Anticipatory Child Fostering and Household Economic Stability in Malawi

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Abstract

Child fostering is practiced throughout much of sub-Saharan Africa and is often used by families to offset economic risk and insecurities. Recent demographic changes in the region have added new complexities to this practice and little is known about how these changes affect households that foster children. Using data from 1,790 respondents enrolled in a longitudinal survey in Malawi,[1] I empirically explore the relationship between receiving a foster child and changes in household socioeconomic status (SES). Placing particular emphasis on the role anticipating fostering responsibilities, I show that unanticipated fostering corresponds with a decrease in household SES. Furthermore, results indicate that when examining households that foster, fostering should not be treated as a binary event.

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Extended Abstract

Introduction

Tribal and extended kinship structures in sub-Saharan Africa endow the region with a strong tradition of child fostering (Bledsoe 1990; Bledsoe and Isiugo-Abanihe 1989; Goody 1982; Madhavan 2004; Monasch and Boerma 2004; Urassa et al. 1997). Although the practice varies, fostering—the custom of children living apart from their natal families—has been recognized as a means for African families to distribute the cost and benefits of childrearing. This allows both families and communities in Africa to offset economic insecurities and risks (Akresh 2005; Isiugo-Abanihe 1985). Historically, fostering responsibilities tend to have been delegated to the most resource-rich members of extended families in order to provide children with opportunities for upward social mobility (Bledsoe 1990; Goody 1982; Isiugo-Abanihe 1985).

Recent demographic events in sub-Saharan Africa raise questions about how the practice of fostering may be changing. According to UNAIDS and the World Health Organization (2009), as of 2008, more than 14 million children in sub-Saharan Africa had lost one or both parents as a result of AIDS. While scholars remain divided on whether or not families in Africa will be able to meet the fostering demands of a growing number of orphans (Foster and Germann 2002; Heuveline 2004; Madhavan 2004; Monasch and T. J. Boerma 2004; Urassa et al. 1997), studies suggest that the practice of fostering, as it has been historically understood, is in flux. Juxtaposed with this transition, there is a growing body of literature documenting the role of uncertainty in decision-making processes, particularly in sub-Saharan Africa where uncertainty permeates daily life (Jennifer Johnson-Hanks 2004, 2005; Trinitapoli and Yeatman forthcoming). Motivated by recent changes to child fostering practices and the role of uncertainty in decision-making and outcomes, the present paper highlights the importance of considering anticipation and uncertainly as key sociological determinates of a family's capacity to care for an additional child.

To date, the majority of foster care in Africa takes place within households, which have shown remarkable ability to absorb orphaned and non-orphaned foster children. However, in regions of high HIV prevalence, this capacity may be approaching its limit (Grant and Yeatman 2011). As the number of orphans in the region rises, studies suggest that poorer households are starting to play a larger role in child fostering (Bicego, Rutstein, and Johnson 2003; Merli and Palloni 2006). There is also evidence that the orphan crisis has prompted child fostering to extend further beyond kinship networks than it has in the past (Howard et al. 2006; Nyambedha, Wandibba, and Aagaard-Hansen 2003). Both of these changes vastly alter the normative hierarchy of child fostering. While there is ample literature on how these changes affect children (Case, Paxson, and Ableidinger 2004; Nyambedha et al. 2003; Nyamukapa and Gregson 2005), little is known about the consequence this shift holds for households that absorb foster children.

As the delegation of fostering responsibilities broadens, families' capability to foresee future fostering responsibilities may be compromised. By focusing on the role of anticipation, the current paper seeks to empirically explore how households change upon fostering a child. Specifically I ask if and how fostering a child affects household economic standing and, more importantly, does the anticipation of fostering moderate those effects? Results from preliminary analysis suggest that in evaluating the impact that fostering a child has on households, the act of fostering should not be treated as a binary event. Rather, a more nuanced approach is warranted.

Research setting and data

Malawi experienced one of the most severe AIDS epidemics in sub-Saharan Africa. According to UNAIDS, in 2009 HIV prevalence in Malawi was 11 per cent (2010). This is well above the average for sub-Saharan Africa (5 per cent) at the time, leaving more than half a million children in Malawi orphaned by AIDS (UNAIDS 2010). These statistics, in combination with Malawi's strong

tradition of child fostering and acute poverty make the focus of the current research particularly salient to this setting.

The present paper uses the first three waves of data from Tsogolo la Thanzi (TLT), a panel survey in Balaka, Malawi, designed to examine how young people navigate reproduction in an AIDS epidemic. TLT collects data at four-month intervals from 1,500 female and 600 male respondents, who were randomly selected from a sampling frame of 15 to 24 year olds living in census enumeration areas within 7 kilometers of Balaka. Data used in the preliminary analysis were collected between May 2009 and May 2010. After restricting the sample to respondents who completed interviews in all three waves and employing listwise deletion to deal with missing data on key variables, the subsample used in the following analyses contained 1,790 respondents.

While TLT primarily focuses on individual-level characteristics, the study also gathers household-level information including ownership of household goods. Household rosters are also completed and updated at every wave. These data, in combination with the longitudinal nature of TLT allow for the examination of how respondents' households change over time.

Dependent Variable

The outcome measure is change in the relative socioeconomic standing (SES) of households between waves 2 and 3 of the TLT study. To measure SES I constructed a linear index comprised of nine durable goods in addition to electricity.[2] Weights were assigned using principal-components analysis, which is also the method used to construct Demographic Health Surveys' wealth index. The resulting index places households on a continuous scale that is relative to the sample population (Rustein and Johnson 2004). Methodologists have validated this approach to measuring SES as an alternative to measures such as income, consumption, and expenditures; all of which can be difficult to accurately estimate in developing countries (Howe, Hargreaves, and Huttly 2008)

Among the analytic sub-sample, the distribution of our wealth index is skewed to the right, with average scores of -.127 and -.063 in waves 2 and 3, respectively. Between waves 2 and 3 there was an average increase of .064 in the wealth index, with the change in SES ranging from a decrease of 6.785 to an increase of 5.300.

Key independent variables

The primary independent variable is whether or not a household fostered a child. I measure this as both a binary event and as a categorical variable. The latter measure takes into account respondents' level of anticipation of the fostering event and is constructed as described below.

Each wave TLT respondents are asked the following question: "In the next year, how likely is it that you will foster a new child into your household?" Responses are measured through an interactive technique where the respondent is asked to shift the number of beans—which represent the likelihood of an event—from one side of the table to another (there are 10 beans in total). Beginning in wave two, respondents are also asked: "In the past four months have you had a (non-biological) child join your household?" Using these two questions from waves 1 and 2, I categorically group respondents as follows: 1) respondents who did not foster between waves 1 and 2 (reference group); 2) those who fostered a child but indicated at wave 1 that there was a 0-beans likelihood of fostering; 3) those who fostered and correctly anticipated those responsibilities at wave 1 (10 beans); and 4) respondents who fostered a child but were uncertain about whether or not they would foster in the future (1-9 beans at wave 1).

Table 1 compares the mean level of anticipation and mean change in wealth index score for the full sample, households that fostered, and households that did not foster. Within the analytic

[2] Goods include a bed with mattress, television, radio, landline or mobile phone, refrigerator, bicycle, motorcycle, animal-drawn cart, and an automobile.

subsample, 11.6 per cent of respondents' households fostered a child between the first and second wave of the TLT study. 13 per cent of fosterers said there was no possibility of their household absorbing a foster child less than four months prior to doing so. Although fostering households experienced an average increase in SES between waves 2 and 3, the sub-set of households that did not anticipate fostering a child experienced an average decrease in SES.

Table 1. Summary statistics of key variables by household fostering status

Category	N	Mean score on "likelihood of fostering a child" (measured at wave 1)	Mean change in wealth index between waves 2 and 3
Total analytic sub-sample	1,790	3.657	0.064
Non-fostering households	1,583	3.537	0.061
Fostering households	207	4.325	0.082
Unanticipated fostering	*27*	*0*	*-0.270*
Anticipated fostering	*30*	*10*	*0.125*
Uncertain fostering	*150*	*3.927*	*0.136*

Control variables

Other independent variables include respondents' household size, education, and monthly income. I also control for other shocks respondents may have experienced that could contribute to changes in household SES. These include whether or not respondents moved to a better house, moved to a worse house, lost their job, found a better job, or divorced or separated from their partner. Additionally, to account for the possibility that the youthfulness of the sample might impact respondents' ability to anticipate absorbing a foster child, I control for respondents' age.

Analytic Approach

At this stage I use data from waves 2 and 3 of the TLT study to estimate change score models, where the variables are expressed in terms of change that individuals experience over two periods of time (see Johnson 1995 for a full description of the model used). A particular benefit of change score models is that they control for all observed *and* unobserved time-invariant variables such as gender, tribe, and personality characteristics, effectively eliminating bias that can result from omitting key time-invariant variables (Allison 1994).

Like other family transitions, the full effects of fostering on households may not be instantaneous. Given this and the short intervals between the TLT survey waves, the event of fostering is lagged, so that fostering between waves 1 and 2 (as measured at wave 2) predicts change in households' relative economic standing between waves 2 and 3. In addition, because evidence suggests that fostering a child is selective on affluence, I also lag changes in respondents' years of education, moving to a better house, and getting a better job in order to control for a spurious relationship between fostering and change in household wealth. The disadvantage of lagging the primary independent variable is that it does not take into account whether or not households that fostered at wave 2 were still fostering the child at wave 3. However, since absorbing a foster child in this context is considered to be a shock, it is assumed that the effect of fostering persists beyond the time that the foster child resides within the household.

Preliminary results

Model 1 in Table 2 estimates the relationship between fostering as a binary event and changes in the household wealth index. Treated this way, it appears that fostering a child has no influence on later changes in a household's relative economic standing. However, turning our attention to Model 2, which categorizes fostering by prior anticipation, we see that is important to take a nuanced approach to understanding how fostering affects households. Unanticipated fostering has a significant negative

relationship with changes in household SES compared to respondents who did not foster a child. A similar relationship is not observed for the other fostering categories, suggesting that unanticipated fostering may be a unique event. Models 1 and 2 also control for the previously mentioned shocks (coefficients excluded from Table 2). The only shock that was a significant ($p<.01$) predictor of changes in household wealth was moving to a worse house. The coefficients for this variable operated in the expected direction and were -0.360 and -0.366 in models 1 and 2, respectively.

Interestingly, both models demonstrate that an increase in the number of people living in a household corresponds with a positive change in household. This may indicate that certain types of fostering operate indirectly to increase household SES. Future research will take this into consideration by exploring the role of dependency ratios within households.

Table 2. Fostering as a Predictor of Change in Household Wealth (N=1,790)

	Model 1		Model 2	
	b	**St. Error**	**b**	**St. Error**
Fostering a child†	0.019	(0.062)	--	--
Type of fostering (ref.= non-fosterers)	--	--	--	--
Unanticipated Fostering †	--	--	-0.334*	(0.162)
Anticipated Fostering †	--	--	0.042	(0.154)
Uncertain Fostering †	--	--	0.078	(0.071)
Socio-Demographic Controls	--	--	--	--
Change in Age	0.028	(0.049)	0.028	(0.049)
Change in years of education †	-0.006	(0.081)	0.003	(0.081)
Change in HH Size	0.059**	(0.018)	0.058***	(0.018)
Change in Income	0.000	(0.000)	0.000	(0.000)
Constant			0.073*	(0.030)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

† Variables lagged. Change measured between waves 1 and 2.

Future research

The full paper will include a more extensive review of the current literature on uncertainly and child fostering. Subsequent analysis will extend the preliminary models to examine an additional 3 waves of TLT data using a fixed effects modeling approach, which is the same as a change score method when applied to more than two waves of panel data (Johnson 1995). Employing longitudinal analysis over a longer period of time will provide more observations of fostering households. It will also allow us to explore the mechanisms of the relationship between child fostering and changes in household well-being, such as the length of time a child is fostered. Additionally, beginning in wave 4, TLT collects data on the parental status of all children living in a respondent's household. Leveraging such information will allow us to make important comparisons between households that foster orphaned and non-orphaned children. I expect to find that regardless of the length of stay or parental status of the child, prior anticipation of fostering will play the greatest role in determining how households cope with additional child care responsibilities.

References

Akresh, Richard. 2005. "Risk, Network Quality, and Family Structure: Child Fostering Decisions in Burkina Faso." *SSRN eLibrary*. Retrieved September 11, 2011 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=643163).

Allison, Paul D. 1994. "Using Panel Data to Estimate the Effects of Events." *Sociological Methods & Research* 23(2):174 - 199.

Bicego, George, Shea Rutstein, and Kiersten Johnson. 2003. "Dimensions of the Emerging Orphan Crisis in sub-Saharan Africa." *Social Science & Medicine* 56(6):1235-1247.

Bledsoe, Caroline. 1990. "The Politics of Children: Fosterage and the Social Management of Fertility Among the Mende of Sierra Leonne." Pp. 81-100 in *Births and Power: Social Change and the Politics of Reproduction*, edited by W.P. Handwerker. Boulder, CO: Westview Press.

Bledsoe, Caroline, and Uche C. Isiugo-Abanihe. 1989. "Strategies of Child-Fosterage among Mende Grannies in Sierra Leone." Pp. 442-474 in *Reproduction and Social Organization in Sub-Saharan Africa*, edited by Ron J. Lesthaeghe. Berkeley, CA: University of California Press.

Case, Anne, Christina Paxson, and Joseph Ableidinger. 2004. "Orphans in Africa: Parental Death, Poverty, and School Enrollment." *Demography* 41(3):483-508. Retrieved September 5, 2010.

Foster, Geoff, and Stephan Germann. 2002. "The Orphan Crisis." Pp. 664-675 in *AIDS in Africa*, edited by Max Essex. Springer.

Goody, Esther N. 1982. *Parenthood and Social Reproduction: Fostering and Occupational Roles in West Africa*. Cambridge: Cambridge University Press.

Grant, Monica, and Sara Yeatman. 2011. "The Relationship between Orphanhood and Child Fostering in sub-Saharan Africa."

Heuveline, P. 2004. "Impact of the HIV epidemic on population and household structure: the dynamics and evidence to date." *AIDS* 18(Suppl. 2):S45-S53. Retrieved December 21, 2010.

Howard, B. et al. 2006. "Barriers and Incentives to Orphan Care in a Time of AIDS and Economic Crisis: A Cross-Sectional Survey of Caregivers in Rural Zimbabwe." *BMC public health* 6(1):27.

Howe, Laura, James Hargreaves, and Sharon Huttly. 2008. "Issues in the construction of wealth indices for the measurement of socio-economic position in low-income countries." *Emerging Themes in Epidemiology* 5(1):3.

Isiugo-Abanihe, Uche C. 1985. "Child Fosterage in West Africa." *Population and Development Review* 11(1):53-73. Retrieved February 16, 2011.

Johnson-Hanks, J. 2005. "When the future decides - Uncertainty and intentional action in contemporary Cameroon." *Current anthropology* 46(3):363-385.

Johnson-Hanks, Jennifer. 2004. "Uncertainty and the Second Space: Modern Birth Timing and the Dilemma of Education." *European Journal of Population / Revue Européenne de Démographie* 20(4):351-373. Retrieved September 23, 2011.

Johnson, David. 1995. "Alternative Methods for the Quantitative Analysis of Panel data in Family Research: Pooled Time-Series Models." *Journal of Marriage and Family* 57(4):1065-1077.

Madhavan, Sangeetha. 2004. "Fosterage Patterns in the Age of AIDS: Continuity and Change." *Social Science & Medicine* 58(7):1443-1454.

Merli, M. Giovanna, and Alberto Palloni. 2006. "The HIV/AIDS Epidemic, Kin Relations, Living Arrangements, and the African Elderly in South Africa." Pp. 117-165 in *Aging in Sub-Saharan Africa: Recommendations for Futhering Research*, edited by Barney Cohen and Jane Menken. Washington, D.C.: The National Academies Press.

Monasch, Roeland, and Ties J Boerma. 2004. "Orphanhood and Childcare Patterns in sub-Saharan Africa: An Analysis of National Surveys from 40 Countries." *AIDS* 18:S55-S65.

Nyambedha, Eric Otieno, Simiyu Wandibba, and Jens Aagaard-Hansen. 2003. "Changing Patterns of Orphan Care Due to the HIV Epidemic in Western Kenya." *Social Science & Medicine* 57(2):301-311.

Nyamukapa, Constance, and Simon Gregson. 2005. "Extended Family's and Women's roles in Safeguarding Orphans' Education in AIDS-afflicted Rural Zimbabwe." *Social Science & Medicine* 60(10):2155-2167.

Rutstein, S., and K. Johnson. 2004. *The DHS wealth index*. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.

Trinitapoli, Jenny, and Sara Yeatman. *forthcoming*. "Uncertainty and Fertility in a Generalized AIDS Epidemic." *American Sociological Review*.

UNAIDS. 2010. *Report on the Global AIDS Epidemic*. Geneva: United Nations.

UNAIDS and The World Health Organization. 2009. *Sub-Saharan Africa Fact Sheet*. United Nations.

Urassa, Mark et al. 1997. "Orphanhood, Child Fostering and the AIDS Epidemic in Rural Tanzania." *Health Transition Review* 7 (Suppl. 2):141-153.