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Living Arrangements of Sub-Saharan African Elders and Upward Intergenerational Transfers: Evidence from Senegal

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ABSTRACT

In several sub-Saharan African countries, social security, pension and public health systems, essential for wellbeing, are insufficient or non-existent. In these conditions, family acts as the main provider of support for elders though coresidence with non-dependent adult and intergenerational transfers (financial and material) from non-coresident. This paper examines these forms of support in order to understand how living alone or only with their spouse, rather than coresiding with non-dependent adult children influence the receipt of intergenerational financial/material transfers to older people in a SSA country such as Senegal. Using the first and second round of Poverty and Family Structure Survey, a national survey carried out in 2006 and 2010, we estimate a recursive bivariate probit model with simultaneous equations in order to reduce possible endogeneity bias. This study aims to contribute to the emerging literature on intergenerational relationships in SSA context.

BACKGROUND AND RESEARCH QUESTIONS

According to the 2017 World Population Ageing report (Nations Unies, 2017b), the number of elders (over 60 years old) in sub-Saharan Africa is expected to increase threefold by 2050. Concerns raised include their living and health conditions as well as high poverty levels and high disease burdens (World Health Organisation, 2015). In several sub-Saharan African countries, social security, pension and public health systems, essential for wellbeing, are insufficient or non-existent (National Research Council, 2006; Pison, 2009; World Health Organisation, 2015). In the absence of formal health insurance and social protection system, family acts as the main provider of support for elders though coresidence with non-dependent adult and intergenerational transfers (financial and material) from non-coresident (Antoine, 2007, 2009; Bengtson et Roberts, 1991). In general, support for the elderly comes from their children. Extended family also contributes. Support takes the form of measures that can take place both within the household (intra-household) as part of coresidence between the elderly and their non-dependent adult children (intergenerational cohabitation), and between households (inter-household) through the intergenerational transfers of resources (financial or material) that they receive from their non-coresident children. The relationship between these forms of support is poorly documented and overlooked in the literature, particularly in sub-Saharan Africa. In this paper, we examine the link between elderly living arrangements and upward intergenerational transfers of resources from non-coresident adult children to older people in Senegal, a sub-Saharan country.

Few studies suggest that older persons' living arrangements in developing countries are determined by both sociocultural preferences and constraints (economic, health, disabilities, etc.), and is strongly associated with elderly well-being (Bongaarts et Zimmer, 2002; Chen et al., 2017; Kohler et al., 2012; Pal, 2006; Ruggles et Heggeness, 2008; Zimmer et Dayton, 2005). Although those researches suggest that elderly coresidence with adult children is

essential to welfare in old age, others argue that living arrangements of older people, especially in developing countries are changing significantly with increased proportions of elders living alone or only with their spouse (Nations Unies, 2005; Zimmer et Dayton, 2005; Zimmer et Das, 2014; Nations Unies, 2017a). This cohabitation patterns' transformation is due to several factors. First, rural to urban migration of younger generations, as a result of lacking economics opportunities,, could reduce the household size and increase the proportion of older people living alone or only with their spouse. Second, changing norms with urbanization and individualism represent a great challenge for maintaining family solidarity, particularly in the urban areas. Third, both effects of HIV/AIDS and maternal mortality, which concern especially adults, generated a new household type called a skipped generation household (older adult living with grand children without adult). Fourth, economic context corrupted by youth unemployment, house crisis and early fertility, which force adult children to delay their departure from home because they are still unable to take care of themselves.

Yet, it is still unknown whether or not intergenerational transfers from adult children to older parents is affected by the new configuration of elderly living arrangements in sub-Saharan Africa context. Furthermore no consensual results on this issue is available for other developing countries. Three major theories can be used to explain the motivations of the intergenerational transfers: altruism (Becker, 1974), exchange (Bernheim et al., 1985) and biology (Hamilton, 1964). In addition, Fingerman (2013) suggested that intergenerational transfers can be explained in regard of three broader topics: solidarity theory, intergenerational ambivalence theory and multidimensional model of support.

This paper examines the association between living arrangements and the probability that an older adult in Senegal would receive intergenerational transfers from their adult children. The interest of this study is threefold. First, instead of the simple presence of an adult child in the household when they live with their older parent, we also consider their dependency status in order to determine that adult child is an opportunity for elderly support or a household load. Second, if the adult child is non-coresident, we introduce a variable which indicates whether he lives close to the elderly's household in order to measure potential effects of children's living distance on upward intergenerational transfers (Chen et al., 2017). Third, living arrangements decision of older adults can be the result of frequently receiving intergenerational transfers from adult children, which generate a potential reversed causality by endogeneity (Pal, 2006). Indeed, elders receiving more financial and material transfers can be more likely to live alone as higher wealth reduces vulnerabilities and constraints.

By considering these new elements and many others, we aim to answer the following questions:

- To what extent are elders in Senegal receiving intergenerational transfers in response to their living arrangements?
- Does living alone or only with their spouse, rather than coresiding with non-dependent adult children influence differently the receipt of intergenerational financial or material transfers?
- How does coresidence with, and proximity to, non-dependent adult children influence the receipt and the amount of the transfers to the older person?
- Does coresidence with non-dependent adult children have more significant effects on intergenerational transfers for elderly women than men or in rural areas than urban one?

DATA AND METHODS

Data

We used data from the first and second round of the Poverty and Family Structure Survey in Senegal, a national survey carried out in 2006 and 2010 and conducted by the National Agency for Statistics and Demography. The main objective of that survey was to analyse the determinants of family structures and their consequences on households and individuals' well-being. The household sample interviewed for the first round is 2080¹ and 2953 households for the second round, with about 85% of the people interviewed in 2006 found in 2011. People over 55 years old will be considered as elderly in this study, that's about 977 individuals.

Dependent variables

Intergenerational transfers (financial and material) from non-coresident children to elderly We used three variables to represent whether elders received a transfer from non-coresident adult children during the past 12 months: (a) financial transfers, (b) material support and (c) amount of financial transfers. We measured the amount of financial transfers based on the total that parent had received from each child during the past 12 months.

Independent variables

Living arrangements are our main independent variables. We measured living arrangements with two variables: coresidence with, and proximity to non-dependent child.

Control variables include age, gender, residence's area, marital status, education level, occupation, elderly wealth, health status and functional health difficulties, total number of children, number of dependent and non-dependent in the household.

Methods

To explore the background characteristics of the respondents, univariate techniques such as frequency distribution are used. Also, bivariate techniques such as chi square statistic examined association between independent and dependent variables, by gender and residence's area. We use the recursive bivariate probit model to control the association between living arrangements and the probability that an older adult in Senegal would receive intergenerational transfers from their adult children. We give priority to this method to reduce possible endogeneity bias due to the reversed causality.

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¹ These are 1800 sampled households and 280 secondary households, i.e. those of the spouses of the sampled heads of households who were also interviewed (particularly in a polygamous household).

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