# Intergenerational Patterns of Family Formation in sub-Saharan Africa Somefun Oluwaseyi<sup>1</sup> <sup>1</sup>Demography and Population Studies, School of Public Health and Social Sciences, Faculty of Humanities, University of the Witwatersrand, Johannesburg, 2000,

South Africa.

#### Abstract

Is there an intergenerational transmission of family formation in sub-Saharan Africa and are the patterns different in each of the countries in the region? The transmission of family demographic behaviour has been extensively studied with results showing that a number of young people show the same behaviour as their parents. Recent studies have documented the relationship between different socio-cultural factors associated with family formation among young people; however the role of intergeneration regularities in family formation of young people in SSA is scarce. Examining the social control theory and the life course perspective, this paper hypothesizes that youth who experience parental cohabitation or divorce would have an elevated risk of divorce or not entering into union. This paper also examines whether these associations vary in different societal contexts. We pooled census data from 6 purposefully selected countries in SSA which are available through Integrated Public Use Microdata Series (IPUMS)-International, consisting of 3,920,102 young people aged 15-35. Frequency distributions and multinomial logistic regression was modelled to examine the association between household family formation and youth union formation. Results showed that children of parents who were divorced had higher odds of being divorced. These results were similar for all the countries studied. We contribute to literature by applying the conceptual and analytical framework of intergenerational patterns of family formation to nationally representative data in SSA and systematically comparing them in different contexts.

#### Background

The family although a basic unit, is known to be one of the most important institutions in the society. This is because of the socio-economic stability and human capital it helps provide for its members and it's a foundation on which other institutions in the society are deeply rooted in. Acknowledging its importance, there have been a lot of family studies noting that positive familial outcomes have a positive effect on the society at large. For instance, protective family structure has been linked with better academic outcomes among youth (Odimegwu et al., 2017), lower rates of juvenile delinquency (Guillen et al., 2015) and various health outcomes (Annim et al., 2015, Akinyemi et al., 2017). However, the family unit is experiencing some changes.

Globally, changes have occurred in the transition to adulthood and family formation patterns have experienced changes in recent times. These changes have been demonstrated in the modern trends and sequencing of important demographic transitions such as cohabitation, nuptiality and fertility. Some of the documented changes include an increase in the age at first union (Koski et al., 2017), increased cohabitation rates (Kimani and Kombo), increased divorced rates (Thiombiano, 2017) and pre-marital fertility (Smith-Greenaway, 2016).

The dynamics in the emerging life course trends have been on the agenda of social scientists and they have collectively attributed these changes to be as a result of the second Demographic Transition Theory. This theory argues that the principal driver of these changes is as a result of diffusion of ideas, change in the socio-economic status of women and technological advancements which have led to individualization and materialistic values (Zaidi and Morgan, 2017).

These values have an effect on the percentage of lone motherhood and divorce rates which have implications for various outcomes. Using data from 11 countries in sub-Saharan Africa, child mortality was higher among children who had mothers that were previously married and children of divorced had higher odds of child mortality in all the countries studied (Clark and Hamplová, 2013). These results are similar to results found in Cameroon, Nigeria and DRC where lone motherhood was associated with higher odds of child stunting (Ntoimo and Odimegwu, 2014). These changing family forms have not only affected health outcomes but other outcomes such as educational attainment which is important for human capital development have been influenced (Lloyd and Blanc, 1996).

These changes have not been restricted to adults alone. Young people are also experiencing some changes during their life course. On the average, some youth get into unions earlier than their counterparts while others cohabit or choose to remain single. Factors associated with union formation among youth have been well documented. For instance, socio-economic status such as employment and income has been linked with union formation of young people in developed countries (Jalovaara, 2012, Carlson et al., 2004, Jang and Snyder, 2015, Domínguez-Folgueras and Castro-Martín, 2008) and in sub-Saharan Africa (Calvès, 2016). In contribution to the relationship between economic strain and union formation, another study found a negative association between student loan and union formation among young adults (Bozick and Estacion, 2014).

Although there is a growing number of a literature on union formation among youth beyond developed countries, still missing from the literature is an examination of marriage entry and exit among the young population in SSA. Furthermore, as in many Western countries, youth family formation in SSA has transformed significantly: between 1990 and 2014, there has been a reduction in the number of young people getting married before the age of 17 (Amoo, 2017). Other studies have also documented a 4-year increase in the age at first marriage for men (from 21-24 years) and 2 years (from 18-19 years) for women. Men reported a longer time spent single than women (median 4–7 years for men and 0–2 years for women) (Marston et al., 2009).

#### **Theoretical underpinning**

Social control can be described as individual characteristic that is established early in life which can influence future behaviour. Parents usually serve as role models to their children. Children are more likely to model the behaviours of their parents because of the influence parents have over their children. From birth, a parent will nurture and sharpen behaviours suitable to the norms of society through childrearing. However, there are certain parenting techniques that have a greater impact on a child's behaviours. For instance, children born to unmarried parents may view non-marital fertility as the norm and desirable (McLanahan and Bumpass, 1988, Thomson et al., 1992). Another mechanism in which social control can influence behaviours of youth in the household is the absence of mentors or role models who can positively influence the behaviours of young people in the household.

The life course perspective postulated by (Elder Jr, 1994) stresses the belief that lives are lived mutually and the changes in a parent's life for example causes changes for their children. The life course perspective has been well established as an important framework for examining

youth development. This is because of its approach to placing significance on all the events that takes place in the lives of young people; thereby not separating any stage (Johnson et al., 2011). Although this framework has been used to explain how events during childhood influences health outcomes among youth, there is paucity of research in sub-Saharan Africa on how family formation patterns influence youth family formation.

Examining the reciprocal effects of religiosity of mothers on marital behaviour of children, Thornton et al. (1992) found that children from less religious families had higher rates of entering into cohabiting unions with gender differentials.

However, missing in the African literature is the intergeneration transmission of family formation patterns. Based on this background, we examine family formation in different countries based on the assumption that childhood experiences in the family of origin shape the subsequent life courses. More specifically, I focus on how the family formation patterns of parents are associated with the family formation of young people in the household.

#### **Data and Methods**

This study utilizes cross-sectional data from the Integrated Public Use Microdata Series– International, 2010 (IPUMS). The IPUMS is a compilation of harmonized censuses from countries throughout the world and access was granted by the Minnesota Population Center. These data are a 10% randomly chosen sample of the census data, and individual weights have been applied. More details regarding the data set have been documented by (Jeffers et al., 2017).

#### Sample

The target population for this study would be youth. The specific age-group which defines youth varies across the African continent. Most of these definitions depend on cultural, institutional and socio-political issues. For example, in many African settings, laws define adulthood as commencing from the age of 21 although there has been an attempt to lower to age 18 years in the recent years (Curtain, 2000). However, some parts of rural Africa define adulthood as the capacity to sustain a legal marriage and those who are not married till be regarded as children (Abdullah, 1999). For standardization purposes, the United Nations came up with specific age categories to define youth. The standard United Nations definition states that youth include people between 15 and 24 years of age. This definition is inconsistent with the definition of youth as contained in the Nigerian National Youth policy which defines youth

as comprising all young persons between the ages 18 and 35 and the South African National Youth Policy 2009-2014 which refers to youths as those falling within the age group of 14 to 35 years. This is because the youth category has been extended to 30 years and beyond in many African settings which is a reflection of prolonged youth dependence. It also reveals the inability of many young people to pursue sustainable livelihoods as a result of the stagnant economic situation in SSA. For the purpose of this study, youth would be defined as males and females aged 15-35.

This paper used most recent data for the selected countries: Nigeria (2010), Ghana (2010), West Africa; Tanzania (2010) and Botswana (2011), South Africa (2011), Zambia (2010) representing Southern Africa. The selection criterion was that the countries should have had a census from the year 2010. These countries met this criterion.

#### **Outcome Variable**

Within the IPUMS data, a question was asked on marital status. The variable describes the person's current marital status according to law or custom. Census instructions rarely explicitly limit marital status to strictly legal unions. The variable was coded as; 1"Single" 2"In union" 3"Formerly married".

#### **Independent Variables**

The key independent variable in this study is parental family structure. The marital status of the household head was used. In a number of households, when young people get married, they tend to set up their own household but we were able to deal with this selectivity by linking young people with the variable which measured relationship to head of household. We dropped categories where the head of household was the spouse. Household heads that were widowed were also dropped from the sample. The variable was measured as 1"Never Married" 2"Married" 3 "Cohabiting" and 4"Formerly married".

Based on reviewed literature, we identified some significant demographic and socioeconomic predictors of family formation among youth, and we controlled for some of the demographic and socioeconomic predictors of family formation. These variables include age, religion, place of residence, educational attainment, work status, mother's education, father's education, and wealth status, which is a proxy for household socioeconomic status (SES) captured through a wealth index based on household possessions and amenities.

IPUMS data do not provide direct information on household income but principal components analysis (Fry et al., 2014) was used to derive a proxy indicator for household SES (i.e., total assets score) using information on housing characteristics (i.e., roof condition, wall condition, floor condition, land area), access to utilities and infrastructure (i.e., water supply, electricity, type of toilet), and durable asset ownerships (i.e., television, radio, telephone, computer, washing machine, refrigerator, air condition, motorcycle).

#### Analysis

The descriptive statistics shows the distribution of youth by the key variables. Values were expressed as absolute numbers (percentages) and median ( $\pm$  standard error) for categorical and continuous variables, respectively. Multinomial logistic regression was used based on the nature of the outcome variable. Sampling weights were applied to adjust for differences in probability of selection and to adjust for nonresponse to produce the proper representation. Individual weights were used for descriptive statistics in this study, using Stata 14 for Windows. Results on measures of association were presented as relative risk (RRR) for being in union and divorced, with alpha level set at .05.

#### **Ethical Consideration**

The IPUMS-International data can be downloaded from the website and is free to use by researchers for further analysis. To access the IPUMS data, permission was obtained from the Minnesota Population Centre.

#### Results

#### **Descriptive Results**

Descriptive results in figure 1 show that more than half of the young people in study countries were never married. About 83% of the young people have never been married in South Africa compared to 63% of never married youth in Tanzania. Although results are not presented in Figure 1, Botswana had the highest number of young people cohabiting at 19% compared to about 1% of youth cohabiting in Nigeria.

#### **Bivariate Association**

The unadjusted results show an association between parent's union formation and youth union formation. The results were similar for the study countries. In all the countries studied, young

adults who had divorced or separated parents had lower odds of being single. Parental divorce was associated with elevated odds of divorce among young adults in all the countries studied.

#### **Multivariate Analysis**

After controlling for other covariates in panel 2 of Table 1, results show that the odds of being single remain the same for the study countries. Young people who had parents cohabiting had lower odds of remaining single. This result was similar for young people who had divorced parents. Also, the relative risk of divorce was higher among young adults who had divorced parents in all the countries. However, in Botswana and Ghana, young adults who had cohabiting parents had lower odds of being divorced. These results differed for results in South Africa, Tanzania and Zambia where young adults with cohabiting parents had lower had higher odds of being divorced, although the association was not statistically significant.

The results in table 2 present results for pooled data. Parental divorce was associated with lower odds of being never married and higher odds of young adults experiencing divorce. Other significant covariates include, sex, age and socio-economic status of the young adult.

#### **Discussion and Conclusion**

Family formation patterns are changing and young people are also experiencing changes in their family formation patterns. Although a number of factors have been associated with union formation of young people, we examine whether parental family formation was associated with family formation of young people in sub-Saharan Africa.

Descriptive statistics show that more than half of the young people in the countries we studied were never married. This is possibly because of the sample which included young adults aged 15-18. It could also be that young adults are delaying married in SSA which has been shown in the literature. Although there are few studies reporting divorce or separation among young adults, our study found low percentages of young adults that have been separated or divorced. Divorce ranged from 3% in Zambia to about 1% in Botswana, Nigeria and South Africa.

Our results are in line with one of our hypothesis. Parental divorce was positively associated with divorce of young adults in all the countries studied. This result can be supported by the social control theory where children are more likely to model the behaviour of parents.

#### Limitations

Due to cultural and social norms in some countries, young people in cohabiting unions may report being married. In addition, the complexity of intergenerational processes; in particular, the interactive and serial nature of youth life trajectories, presents some challenges for researchers using cross-sectional data.

#### **Policy Implications**

It is important that family demographers understudy the continuity of family formation patterns in SSA where family formation is changing rapidly. This is because program planners may want to design and implement preventive interventions aimed at improving or sustaining healthy youth family formation patterns.

	Par	Panel 1		Panel 2	
	Never married vs In Union	Divorced vs In Union	Never married vs In Union	Divorced vs In Union	
	Unadjusted RRR (CI)	Unadjusted RRR (CI)	Adjusted RRR (CI)	Adjusted RRR (CI)	
Country					
Botswana					
Never Married					
Married	0.19 (0.18-0.20) ***	0.52 (0.34-0.79) ***	0.67 (0.43-1.05)	0.21 (0.05-0.78) *	
Cohabiting	0.04 (0.04-0.04) ***	0.14 (0.09-0.23) ***	0.42 (0.26-0.66) ***	0.12 (0.02-0.56) *	
Divorced/Separated	0.30 (0.26-0.34) ***	37.83 (26.26-54.50) ***	0.22 (0.05-0.88) *	-	
Ghana					
Never Married					
Married	0.06 (0.05-0.06) ***	0.22 (0.21-0.25) ***	0.26 (0.20-0.35) ***	0.49 (0.25-0.95)	
Cohabiting	0.01 (0.01-0.02) ***	0.09 (0.08-0.11) ***	0.22 (0.16-0.29) ***	0.57 (0.28-1.13)	
Divorced/Separated	0.16 (0.15-0.16) ***	9.47 (8.65-10.36) ***	0.46 (0.27-0.81) **	7.52 (3.19-17.74) ***	
Nigeria					
Never Married					
Married	0.02 (0.01-0.04) ***	Na	Na	Na	
Cohabiting	0.04 (0.01-0.01) ***	Na	Na	Na	
Divorced/Separated	0.38 (0.13-1.11)	na	na	na	
South Africa					
Never Married					
Married	0.07 (0.07-0.07) ***	0.21 (0.19-0.22) ***	0.29 (0.20-0.41) ***	1.21 (0.42-3.43)	
Cohabiting	0.01 (0.01-0.02) ***	0.05 (0.04-0.05) ***	0.27 (0.19-0.39) ***	1.06 (0.36-3.03)	
Divorced/Separated	0.27 (0.26-0.28) ***	14.48 (13.48-15.55) ***	0.29 (0.12-0.68) **	29.40 (7.74-111.66) ***	
Tanzania					
Never Married					
Married	0.15 (0.15-0.16) ***	0.26 (0.25-0.28) ***	0.87 (0.78-0.96) **	1.03 (0.78-1.37)	
Cohabiting	0.08 (0.08-0.09) ***	0.15 (0.14-0.17) ***	0.84 (0.76-0.94) **	1.00 (0.73-1.36)	
Divorced/Separated	0.46 (0.45-0.47) ***	16.95 (16.00-17.95) ***	0.86 (0.76-0.98) *	1.90 (1.35-2.67) ***	
Zambia					
Never Married					
Married	0.03 (0.03-0.04) ***	0.10 (0.09-0.12) ***	0.38 (0.20-0.71) **	2.16 (0.60-7.75)	
Cohabiting	0.01 (0.01-0.21) ***	0.06 (0.04-0.07) ***	0.30 (0.15-0.57) ***	1.62 (0.44-6.01)	

 Table 1: Unadjusted and Adjusted Multinomial logistic regression predicting intergenerational family formation by Country

Divorced/Separated	0.21 (0.19-0.23) ***	11.18 (9.59-13.02) ***	0.55 (0.28-1.09)	6.80 (1.82-25.30) ***

\*=p<0.1 (significant at 10%) \*\*=p <0 .05 (significant at 5%) \*\*\*=p<0.01 (significant at 1%)

## Table 2: Adjusted Multinomial logistic regression predicting intergenerational family

### formation in SSA

Variables	Adjusted RRR (CI)	Adjusted RRR (CI)	
	Never married vs In Union	Divorced vs In Union	
Union Status			
Never Married			
Married	0.27 (0.22-0.34) ***	0.68 (0.39-1.18)	
Cohabiting	0.37 (0.29-0.46) ***	0.76 (0.43-1.33)	
Divorced/Separated	0.33 (0.21-0.52) ***	12.77 (6.28-25.96) ***	
Sex			
Male			
Female	0.72 (0.71-0.74) ***	2.14 (2.01-2.28) ***	
Age			
15-19			
20-24	0.48 (0.47-0.50) ***	1.44 (1.29-1.59) ***	
25-29	0.25 (0.25-0.26) ***	1.85 (1.67-2.05) ***	
30-35	0.14 (0.14-0.15) ***	2.87 (2.60-3.17) ***	
Residence			
Rural			
Urban	1.16 (1.15-1.21) ***	1.04 (0.97-1.11)	
Educational attainment			
No Education			
Primary Education	1.78 (1.75-1.87) ***	1.30 (1.18-1.44) ***	
Secondary Education	2.82 (2.79-2.98) ***	1.14 (1.04-1.25) ***	
Higher Education	3.26 (3.11-3.49) ***	0.79 (0.66-0.94) ***	
Work Status			
Employed			
Unemployed	2.23 (2.18-2.28) ***	0.90 (0.86-0.98) *	
Wealth Status			
Poor			
Middle	1.14 (1.12-1.17) ***	0.90 (0.84-0.96) ***	
Rich	1.08 (1.04-1.11) ***	0.73 (0.67-0.80) ***	
Fathers Educational Attainment			
Less than Primary Completed			
Primary Completed	0.82 (0.80-0.85) ***	1.26 (1.17-1.36) ***	
Secondary Completed	0.79 (1.64-1.78) ***	1.27 (1.13-1.29) ***	
University Completed	2.15 (1.98-2.33) ***	1.27 (1.04-1.54) *	
Mothers Educational Attainment			
Less than Primary Completed			
Primary Completed	1.37 (1.33-1.41) ***	1.03 (0.95-1.11)	
Secondary Completed	1.71 (1.64-1.78) ***	1.14 (1.01-1.29) *	
University Completed	2.15 (1.98-2.33) ***	1.17-1.81) ***	

\*=p<0.1 (significant at 10%) \*\*=p <0.05 (significant at 5%) \*\*\*=p<0.01 (significant at 1%)



#### Figure 1: Percentage Distribution of Union Status by Country

#### **Appendix 1: Sample Size by Country**

	Males	Females
Country	Frequency	Frequency
Botswana	38,946	36,114
Ghana	431,407	355,950
Nigeria	11,789	5,650
South Africa	790,667	669,698
Tanzania	697,547	510,890
Zambia	232,902	138,542
Total	2,203,258	1,716844

#### References

- AKINYEMI, J. O., SOMEFUN, O. D. & AJAERO, C. K. 2017. Family structure and full vaccination coverage among children aged 12-23 months in West Africa: Analysis of the interaction effects of maternal education. *African Population Studies*, 31.
- AMOO, E. O. 2017. Trends and determinants of female age at first marriage in Sub-Sharan Africa (1990-2014) What has changed? *African Population Studies*, 31, 3573-3585.
- ANNIM, S. K., AWUSABO-ASARE, K. & AMO-ADJEI, J. 2015. Household nucleation, dependency and child health outcomes in Ghana. *Journal of biosocial science*, 47, 565-592.
- BOZICK, R. & ESTACION, A. 2014. Do student loans delay marriage? Debt repayment and family formation in young adulthood. *Demographic Research*, 30, 1865.
- CALVÈS, A.-E. 2016. First union formation in urban Burkina Faso: Competing relationship transitions to marriage or cohabitation. *Demographic Research*, 34, 421.
- CARLSON, M., MCLANAHAN, S. & ENGLAND, P. 2004. Union formation in fragile families. *Demography*, 41, 237-261.

- CLARK, S. & HAMPLOVÁ, D. 2013. Single motherhood and child mortality in sub-Saharan Africa: A life course perspective. *Demography*, 50, 1521-1549.
- DOMÍNGUEZ-FOLGUERAS, M. & CASTRO-MARTÍN, T. 2008. Women's changing socioeconomic position and union formation in Spain and Portugal. *Demographic Research*, 19, 1513.
- ELDER JR, G. H. 1994. Time, human agency, and social change: Perspectives on the life course. *Social psychology quarterly*, 4-15.
- FRY, K., FIRESTONE, R. & CHAKRABORTY, N. M. 2014. Measuring equity with nationally representative wealth quintiles. *Washington DC*.
- GUILLEN, N., ROTH, E., ALFARO, A. & FERNANDEZ, E. 2015. Youth alcohol drinking behavior: Associated risk and protective factors. *Revista Iberoamericana de Psicología y Salud*, 6, 53-63.
- JALOVAARA, M. 2012. Socio-economic resources and first-union formation in Finland, cohorts born 1969–81. *Population studies*, 66, 69-85.
- JANG, B. J. & SNYDER, A. R. 2015. Moving and union formation in the transition to adulthood in the United States. *Advances in life course research*, 23, 44-55.
- JEFFERS, K., KING, M., CLEVELAND, L. & KELLY HALL, P. 2017. Data resource profile: IPUMS-International. *International journal of epidemiology*, 46, 390-391.
- JOHNSON, M. K., CROSNOE, R. & ELDER, G. H. 2011. Insights on adolescence from a life course perspective. *Journal of Research on Adolescence*, 21, 273-280.
- KIMANI, E. & KOMBO, K. Challenges facing nuclear families with absent fathers in Gatundu North district, Central Kenya. 2010. 11-25.
- KOSKI, A., CLARK, S. & NANDI, A. 2017. Has Child Marriage Declined in sub-Saharan Africa? An Analysis of Trends in 31 Countries. *Population and Development Review*, 43, 7-29.
- LLOYD, C. B. & BLANC, A. K. 1996. Children's schooling in sub-Saharan Africa: The role of fathers, mothers, and others. *Population and development review*, 265-298.
- MARSTON, M., SLAYMAKER, E., CREMIN, I., FLOYD, S., MCGRATH, N., KASAMBA, I., LUTALO, T., NYIRENDA, M., NDYANABO, A. & MUPAMBIREYI, Z. 2009. Trends in marriage and time spent single in sub-Saharan Africa: a comparative analysis of six population-based cohort studies and nine Demographic and Health Surveys. *Sexually transmitted infections*, 85, i64-i71.
- MCLANAHAN, S. & BUMPASS, L. 1988. Intergenerational consequences of family disruption. *American Journal of Sociology*, 94, 130-152.
- NTOIMO, L. F. C. & ODIMEGWU, C. O. 2014. Health effects of single motherhood on children in sub-Saharan Africa: a cross-sectional study. *BMC public health*, 14, 1145.
- ODIMEGWU, C., SOMEFUN, O. D. & AKINYEMI, J. 2017. Gender Differences in the Effect of Family Structure on Educational Outcomes Among Nigerian Youth. *SAGE Open*, 7, 2158244017739948.
- SMITH-GREENAWAY, E. 2016. Premarital childbearing in sub-Saharan Africa: Can investing in women's education offset disadvantages for children? *SSM-population health*, *2*, 164-174.
- THIOMBIANO, B. G. 2017. Union breakdown in West African cities: The cases of Ouagadougou and Lomé. *Demographic Research*, 37, 101-128.
- THOMSON, E., MCLANAHAN, S. S. & CURTIN, R. B. 1992. Family structure, gender, and parental socialization. *Journal of Marriage and the Family*, 368-378.
- THORNTON, A., AXINN, W. G. & HILL, D. H. 1992. Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology*, 98, 628-651.
- ZAIDI, B. & MORGAN, S. P. 2017. The Second Demographic Transition Theory: A Review and Appraisal. Annual review of sociology, 43, 473-492.