Policy adequacy, inclusion, and commitment: Impact of Household Expenditure in Education in China

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EXTENDED ABSTRACT

Globally, labor migration is an essential component of the 21st century. Much of the existing research on the consequences of labor migration on the family has focused primarily on the economic consequences while the consequences for social protection - including education, health care, child care and care for disabled and elderly adults - have received less attention. This can be explained in part by the dominance of the New Economics of Labor Migration (NELM) theory in migration scholarship which places financial risk management on individual households rather than formal social protection systems [1]. The intersection of labor migration and social protection is particularly complex within the Peoples Republic of China (hereafter China), where the *Hukou* household registration system, based on place of residence and generally administered by local municipalities, continues to be the primary mechanism through which people are eligible for government-subsidized social protection programs including public education. Decades of widespread 'temporary' migration of working-age population into urban centers are contributing to a disruption of the place-based social protection system. Migration is also disrupting traditional patterns of multigenerational household formation that traditionally has contributed a significant amount of direct social care for dependents including children, the disabled and aged adults. Different components of the social protection system are more pronounced depending on the family life course stage, reflecting a synergy and tension between the fulfillment of social reproduction and social protection aspirations and responsibilities. This current study examines the intersectionality of education policy and migration within the Chinese context of central-local policy implementation.

Education plays a critical role in social mobility within contemporary China, and as the 2nd and 3rd generation of Chinese rural-urban migrants increasingly have brought their children to the urban centers, education policy and practices have become an important target of policy [2]. Most of the existing research on education and migration has focused on youth populations experiencing migrant educational segregation and exclusion using geographically discrete areas within China [3-5]. Thus, while Hannum et al (2011) provide important information about lifecourse trajectories in education of contemporary Chinese youth, the study population is constrained to one origin province. Other studies examine regional variation in education policy content and rules in relationship to *Huko*u and migrant status [6]but there remains a significant research gap on the relationship between regional variation in social policy and youth lifecourse trajectories. In addition to the gap in empirical investigation of regional comparative social policy and individual outcomes more broadly [2, 7], there is a lack of systematic empirical evidence taking into the influence of different social and community characteristics on human capital acquisition and entry to the labor market for the youth population currently coming of age in China.

This paper explores the relationship between education policy indicators and household educational expenditure education using a cohort of children (aged 6 to 16 in 2010) from the China Family Panel Study (CFPS). We combine data from 2010 CFPS with secondary data collected from the China Statistical Yearbooks lagged by 1-3 years, depending on data availability. The first section provides general background on scholarship related to social policy decentralization in China. The second section briefly reviews the major milestones in migrant education and educational policy, highlighting geographical variation, when applicable. These two sections provide the broader context for the research study and are followed by the conceptual approach which draws on a body of

quantitative comparative policy variation research more commonly applied in the U.S. and Europe [8]. In the fourth section, information about the study data, including a description of the data sources and the method for creating the indicators is discussed. This is followed by the analysis where we employ multilevel models accounting for individual level characteristics, community characteristics and education policy indicators *adequacy, inclusion and commitment*.

We address the following research questions: (1) How does expenditure vary between local and migrant household with children across China? (2) What are the contributions of policy factors and community characteristics to explaining variability in household educational expenditure?

PRELIMINARY RESULTS

In this section we briefly describe preliminary results of hierarchical multilevel models predicting the key outcome variable of *educational expenditure*. The outcome is a log-transformed score of school-related fees including tuition, boarding fees, textbooks, and private tutoring derived from the CFPS. Details of measures on the individual level predictors, community characteristics, and policy factors are in Table 1.

The multilevel analysis suggests that the after controlling for individual, community characteristics and policy factors, there is no significant difference in educational expenditure between children from non-local and local households. Not surprisingly, household education expenditure for secondary school students is greater than primary school students reflecting educational costs more broadly in China. Compared to those attending public school, children attending private school also spent more on education. Mothers' education and household income have positive associations with child educational spending (See Table 1, Model 1).

Across the three dimensions of education policy, lower policy commitment (higher student to teacher ratio) shows a negative association with educational expenditure, suggesting households spend less when policy commitment is low. There appears to be no significant interaction between individual migrant status and educational policy indicators in predicting educational expenditure.

Although community level characteristics do not show a direct effect on education expenditure, the cross-level interaction estimates (see Model 3) point to the significance of density of community migrant population in explaining variability in educational expenditure between non-local and local Hukou households. As seen in Figure 1, the gap in educational expenditure between urban and migrant children narrows in migrant-concentrated (receiving) regions but widens in communities with low density of migrant population. In recent years, local governments in migrant destination areas have been instituting policy changes to provide more resources that promote greater inclusion of migrant children into education [9, 10]. The closing gap in educational expenditure for children in the migrant receiving region may be interpreted in the context of policy change. The overall cost for non-migrant children in both high- and low-density areas is similar, but migrant children's household pay more when they are in the population minority (Figure 1). The implications of this are not clear from the present study. For example, it could be that the low-density migrant areas could have less developed policy responsiveness to educational inclusion of non-local children while the more equal household expenditure in the high-density communities could indicate more inclusive educational policy responsiveness resulting in equal accessibility for local and migrant child populations. The cross-level interaction between education policy and migrant population density provides further insight (Model 4; Figure 2) whereby migrant children living in high migrant concentrated communities with low education policy commitment spend less on education compared to local children. This suggests different policy strategies for financing more inclusive education.

The findings from this study suggest that within the Chinese contest greater policy support is associated with increased household investment in education, perhaps indicating a preference for increasing household expenditure what may be perceived to be higher quality education. Given the continued salience of education as the pathway to social mobility in China, this is a reasonable conclusion. The paper concludes with discussion about implications for equitable education accessibility in China.

Table 1. Multilevel modeling of individual, community and policy factors in predicting household expenditure in education

Notes. **p<.01; *p<0.05		Model 0	Model 1	Model 2	Model 3	Model 4
Level 1 Individual	Intercept	3.022**	3.14**	3.17**	3.13**	2.94**
	Migrant status (1=nonlocal household; 0=local household)		0.063	-0.212	0.256	0.069
	Gender (1=girl; 0=boy)		-0.026	-0.028	-0.027	-0.027
	Grade(1=elementary; 0=secondary)		-0.127*	-0.13*	-0.13*	-0.127*
	School type (1=public school; 0=private)		-0.619**	-0.612**	-0.628**	-0.62**
	Family income		0.204**	0.203**	0.201**	0.198**
	Mother education		0.079**	0.079**	0.079**	0.081**
Level 2 Community	Educational expenditure		0.003	-0.0002	0.0029	0.002
(CID)	SES		-0.003	-0.005	-0.0016	0.0008
	migrant population (1 represent >20% migrant population in community)		-0.026	-0.028	-0.0025	0.853**
Level 3 Province	Adequacy (educational expenditure/enrollment)		-0.0007	0.0005	-0.0011	0.003
(Provcd)	Inclusion (child population/enrollment)		0.082	0.07	0.0874	0.0157
	Commitment (teacher-student ratio)		-0.052*	-0.052*	-0.0523*	-0.0304
Interactions (only significant interaction terms are displayed)						
	migrant*Community migrant population				-0.22*	
	Commitment*Community migrant population					-0.071*
	Provcd intercept variance	0.064	0.029	0.03	0.029	0.033
	cid intercept variance	0.082	0.045	0.045	0.044	0.042
	Residual	0.225	0.195	0.194	0.195	0.194

Figure 1.The two-way interaction with community migrant population and individual migrant status in predicting household expenditure in education
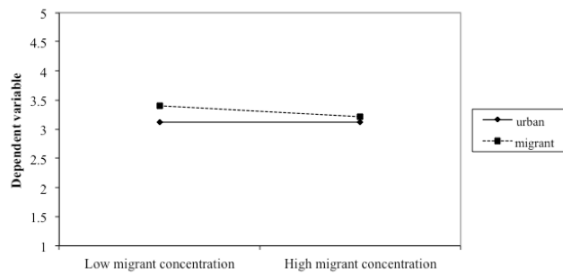
Notes. Moderator is migrant status (urban=local hukou household; rural=non local hukou household)
Predictor is migrant population (high migrant concentration refers to communities with >20% migrant population)

Figure 2.The two-way interaction with community migrant population and policy commitment in predicting household expenditure in education
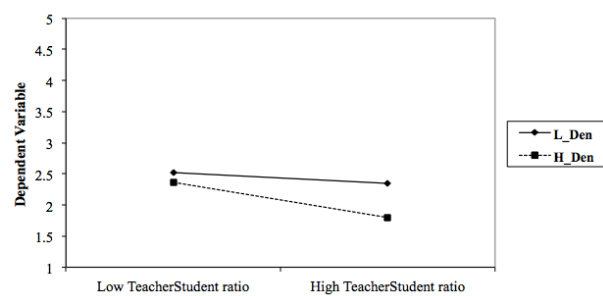
Notes. Moderator is community migrant population (high migrant concentration refers to communities with >20% migrant population) Predictor is policy commitment (high commitment =low teacher-student ratio)

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