

Divorce, Remarriage, and Children's Outcomes in Rural Malawi

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Abstract

A large literature exists on the consequences of divorce for children's outcomes in the United States. Studies have generally found that children of divorced parents perform worse on a wide range of outcomes, including academic achievement, health, and psychological well-being. Although evidence indicates that some Sub-Saharan African countries have high rates of marital instability as well as increasing rates of divorce, very few studies have explored the relationship between divorce and children's outcomes in this region. In this paper, I examine the relationship between divorce and children's health and education outcomes in rural Malawi. Are children of divorced parents more likely to suffer worse outcomes than children in intact marriages? Do children whose parents remarry after divorce experience changes in these outcomes? To answer these questions, I use three waves of data from the Malawi Longitudinal Study of Families and Health (MLSFH).

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Introduction

In the United States, the relationship between divorce and children's outcomes has been extensively studied. Outcomes examined include, but are not limited to, schooling, health, and psychological well-being. Researchers have generally found that divorce has a deleterious effect on children's outcomes (Amato 2000, 2001, 2010; Amato and Keith 1991). Despite evidence that some African countries have high rates of marital instability (Reniers 2003; Smith and Watkins 2005; Tilson and Larsen 2000) and rates that are also increasing (Amoateng and Heaton 1989; Hutchinson 1990; Locoh and Thiriat 1995), very few studies have examined the relationship between divorce and children's outcomes in this region of the world.¹

Since evidence suggests that children from divorced marriages are vulnerable to poor outcomes in the United States, it is possible that this may also be the case in Sub-Saharan Africa. In this paper, I study the relationship between divorce and children's outcomes, specifically health and education, in the setting of rural Malawi. Because very few divorced individuals remain unmarried in Sub-Saharan Africa (Isiugo-Abanihe 1998; Reniers 2003; Tilson and Larsen 2000), I also examine the relationship between remarriage and children's outcomes. Below are some of the questions I wish to explore in this paper.

- 1) Are children from divorced parents more likely to suffer worse outcomes than children from intact marriages?
- 2) Does time since divorce matter? Do children with recently divorced parents fare worse than children whose parents divorced in the past?
- 3) Do children whose parents remarry after divorce experience changes in these outcomes?

The Setting: Rural Malawi

Malawi, a relatively poor, developing country in East Africa, is ranked 153 out of 169 countries in the Human Development Index and has a gross national income (GNI) per capita of US\$911 (in purchasing power parity) (UNDP 2010). More than 80 percent of its population resides in rural areas (World Bank 2011). Like many other African countries, Malawi has been

¹ I have found only one study examining divorce and children in Sub-Saharan Africa. Bojuwoye and Akpan (2009) conducted a qualitative study with the objective of understanding children's reactions to their parents' divorce. Their sample consisted of ten children (5 girls and 5 boys) with a mean age of 14.2 years in South Africa.

particularly hard-hit by the AIDS epidemic. Current adult HIV prevalence, estimated at 11.0%, once peaked at 14.7% in 1997-1998 (World Bank 2011). Life expectancy peaked at 52 years in 1996 (World Bank 2011), before falling steadily for several years. It reached a low of 50.4 years in 2003 and is now increasing once again (World Bank 2011).

Several reasons make rural Malawi a suitable setting for examining the consequences of divorce and remarriage on children's outcomes in Sub-Saharan Africa. First, marital instability is common in present-day Malawi. It is not a recent phenomenon and has, in fact, been observed throughout much of the twentieth century (Kaler 2001; Mitchell 1956; Reniers 2003; Tew 1950; Vaughan 1983). Reniers (2003) provides much of our current knowledge about divorce and remarriage in rural Malawi. Calculating estimates of the frequency of divorce, he found life table probabilities of divorce ranging from 40 to 65 percent among females living in rural areas in 2001. These probabilities are believed to be some of the highest in Sub-Saharan Africa.² In addition to high levels of divorce, most divorced Malawians, as in other African countries, remarry in a relatively short period of time and most marry eventually (Reniers 2003). Within two and five years of divorce, more than 40 and 75 percent of women remarried, respectively.

Second, Malawi's diverse ethnic and religious composition makes it an interesting candidate for a study on the consequences of divorce and remarriage on children's outcomes. Malawi is composed of three distinct regions representing a variety of cultural and religious practices. Marriage traditions also differ across regions. The Northern region, primarily Christian, is patrilineal with virilocal residence after marriage. The Tumbuku are the dominant ethnic group. The Southern region, primarily Muslim, is matrilineal with uxorilocal residence after marriage. Yao are the dominant ethnic group. The Central region, primarily Christian, was once matrilineal, but now observes a mixture of patrilineal and matrilineal kinship structures (Phiri 1983). The Chewa are the dominant ethnic group and residence can be either virilocal or

² Divorce rates are not a widely collected statistic in Sub-Saharan Africa. What is known about the frequency of divorce comes from surveys conducted in only a handful of countries. As some of these studies did not occur in the past few years, the following figures may not be indicative of current levels of divorce. More importantly, they may not be representative of all African countries. In Ethiopia, 34 and 45 percent of marriages ended in divorce after 10 and 30 years, respectively (Tilson and Larsen 2000). In Ghana, 32 percent of women have experienced a divorce after 20 years of marriage (Amoateng and Heaton 1989). Among the Nuer in Sudan, 12.3 percent of women were divorced in 1983. In Nigeria, 10 percent of ever-married women have been divorced at least once in their lifetime (Isiugo-Abanihe 1998). In Togo, only half of all women are still in their first marriage at age 50 (Locoh and Thiriart 1995). Of first marriages that have ended, 78 percent were due to divorce or separation.

uxorilocal after marriage. Results found in this analysis may be applicable to other African countries with similar cultural and religious practices.

Of the three regions, the North has the lowest first marriage divorce probabilities (Reniers 2003). Approximately 14 and 40 percent of first marriages end in divorce after 5 and 25 years, respectively. The Southern region, historically known for its lack of marital stability (Kaler 2001; Mitchell 1956; Tew 1950), has much higher figures, 33 and 65 percent, respectively. Numbers for the Central region lie between those for the North and South (Reniers 2003). Another interesting difference is the prevalence of polygamy. Despite being primarily Christian, the Northern region has the highest levels of polygamy, more than 40 percent of first marriages are polygamous. In contrast, the Southern region, consisting mostly of Muslims, possesses the lowest levels of polygamy, less than a quarter of first marriages are polygamous. Similar to divorce probabilities, prevalence levels of polygamy in the Central region lie between that of the North and South.

Lastly, while it is not known if divorce rates are increasing in Malawi, evidence indicates that women are increasingly using divorce as a strategy to reduce their own risk of HIV infection (Reniers 2008; Smith and Watkins 2005). If this is the case, then it is plausible that divorce rates have risen, at least in the recent past, assuming that a secular decline in divorce has not occurred. More importantly, the number of children affected by divorce, as well as remarriage, will have also experienced a corresponding increase.

Data

I use data from the Malawi Longitudinal Study of Families and Health (MLSFH), formerly known as the Malawi Diffusion and Ideational Change Project (MDICP). The Malawi Longitudinal Study of Families and Health is a panel survey that examines the role of social interactions in changing attitudes and behaviors in three rural districts of Malawi: Rumphi (Northern), Mchinji (Central), and Balaka (Southern). The first wave of data collection (MLSFH1), begun in 1998, interviewed 1,541 ever-married women ages 15-49 and 1,065 of their husbands. In 2001, during the second wave (MLSFH2), they re-interviewed these respondents as well as all new spouses of men and women who remarried between 1998 and 2001. In 2004, during the third wave (MLSFH3), the original sample and their new spouses were interviewed, along with a sample of approximately 1,000 adolescents, ages 15-24. In the fourth

(2006), fifth (2008), and sixth (2010) waves, also known as MLSFH4, MLSFH5, and MLSFH6, all respondents from previous waves were included in the sample, along with all spouses of MLSFH3 adolescents, and any new spouses to respondents. In MLSFH5, a sample of approximately 800 parents of MLSFH respondents was added.

In this analysis, I use data collected from respondents in MLSFH4, MLSFH5, and MLSFH6. These survey waves were chosen because of the nature of data collected on the children of respondents.³ Beginning in 2006, MLSFH collected data on all biological children of respondents, regardless of their children's usual place of residence. Furthermore, I exclude male respondents, restricting the analysis to females. The practice of polygamy makes it difficult to determine from which marriages children were produced. Except in the case of premarital and extramarital births, this should not be a problem for women. By comparing children's dates of birth and mother's dates of marriage, I can determine premarital births and exclude them from the analytical sample. Because information on the child's paternity was not collected, I cannot determine whether a child was conceived in an extramarital affair. Therefore, I must assume that none of the children were produced as a result of extramarital sexual relations. Lastly, I restrict the sample to children under age 20 who have longitudinal data from at least two of the three waves. In this survey, children are not followed longitudinally. Rather, their mothers are followed. MLSFH collects detailed information on all biological children of respondents in household rosters. These children have been manually linked by comparing their name, age, and sex across survey waves.

The ability to categorize children based on parents' marriage status depends largely on the accuracy of their mothers' retrospective marriage histories. Preliminary analyses conducted for another paper indicate that respondents tend to under-report the number of marriages and divorces they have undergone.⁴ This can cause problems in correctly classifying children as coming from intact or divorced marriages. As a result, I use reconstructed marriage histories of mothers of children in my analytical sample to classify children based on their parents' marriage status. These reconstructed marriage histories were created from marriage history data collected

³ In 2004, MLSFH began collecting detailed data, including age, sex, marital status, health status, and educational attainment, on household members living with the respondent at the time of the survey. No information was collected on biological children of respondents who usually live elsewhere.

⁴ These analyses were conducted as part of my dissertation.

in MLSFH4, MLSFH5, and MLSFH6. Detailed information on the methodology used to create these histories is available upon request.

Methods

Outcomes of Interest

In Table 1, I present the education and health outcomes that will be considered in this analysis.

Proposed Analyses

1. I will test whether children of divorced parents are more likely than those from intact marriages to have worse health and education outcomes in each survey year. The type of regression will depend largely on the distribution of each outcome. My primary independent variable will be whether the child's parents are divorced and potential control variables will include child's age, child's gender, lives with mother, household wealth, region, mother's age, mother's education, and mother's marital status.
2. I will test whether children of divorced parents experience greater deteriorations in outcomes over time than children from intact marriages. I will use longitudinal data methods, such as random or fixed effects regression. Independent variables under consideration will be similar to those mentioned above.
3. I will test whether children of recently divorced parents (those who divorced between 2006 and 2010) have worse outcomes than children whose parents were not recently divorced or are still in intact marriages. I will also use longitudinal data methods. Independent variables under consideration will be similar to those mentioned above.
4. I will examine whether remarriage changes children's education and health outcomes using longitudinal data methods. Independent variables under consideration will be similar to those mentioned above.

Preliminary Results

All descriptive statistics in this section are based on MLSFH5. I chose MLSFH5 because all children and mothers in my analytical sample have data for this survey wave.

Characteristics of Mothers

In Table 2, I present characteristics of mothers of children in my analytical sample. On average, each mother has 3.1 children out of 5.6 children ever born in the analytical sample. Almost 40 percent of mothers in my sample have married two or more times. The majority have only been married twice. The percentage of mothers ever divorced is also high, 37.5 percent. Of those ever divorced, more than 1 in 5 has been divorced at least twice. Lastly, a small proportion of women underwent marital change during these survey waves. While close to 8 percent remarried between 2006 and 2010, 9 percent divorced during this period.

Characteristics of Children

In Table 3, I present characteristics of children in my analytical sample. I have 4,157 children with longitudinal data for at least two survey waves. Categories for gender, age, and region are evenly distributed in the sample. While more than one-third of these children have a mother who was ever divorced, only 12 percent come from divorced marriages. More than 80 percent of children have parents that are still married to each other. Lastly, less than 12 percent of children are not living with their mother.

Outcomes of Interest

In Tables 4-6, I present tabulations of outcomes of interest by parents' marriage status. Depending on the distribution of the outcome, I use either chi-square or Wilcoxon rank sum tests to test for statistically significant differences by parents' marriage status. For the moment, I've included tabulations of children from marriages where the father died (category = widowed) as a comparison group. They are not included when testing for statistically significant differences by parents' marriage status.

Outcomes of interest for young children, ages 0-5, are primarily focused on health. In Table 4, I present tabulations of health outcomes by parents' marriage status. For general health status, both boys and girls from divorced marriages are less likely than those from intact marriages to be rated as being in excellent/very good health by their mothers. Interestingly, a

slightly greater percentage of girls from divorced marriages than from intact marriages are rated as being in much better/better health compared to others of the same age and sex. This is not the case for boys. While some differences appear to exist by parents' marriage status, none of these differences are statistically significant.

For children ages 6-10, I examine both education and health outcomes. Overall, children whose parents are divorced appear to perform similarly on most education outcomes to children whose parents are still married. The only exception is found among girls for the mean schooling gap measured among all children. Girls from intact marriages are, on average, 0.9 years behind. This figure is 1.4 years for girls from divorced marriages. This difference, however, is not statistically significant. In terms of health outcomes, children whose parents are still married tend to be rated as having better health than those whose parents are divorced. These differences are not statistically significant.

Differences by parents' marriage status become more apparent during adolescence (Table 6). Girls whose parents are divorced perform significantly worse on all education outcomes than their counterparts whose parents are still married. They are more likely to have never attended school and are less likely to currently attend school. They have also completed fewer years of schooling and have a greater schooling gap. While boys whose parents are divorced have similar education outcomes to those whose parents are still married, they are less likely to be rated as being in excellent/very good health and much better/better health compared to others of the same age and sex. These differences are statistically significant.

Table 1. Potential Outcomes of Interest

	<u>Ages</u>
<i>Education</i>	
Never attended school	6-19
Currently attending school	6-19
Grades of schooling completed	6-19
Schooling gap	6-19
<i>Health</i>	
General health status	0-19
Health compared to other children who are of the same age and sex	0-19
Anthropometric measurements	0-5
Mortality	0-19

Table 2. Summary Statistics, Mothers, MLSFH5

<u>Variables</u>	
Mean age (yrs)	36.2 (11.41)
Educational Attainment (%)	
No schooling	28.3
Some primary	56.6
Completed primary	7.8
Secondary or higher	7.3
Mean grades of schooling completed	3.9 (3.31)
Region	
Central	30.0
South	35.1
North	34.8
Mean number of children ever born	5.6 (3.03)
Mean number of children in sample	3.1 (1.58)
Current Marital Status (%)	
Married	89.0
Separated/Divorced	6.2
Widowed	4.9
In a polygamous marriage (%)	31.4
Mean number of times married	1.5 (0.80)
Number of times married (%)	
Once	63.9
Twice	25.0
Three	8.5
Four or more times	2.7
Ever divorced (%)	37.2
Number of times divorced ^a (%)	
Once	69.3
Twice	21.5
Three	7.4
Four or more times	1.8
Remarried between 2006-2010	7.7
Divorced between 2006-2010	9.0
Total	1349

Note: All marriage-related variables, except for current marital status, are based on reconstructed marriage histories.

^aAmong those ever divorced.

Table 3. Summary Statistics, Children, MLSFH5

Variables

Gender (%)	
Girls	50.2
Boys	49.8
Age group (%)	
0-5 yrs	33.3
6-11 yrs	31.6
12-19 yrs	35.1
Region (%)	
Central	29.8
South	34.7
North	35.5
Ever divorced mother (%)	36.4
Status of parents (%)	
Still married	81.7
Divorced	11.9
Widowed	6.4
Lives with mother (%)	88.6
Total	4157

Table 4. Outcomes of Interest by Parents' Marriage Status, Girls and Boys, Ages 0-5, MLSFH5

<u>Outcomes</u>	<u>Girls</u>			<u>Boys</u>		
	<u>Still married</u>	<u>Divorced</u>	<u>Widowed</u>	<u>Still married</u>	<u>Divorced</u>	<u>Widowed</u>
General health status (%)						
Excellent/very good	75.6	65.4	92.9	76.7	67.3	60.0
Good	22.2	32.7	7.1	21.3	27.3	40.0
Poor/very poor	2.2	1.9	0.0	2.0	5.5	0.0
Health status compared to others (%)						
Same	31.8	27.5	21.4	31.4	34.0	40.0
Much better/better	65.6	68.6	75.6	65.8	58.5	60.0
Worse/much worse	2.6	3.9	0.0	2.8	7.6	0.0
Total	589	52	14	587	55	10

Table 5. Outcomes of interest by Parents' Marriage Status, Girls and Boys, Ages 6-10, MLSFH5

Outcomes	Girls			Boys		
	Still married	Divorced	Widowed	Still married	Divorced	Widowed
Never attended school (%)	13.8	15.9	15.8	15.4	18.2	18.8
Currently attending school (%)	83.7	81.2	73.7	82.6	78.2	68.8
Mean grades of schooling completed	1.8 (1.75)	1.9 (1.85)	2.4 (2.37)	1.9 (2.56)	1.8 (3.02)	1.4 (2.14)
Mean schooling gap ^a	0.9 (0.90)	1.0 (0.96)	1.0 (0.96)	0.8 (0.90)	0.9 (1.01)	1.1 (1.05)
Mean schooling gap ^b	0.9 (0.92)	1.4 (2.28)	1.1 (1.02)	0.9 (1.24)	0.9 (0.95)	1.4 (1.15)
General health status (%)						
Excellent/very good	75.4	70.0	73.7	76.5	71.4	81.8
Good	21.9	27.1	26.3	20.5	28.6	15.2
Poor/very poor	2.7	2.9	0.0	3.0	0.0	3.0
Health status compared to others (%)						
Same	28.6	41.4	42.1	32.7	37.5	21.2
Much better/better	66.9	55.7	57.9	62.9	58.9	75.8
Worse/much worse	4.5	2.9	0.0	4.8	3.6	0.0
Total	445	71	19	440	56	33

Note: Standard deviations are in parentheses.

^a Among those currently in school

^b Includes those in and out of school

Table 6. Outcomes of interest by Parents' Marriage Status, Girls and Boys, Ages 11-17, MLSFH5

Outcomes	Girls			Boys			
	Still married	Divorced		Widowed	Still married	Divorced	Widowed
Never attended school (%)	2.4	10.2	***	3.1	3.4	2.4	3.3
Currently attending school (%)	84.3	67.4	***	73.9	89.1	83.1	56.9
Mean grades of schooling completed	4.5	4.0	*	4.3	4.3	4.3	4.1
	(2.19)	(2.77)		(2.57)	(2.21)	(2.36)	(2.00)
Mean schooling gap ^a	2.7	3.2	+	2.9	3.1	3.1	3.4
	(1.68)	(1.77)		(1.81)	(1.68)	(1.87)	(1.83)
Mean schooling gap ^b	3.3	4.0	**	3.5	3.4	3.7	3.8
	(2.19)	(2.40)		(2.57)	(1.97)	(2.43)	(2.20)
General health status (%)							*
Excellent/very good	80.7	74.8		77.3	81.9	73.5	85.0
Good	18.9	25.3		19.7	17.7	24.1	15.0
Poor/very poor	0.4	0.0		3.0	0.4	2.4	0.0
Health status compared to others (%)							*
Same	26.0	33.3		28.8	27.7	33.7	28.3
Much better/better	72.5	65.7		68.2	70.8	60.2	70.0
Worse/much worse	1.5	1.0		3.0	1.5	6.0	1.7
Total	467	99		66	471	83	62

Note: Standard deviations are in parentheses. Significant levels refer to comparisons between still married and divorced.

^aAmong those currently in school

^bIncludes those in and out of school

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