

**FOSTERING AND FERTILITY:
(RE) EXAMINING CHILD FOSTERING AS A DETERMINATE OF FERTILITY PREFERENCES**

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ABSTRACT

Voluntary child fostering—the practice of placing children in other households—is a long-standing practice throughout much of sub-Saharan Africa. Theoretical and empirical evidence suggests that child fostering diffuses childrearing responsibilities, thereby contributing to the high levels of fertility found in the region. However, recent regional dynamics threaten to alter this relationship. Some scholars have speculated that the AIDS epidemic is eroding community and familial networks—institutions that are fundamental to voluntary child fostering practices. Using an ongoing panel study in Malawi, the current study aims to quantitatively model the relationship between fostering responsibilities and fertility preferences in order to further understand how this relationship is currently operating.

EXTENDED ABSTRACT

Introduction

Tribal and extended kinship structures in sub-Saharan Africa support the region's strong tradition of child fostering (Madhavan 2004; Monasch and Boerma 2004; Urassa, Boerma, Ng'weshemi, Isingo, Schapink, and Kumogola 1997). While specific child fostering practices vary from culture to culture, overall, fostering functions to offset economic insecurities by sharing the costs and benefits of childrearing across both extended families and communities (Bledsoe 1990; Isiugo-Abanihe 1985; Ntozi 1995). Caldwell's 'wealth flow' theory holds that children in high-fertility areas act as social insurance for parents and communities, thus elevating their economic value and the incentives to have large families (Caldwell 1976; Caldwell 1983). In line with this theory, fostering has been identified as a "prop" to the high levels of fertility observed across most of sub-Saharan Africa.

Ethnographic studies from various contexts lend support to Caldwell's theory as it relates to fostering. Studying the fostering practices of the Mende of Sierra Leone, Bledsoe (1990) links both the actual and the potential diffusion of parental roles to high fertility. Mende parents strategically foster out children in order to provide them with opportunities for upward social mobility such as schooling and apprenticeships. In this way, parents leverage the wealth of their extended networks and, in turn, are capable of providing for a greater number of children. At the same time, families who receive foster children benefit from the domestic labor those children provide (Goody 1982). Fostering older children (especially girls) reduces mothers' childrearing costs (i.e. housework and taking care of younger children) and may even reduce the spacing between births.

Despite reasonably strong consensus on the causal relationship between fostering and high fertility, two relatively recent and sweeping changes across sub-Saharan Africa may be altering the relationship, as it has been understood historically. First, the changes accompanying mass education (especially universal primary schooling) have dramatically altered the opportunity structures in both rural and urban settings. Second, during the past 30 years, the AIDS epidemic has increased mortality among prime-age adults, thus increasing the number of orphans in the region (UNAIDS 2010). Third, many scholars predicted that the AIDS epidemic would overwhelm community support systems and dramatically alter kin networks and household structures throughout sub-Saharan Africa (Foster, Makufa, Drew, and Kralovec 1997; Merli and Palloni 2006; Ntozi and Zirimenya 1999; Palloni and Lee 1992). Changing educational opportunities, a growing orphan population, and (if accurate) the erosion of extended kinship networks, stand to directly affect both child-fostering practices themselves and the effects of fostering on other domains of life—particularly fertility.

In this paper, we model the relationship between fostering and fertility preferences using data from an ongoing panel study of young adults (15-25 in 2009) in Balaka, Malawi. The combination of Malawi's high HIV infection rate, its relatively large orphan population, and its slowly declining fertility rate (see National Statistical Office & ICF 2011), makes Malawi an ideal setting for examining this relationship. Specifically, we ask the following questions: Do new fostering responsibilities trigger changes in young adults' fertility preferences? And is that effect contingent on specific fostering circumstances—whether the fostering responsibilities were accurately anticipated or whether they came as a surprise?

Answering these questions will fill several gaps left by previous research. First, the majority of previous studies that explore the links between fostering and fertility are focused on parents

who have fostered out their children; much less is known about the impact of fostering on the receiving parents and households. Second, prior work on this topic tends to focus on actual fertility, but fertility preferences are a crucial determinant of fertility behaviors and may be more malleable, especially at early stages of the life course. Third, what we currently know about the relationship between child fosterage and fertility is largely based on examinations of *voluntary* fostering. Despite growing interest in orphanhood and orphans' outcomes, little scholarly attention has been given to how the demands of crisis fostering (i.e. fostering a child in response to the death of a sibling or neighbor) is altering the fostering-fertility equation.

Data

The current study uses data from Tsogolo la Thanzi (TLT), a panel study in Balaka, Malawi designed to examine how young people navigate reproduction in an AIDS epidemic.¹ The study uses the first 6 waves of data, collected at four-month intervals between May 2009 and May 2011. The full TLT study includes 1,500 female and 600 male respondents randomly selected from a sampling frame of 15 to 24 year olds living in census enumeration areas within 7 kilometers of Balaka. Despite the tendency of family planning programs to target women, we include men in our analysis since there is strong evidence indicating that men's fertility preferences play a key role in family planning decisions and are also sensitive to economic pressures and household-level changes (Dodoo 1998; Dodoo and Seal 1994; Isiugo-Abanihe 1994).

In addition to measuring fertility preferences and family formation among young adults, TLT collects data on respondents' extended kinship responsibilities. One such responsibility includes child fostering. 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?" Beginning in wave 2, respondents were also asked: "Have you had a (non-biological) child join your household?" We use these two questions in combination to determine if the level of anticipation moderates the effect of child fostering responsibilities on fertility preferences. We focus on fertility preferences as our outcome variable because they are less stable than measures of *actual* fertility. It is precisely this fluctuation that has the potential to offer insight on how child fostering shapes the volitional dimensions of fertility. Unlike actual fertility, a person's fertility preferences can change in response to life circumstances and other shocks (Bankole and Westoff 1998; Sennott and Yeatman, 2011). This flexibility may be better suited to gauge whether or not individuals feel that they are becoming over-burdened with non-biological childrearing responsibilities.

Additional independent variables include respondents' current fertility (births and pregnancies) and other shocks that respondents may have experienced between waves, such as the death of a partner or child, divorce, or loss of job. We control for a host of factors known to be associated with both fostering and fertility in this context: respondents' education, household wealth, household size, marital status, number of biological children, gender, and age.

¹ Principle Investigators are Jenny Trinitapoli and Sara Yeatman. TLT is funded by grant R01-HD058366 from the National Institute of Child Health and Human Development. Persons interested in obtaining data files TLT should contact Tsogolo la Thanzi, Population Research Institute, Penn State University, 601 Oswald Tower, University Park, PA 16803.

Methods and Preliminary Findings

We have already estimated preliminary models using just the first two waves of TLT data. Using ordinary least squares (OLS) regression, we estimated the effects of fostering between waves 1 and 2 and level of anticipation of a fostering event at wave 1 on a respondent's ideal family size at wave 2, controlling for ideal family size at wave 1. Results from these models can be found in Table 1.

After restricting our sample to respondents who completed interviews in both waves and employing listwise deletion to deal with missing data on key variables, our analytic subsample contained 1,933 respondents. Within this subsample, 11.3 percent of the respondents fostered a child into their home between the waves (a four-month period). Consistent with prior research, respondents living in households that foster are, on average, higher educated and have greater household wealth than those that did not foster a child. These patterns reflect what we know about traditional child fosterage, where children are fostered into wealthier homes as a means of upward social mobility (Bledsoe 1990; Isiugo-Abanihe 1985).

The TLT data reveal substantial variability in respondents' ability to correctly anticipate new fostering responsibilities; and the element of surprise is noteworthy. Specifically, 13.7 percent of respondents who fostered a child between waves 1 and 2 indicated at wave 1 that there was no chance of fostering a child within the coming year. This implies, to some extent, fostering could be operating as a shock to the respondent and their household.

While our preliminary analyses show no significant relationship between child fostering and ideal family size over a four-month period, we want to look at whether or not this relationship changes over a longer span of time. Interestingly, Model 2 reveals that the event of fostering impacts fertility preferences in the expected direction (negatively). This is encouraging given the short time period analyzed and the limited number of fostering cases present in the subsample. Employing longitudinal analysis with two years of data will not only allow us to look at whether or not this relationship changes over time, but it will also provide more observations of fostering individuals and more variation in life circumstances. Furthermore, what we know about traditional fostering practices implies that receiving a foster child is selective. Given this, we also plan to take a propensity score approach to future modeling in order to adjust for this selectivity.

Conclusion

The predicted increase in, and changes to, non-biological childrearing in sub-Saharan Africa makes understanding the relationship between child fostering and fertility preferences remarkably important. Such a study will not only enrich the scholarly literature surrounding these topics, but also provide practitioners with the information necessary to mitigate family planning challenges in a region that is in the midst of sweeping demographic flux.

Although the models presented herein did not reveal a relationship between fostering and fertility preferences, the effects of new child caring responsibilities are likely not immediate, which is why our full set of analyses will focus on changes in fertility preferences over a two year period of time. Moreover, because the TLT sample contains people at the beginning of their reproductive career, a longitudinal approach will allow us to see how the effect of fostering varies over the life course. Through examining changes, rather than static differences, in fertility preferences, we hope to glean a more comprehensive understanding of how fostering responsibilities may be impacting people's fertility desires.

Table 1. Preliminary Models of Fostering and Fertility Preferences
 Dependent Variable: Ideal Family Size at Wave 2

	Model 1	Model 2	Model 3
Ideal family Size, W1	0.707*** (0.016)	0.707*** (0.016)	0.706*** (0.016)
Age, W1	-0.010 (0.007)	-0.010 (0.007)	-0.009 (0.007)
Number of living children, W2	0.130*** (0.029)	0.130*** (0.029)	0.129*** (0.029)
Household Wealth, W2	-0.019 (0.010)	-0.018 (0.010)	-0.018 (0.010)
Married or Cohabiting, W2	0.017 (0.051)	0.020 (0.051)	0.021 (0.051)
Years of Education, W2	0.002 (0.007)	0.002 (0.007)	0.002 (0.007)
Household Size, W2	0.008 (0.006)	0.008 (0.006)	0.008 (0.006)
Female	-0.016 (0.042)	-0.015 (0.042)	-0.013 (0.042)
Foster Family		-0.037 (0.053)	-0.037 (0.053)
Anticipation of fostering			-0.002 (0.005)
Constant	1.054*** (0.156)	1.053*** (0.156)	1.054*** (0.156)
Observations	1933	1933	1933
R^2	0.552	0.552	0.553

Standard errors in parentheses

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

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