An HLM Analysis of the Effects of Parental Involvement on Academic Achievement in Rural Gansu, China

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INTRODUCTION

Overall, research has shown that parental involvement in children’s education contributes to students’ educational success (Rothen, Goodwin, & Stansfeld, 2012). Yet, families do not live in isolation. Home, school, and community are immediate contexts that influence a child's development (Bronfenbrenner, 1986). Families are embedded in communities, which exert a strong influence on children’s educational outcomes.

The influence of parental involvement on student academic achievement has been examined in various ways, one of which is the social capital theory (Rothen et al., 2012). A form of social capital that Coleman (1988) discusses, and which exists with special strength in rural China, is accumulated in the community, which includes social norms and sanctions. China is a collectivist society where families develop close social bonding and networks, and people monitor each other’s children and support each other (Adams, 2006). Thus, to understand social capital between parents and children is of particular importance in the rural China context.

OBJECTIVES

Although many studies have focused on the relationship between the amount of social capital and reading achievement of children, there is a lack of research in the context of rural China, where parents tend to support their children in non-traditional ways that are invisible to teachers and schools (Kong, 2016).

In the present study, we intend to answer the following questions:

a. Do individual-level communicative parenting and punitive parenting predict Chinese language achievement?

b. Do village average communicative parenting and punitive parenting predict Chinese language achievement?

c. Does village community closure predict Chinese language achievement?

METHODS

To investigate the influence of community on children’s academic achievement in rural China, we draw data from the 2000 Gansu Survey of Children and Families (GSCF). It draws a multi-stage cluster sample of 2000 children aged 9-12 years old in 100 villages in Gansu. The analytic sample in this study is restricted to 568 parents of children who were attending grades 1-3 and received Yuwen (Chinese) tests.

We developed a two-level HLM model to examine how the student-level (Level-1) parenting practices (constructive parenting, and punitive parenting) and village-level (Level-2) social capital (village average communication, village average punishment, and community closure) influences student Yuwen achievement. Figure 1 illustrates hypothesized HLM model of the effects of parental involvement on student Yuwen achievement.

RESULTS

First, test of fully unconditional model was conducted, which found that a significant proportion of variance in Chinese achievement (ICC = .444, $\chi^2(97) = 482.54, p < .001$) occurred between villages. 56% of the variance in Chinese achievement is due to variability within villages. We then add predictors to level-1 model and level-2 model.

The final HLM model of the effects of parental involvement on student Yuwen achievement is presented in Figure 2.

CONCLUSIONS

A possible explanation for the positive influence of parent-child constructive communication and parental encouragement is that when parents discuss with children, they involve usage of complex language formats, understanding of concepts, and discussion of familiar topics, which may contribute to their language development. It also allows parents to communicate their values and expectations about learning, academic, and achievement.

Although punitive parenting widely spread in rural China, it has negative effect of child language achievement. It is recommended that educators, policymakers, and school administrators in rural China work together with parents to tackle with practices and consequences of punitive parenting styles. Although we test the plausibility that village-level punitive parenting practices causally influence achievement, the direction of causality is not obvious. Future longitudinal study is warranted to examine the direction of the relationship

REFERENCES


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