The effects of ethnic political networks on educational attainment in Africa

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Since the African independence era, the educational infrastructure in sub-Saharan Africa has expanded dramatically. In many countries, however, that expansion does not seem to have been equal across regions and, therefore, ethnic groups. This paper asks whether these within-country inequalities are, in part, a product of differential access to ethnic political networks, sometimes referred to as "clientilist" and "neopatrimonial" politics combined with the centralization of both power and access to resources around the President.

The paper is part of a larger project that has merged unique data on places of birth or home areas of every African president since independence with Demographic and Health Survey data from 26 countries in sub-Saharan Africa. Overall sample size is roughly 270,000 people, though statistical tests are conducted at the district level (N=257-301, depending on the model).

The overall conceptual model tests how much different types of development outcomes (education, employment, morbidity and mortality) measured at time t are a product of differential access to political power at some time in the past (t-n). Controls are included for what (Horowitz 2000:151) calls "the ethnic distribution of colonial opportunity." Two types of models are specified. Main effects are estimated in fixed effects models (level of country). Random variation in the effects of political power across countries are estimated in hierarchical linear (multilevel) models.

Initial results from the main analysis are presented in the table below. They show that a district's past "access to political power" – indexed by (a) whether or not the country's president came from that district, and (b) how many years the president was in power – has no effect on contemporary educational inequalities. In the final paper, additional analyses will be presented that specify different lag times and interaction terms between political power and other district-level characteristics.

Table 1. Effects of district's political power and distance to the capital on women's years of schooling, net of individual-level characteristics

	(1)	(2)	(3)	(4)
Political power when individual was aged 0-6	0.284	0.226		
	(1.35)	(0.91)		
Political power 1-5 yrs prior to individual's birth		0.054		
		(0.23)		
Any political power when individual was aged 0-6			0.219	0.212
			(1.51)	(1.73)&
Any political power 1-5 yrs prior to individual's birth				0.012
				(0.13)
Distance from district to capital city	-0.001	-0.001	-0.001	-0.001
	(2.92)**	(2.82)**	(3.38)**	(3.37)**

| R-squared | 0.26 | 0.27 | 0.26 | 0.26 |

Initial results from the multilevel models are specified in Table 2. They show that there is considerable district and country-level variation in the effects of political power on education. This points to heterogeneity in the effects of this particular relationship. In other words, the clientilist model may work in some countries but may not adequately explain variation in education across Africa as a whole.

**Table 2. Variance components of 3-level random effects model,
net of fixed parameters, by dimension of development**

		Education
Country-level variance (intercept)	$_{k00}V$	1.82 (.287)***
Country-level variance (PP)	$_{k20}V$	.863 (.287)**
District-level variance	$_{jk0}U$	1.49 (.068)***
Individual-level variance	R_{ijk}	3.76 (.005)***