 2	Model 1	Model 2
Reached Puberty	6.01 *	6.14 *	8.00 ***	8.59 ***
Religious	0.46 *	0.49 *	0.47 *	0.45 *
Urban Born	--	--	0.71	0.74
Enrolled in School	--	--	--	--
Completed Education of Parent				
Some Secondary (omitted)				
Matric	0.18 ***	0.18 ***	0.66	0.75
Missing	--	--	2.47	2.56
Negative Homelife Index	1.08	0.93	1.98 **	2.13 **
Mother Present	--	--	1.39	1.69
Simple Father Presence	0.91		0.46 **	
Detailed Father Presence				
Father Present (omitted)				
Father Absent - Alive		1.35		1.74
Father Absent - Dead		--		4.54 **
Father Absent - Unsure if Alive		--		2.91
Number of Respondents	251	251	289	289
Number of Person Years	979	979	1134	1134

*=p<.10, **=p<.05, ***=p<.01

-- = Not enough variation in covariate