

THE INFLUENCE OF NON-ECONOMIC HOUSEHOLD RESOURCES ON SCHOOLING

Pearl Kyei

BACKGROUND

Female headship, typically synonymous with single parenthood, has a negative influence on the lower cognitive development and academic achievement of children (Guo and Harris 2000; Pong, Dronkers, and Hampden-Thompson 2003; Park 2007) and is a growing concern as the number of female-headed households is increasing worldwide (Buvinić and Gupta 1997; Casper and Bianchi 2002; Lloyd and Gage-Brandon 1993). In sub-Saharan Africa however, female headship has a positive association with children's educational participation (Lloyd and Blanc 1996; Sibanda 2004; Townsend et al. 2002). Children living in female-headed households have higher enrolment and grade completion rates (Lloyd and Blanc 1996) and are less likely to drop out of both primary and secondary school (Sibanda 2004). The benefit of living in female-headed households is not limited to education alone as it extends to nutritional (Kennedy and Peters 1992; Buvinić and Gupta 1996) and health outcomes (Castle 1995; Pfeiffer, Gloyd and Li 2000) as well.

The positive relationship between female headship and education is very relevant from both a research and a policy perspective. Because income constraints and gender represent major impediments to educational attainment in this region (Ashiabi 2000; Fentiman, Hall and Bundy 1999; Lloyd and Blanc 1996), understanding the pathways through which female-headed households overcome their lower socio-economic status to provide positive outcomes for children is important. Understanding the success of female household heads can thus provide insight into improving schooling outcomes for other disadvantaged groups to reduce educational inequality in the region.

The female headship advantage is well established in the African education literature where female headship is typically used as a control variable in studies on schooling. None have yet undertaken a detailed analysis to explain this surprising association and the resources, apart from household income, that female-headed households draw on to invest in children's education. In this paper, I explore the relationship between non-economic resources and

schooling using longitudinal data on Black households from the Cape Area Panel Study to explore the educational resource differences between female and male-headed households and to analyze the influence of female headship on three key outcomes: educational expectations, schooling progress, and academic achievement.

HYPOTHESES

I identify three theoretical reasons to explain the education advantage. (1) That female household heads receive supplementary economic resources from alternate sources that allow them to have greater household income meaning that their economic disadvantage relative to male-headed households is overstated. (2) That female-headed households have more child-oriented resource allocation so that even with lower household income they can make comparable investments to child education as male-headed household with greater household income. (3) That female household heads receive social support from strong networks that alleviate the constraints of female headship. The first explanation would mean that the resources available to female household heads are underestimated and thus they may have more resources available to invest in children than previously believed. The next is that female-headed households do have severe resource constraints as believed but have a more child-orientation allocation of resources and as such can invest as much or more in education than male-headed households. The final explanation is those female-headed households have the advantage of strong networks that provide support and alleviate the pressures of low socioeconomic status.

DATA AND METHODS

The data is from the Cape Area Panel Study¹ (CAPS), a longitudinal survey of households and youth in metropolitan Cape Town. I focus primarily on Blacks because they are the race

¹ The Cape Area Panel Study (Lam et al. 2007) Waves 1-2-3-4 were collected between 2002 and 2006 by the University of Cape Town and the University of Michigan, with funding provided by the US National Institute for Child Health and Human Development and the Andrew W. Mellon Foundation. Wave 4 was collected in 2006 by the University of Cape Town, University of Michigan and Princeton University. Major funding for Wave 4 was provided by the National Institute on Aging through a grant to Princeton University, in addition to funding provided by NICHD through the University of Michigan. Additional information on the survey and technical documentation is available in Lam et al. (2007) and on the CAPS web site: www.caps.uct.ac.za.

group for whom the female headship advantage has been observed in South Africa. Households where the household head and the young adult were not the same-race were excluded. The education indicators used in the analysis are schooling progress, educational schooling achievement and education expectations. For schooling progress, the variable is grade for age to measure whether young adults have completed the appropriate years of education for their age and how many years they are lagging behind. To calculate schooling I subtract completed years of education plus six from age. Young adults who are lagging behind would have a lag time of 2 or more. This is a more informative measure than current enrolment as it provides detail on how consistent school attendance has been for the child as late enrollment, grade repetition and schooling interruptions are common factors that depress educational attainment. The measure for achievement will be performance in the matriculation examination (the 12th grade examination which is required for the transition to post-secondary education). The final education indicator is educational aspirations which will be represented with a dummy variable for whether the respondent aspires to go to college or graduate school. It is based on a question in the survey that asks the highest education level the young adult expects to attain.

The first step of the analysis is to predict the education outcomes using the conventional measures of household internal socio-economic resources (household per capita income and household head education). The next is to add additional measures for household internal resources (home ownership, proportion of household employed, and mean household adult education level) to determine whether these explain away some of the disparities by household head gender. Then I include measures of resource allocation (per child expenditure and proportion of household budget used on education-related expenditures). For internal resources, these variables measure the disparities in overall resources between female- and male household heads and the disparities in expenditures on education investments to determine whether female-headed households have greater education expenditures at similar income levels to male-headed ones.

The next step is to include measures for supplementary resources (transfers and remittances) available to households that can improve education outcomes and compensate

for low socio-economic status. This will indicate female-headed households have greater resources overall to invest in children than comparable male-headed households. The first control variables are that for economic resources from external sources, to determine whether female headed households have access to alternate resources that compensate for their lower socio-economic status and the extent to which accounting for external income sources explains the differences in education outcomes by household head gender. The next set of controls measure non-economic resources using extended family/social support (residence of extended family members, membership in community savings groups, extended family member helped/helps with schoolwork, extended family important influences growing up) to determine whether these less tangible factors that are not often measures can explain away part of the differences by household head gender. The expectation is that female-headed households would receive more external transfers to supplement their household income and reduce the economic disparity between them and male-headed households while receiving stronger social support from extended family.

PRELIMINARY FINDINGS

The findings reveal that external transfers to female-headed households allow them to compensate somewhat for their socio-economic disadvantage relative to male-headed households allowing them to invest a similar level of resources into education expenditures. I find very strong influences of non-monetary support from social networks – mainly from extended family – on the differences by household head gender in educational but find minimal contributions of resource allocation on these differences. The results also reveal that part of the female headship advantage is explained by using detailed measures to represent household socio-economic resources indicating that the female headship advantage is overstated in the studies that rely on basic economic indicators. Finally, adolescents in female-headed households are also more likely to have characteristics that promote achievement such as self-efficacy and extracurricular activity suggesting female-headed households are better able to nurture such beneficial intangible traits.

REFERENCES

- Ashiabi, Godwin S. 2000. "Some Correlates of Childhood Poverty in Ghana." *Journal of Children and Poverty* 6(2):155-169.
- Buvinić, Mayra and Geeta R. Gupta. 1997. "Female-Headed Households and Female-Maintained Families: Are They Worth Targeting to Reduce Poverty in Developing Countries?" *Economic Development and Cultural Change* 45(2):259-280.
- Castle, Sarah E. 1995. "Child Fostering and Children's Nutritional Outcomes in Rural Mali: The Role of Female Status in Directing Child Transfers." *Social Science & Medicine* 40(5):679-693.
- Fentiman, Alicia, Andrew Hall and Donald Bundy. 2001. "Health and Cultural Factors Associated with Enrollment in Basic Education: A Study in Rural Ghana." *Social Science & Medicine* 52(3):429-439.
- Guo, Guang and Kathleen M. Harris. 2000. "The Mechanisms Mediating the Effects of Poverty on Children's Intellectual Development." *Demography* 37:431-447.
- Kennedy, Eileen and Pauline Peters. 1992. "Household Food Security and Child Nutrition: The Interaction of Income and Gender of Household Head." *World Development*, 20(8):1077-1085.
- Lloyd, Cynthia B. and Ann K. Blanc. 1996. "Children's Schooling in Sub-Saharan Africa: the Role of Fathers, Mothers and Others." *Population and Development Review* 22(2):265-298.
- Pfeiffer, James, Stephen Gloyd and Lucy R. Li. 2001. "Intrahousehold Resource Allocation and Child Growth in Mozambique: an Ethnographic Case-Control Study." *Social Science & Medicine* 53(1):83-97.
- Pong, Suet-Ling, Jaap Dronkers and Gillian Hampden-Thompson. 2003. "Family Policies and Children's School Achievement in Single- versus Two-Parent Families." *Journal of Marriage and Family* 65(1):681-699.
- Sibanda, Amson. 2004. "Who Drops Out of School in South Africa? The Influence of Individual and Household Characteristics." *African Population Studies* 19(1):99-117.
- Townsend, Nicholas, Sangeetha Madhavan, Stephen Tollman, Michel Garenne and Kathleen Kahn. 2002. "Children's Residence Patterns and Educational Attainment in Rural South Africa, 1997." *Population Studies* 56(2):215-225.