

# **Influence of Home Environment on Children's Schooling: From Teacher's Perspective<sup>1</sup>**

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<sup>1</sup> The Gansu Survey of Children and Families is supported by a grant from the UK Economic and Social Research Council and Department for International Development (ESRC RES-167-25-0250). Earlier support for data collection came from the Spencer Foundation Small and Major Grants Programs, the World Bank, and NIH Grants 1R01TW005930-01 and 5R01TW005930-02.

# **Influence of Family Background on Children's Schooling: From Teacher's Perspective**

## **ABSTRACT**

Previous research in educational stratification has revealed that one of the mechanisms a child's family background may affect school outcomes is through its influence on teacher-student relationships at school. Going beyond the conventional modeling of using only measures of the family's socioeconomic situation, this article incorporates the teachers' perspectives of the importance of the children's family background into the examination of teachers' evaluations of children's learning capacity and their expectations for the children's future school attainment, using a unique dataset from rural Gansu in northwest China. The analysis results reveal that teachers' perceptions of the importance of children's family background are closely associated with teachers' evaluations and educational expectations of children, beyond children's academic achievement and their family's actual socioeconomic situations; and teachers' expectations at early time point help to predict children's later school persistence. The findings point to the importance of bringing teachers' subjective perceptions into educational research, and the increasing importance of examining school-related factors to deepen our understanding of the different passageways through which family background leads to educational stratification.

# **Influence of Family Background on Children's Schooling: From Teacher's Perspective**

## **1. INTRODUCTION**

Educational research in the United States and other developed countries has emphasized that the interaction between teachers and students at school is important for educational stratification. One of the mechanism through which a child's family background may affect school outcomes is through its influence on student-teacher relationships at school. Studies have found that supportive relationships between teachers and students have positive impact on students' academic achievement and school persistence (Stanton-Salazar and Dornbusch 1995; Goyette and Conchas 2002; Muller 2001; Croninger and Lee 2001; Jordan, Lara and McPartland 1996; Ekstrom et al. 1986; Wayman 2002; Wells and Oakes. 1998). Most of research on educational stratification in developing countries has focused on the impact of poverty, gender, and school quality on children's access to schooling and school outcomes (Buchmann and Hannum 2001; Hanushek 1995; Fuller and Clark 1994; Fuller 1987; Zhang, Kao and Hannum 2007; Adams and Hannum 2007). However, few studies have examined how relationships between teachers and children may lead to stratification in education.

As a developing country undergoing rapid economic development, China has experienced a rapid expansion of education and now has almost universal enrollment at basic educational levels (Hannum and Xie 1994; Hannum 2002; Hannum and Adam 2007a). However, educational stratification still exists, especially because of regional and rural-urban differences. The Chinese government has made policy changes in recent years to address access problems long experienced by children living in impoverished rural areas. The changing situation makes it increasingly important to understand how children's school experience, including their relationships with teachers, can lead to different educational outcomes.

This study explores whether teachers' perceptions of the importance of children's home environment may serve as one of the pass-ways through which the family background may influence a child's schooling. In this study, the teacher-student relationship is measured by the teachers' evaluations of children's academic competence and behavior at school, and their expectations of the children's future educational attainment. A child's home cultural environment is defined as parents' willingness and capacity to help with their child's schooling. What is innovative in the present study is that it includes teachers' voices when examining teachers' evaluations and expectation of children, in addition to the conventional measures of family socioeconomic status. This study contributes to the existing literature on educational research in China and developing countries where the examination of teacher-student relationships has been largely ignored. Using a unique dataset Gansu Survey of Children and Family (GSCF), a longitudinal data from rural northwest China, this study attempts to answer the following questions:

- How do teachers perceive the importance of children's home environment?
- Are there associations between teachers' perceptions of the importance of children's home environment and their evaluations and expectations of children?
- Do teachers' educational expectations at early time point help to predict children's later enrollment?

## **2. BACKGROUND**

## ***2.1 The Impact of Student-Teacher Relationships on Children's Schooling***

In understanding the disparities in educational outcomes, many studies have pointed to the importance of the interpersonal aspects of schooling, including student-teacher relationships. These studies recognize that the quality of students' relationships with teachers is an important predictor of students' school outcomes. Supportive relationships with teachers can provide students with academic guidance, counseling on educational decisions, and encouragement and emotional support through daily interactions at school. Socially disadvantaged students often lack all forms of resources, both social, material, and cultural, at home and from family networks. These students can benefit most from close student-teacher relationships (Goyette and Conchas 2002; Stanton-Salazar and Dornbusch 1995; Cronsnoe, Johnson, and Elder 2004; Muller 2001; Stanton-Salazar 1997; Croninger and Lee 2001; Cheng and Starks 2002). Student-teacher relationships are closely associated with students' academic achievement and school persistence. Some studies have found that stronger bonding with teachers was associated with higher academic achievements, controlling for previous level of achievement (Goyette and Conchas 2002; Muller 2001; Cronsnoe, Johnson, and Elder 2004). Other researchers have concluded that students with higher grades and higher occupational expectations have better relationships with teachers and counselors (Stanton-Salazar and Dornbusch 1995). Several studies have showed that poor student-teacher relationships are a major cause of student's alienation from school, which in turn may lead to dropping out of high school (Jordan, Lara, and McPartland 1996; Ekstrom et al. 1986; Wayman 2002; Croninger and Lee 2001; Bryk, Lee, and Holland 1993).

One of the important indicators of student-teacher relationships is the teacher's evaluation of and their educational expectations for children. The teachers' evaluation of students' learning capacity and behavior may impact how teachers interact with students in the classroom (Hauser-Cram, Sirin, and Stipek 2003). Meanwhile teachers' evaluations have strong influence on children, whether these evaluations are accurate or not (Hallinan 2008; Downey and Pribesh, 2004; Hauser-Cram, Sirin, and Stipek 2003; Entwisle, Alexander, and Olson. 1997). Many studies have found that teachers' expectations of children's future educational attainment serve as an important predictor of children's future school persistence. Teachers have generally been found to hold lower educational expectations for children from families with lower SES (Rubie-Davies, Hattie, and Hamilton 2006; Benner and Mistry 2007). Besides family background, teachers' perceptions of value differences between themselves and parents also influence teachers' judgment of children's learning capacity (Hauser-Cram, Sirin, and Stipek 2003). Hauser-Cram, Sirin, and Stipek (2003) found that teachers have lower ratings of children when teachers perceive a difference in values held by parents, controlling for children's skills and family SES. Hughes, Gleason, and Zhang (2005) found that teachers' perceptions of student-teacher relationships and parent-teacher relationships also add variations to teachers' evaluations of children's learning capacities in addition to children's measured achievements (Hughes, Gleason, and Zhang 2005).

## ***2.2 Children's Home Cultural Environment and Student-Teacher Relationships***

In exploring how students' family background may influence the formation of supportive student-teacher relationships at school, many studies have pointed to the importance of students' family cultural environment. These studies have focused on how family cultural environment may influence the standards that educators use to evaluate students and their parents (Kingston 2001; Lareau and Weininger 2003; Reay 2004). Using data from a central-city urban southwestern school district, Farkas et al. (1990) conducted a study of cultural resources and social interaction in educational stratification. The study looked at differences in school achievements across gender, ethnicity, and SES groups by examining the informal academic

standards that teachers used to reward more general skills, habits, and styles of students. The authors found that school rewards were based upon the teachers' judgment of student's noncognitive traits, such as study habits and appearance, as well as their cognitive performance. Students' cultural resources, represented by their skills, styles, and habits, served as signals; teachers, as gatekeepers, perceived such signals and conferred appropriate rewards. Students' conduct was in turn shaped by teachers' rewards. Other studies have conceptualized home cultural environment and skills that child can bring from home to include parents' having difficulty helping with homework (Smrekar 1999); the sense of confidence and entitlement students feel when interacting with teachers (Lareau and Horvat 1999); how comfortable students feel approaching teachers (Blackledge 2001); language styles used at home; clothing styles; and styles of interaction between students and teachers (Carter 2003).

These studies have measured children's home cultural environment in different ways, but they all taps on the evaluative standards that teachers use to evaluate students beyond students' academic achievement. Research on the impact of family background on student-teacher relationships emphasize limited resources at home and the lack of skills children may bring to school. The above-cited studies indicate that teachers' perceptions should also be taken into consideration when examining factors that may influence student-teacher relationships in general, and teachers' evaluations and educational expectations in particular.

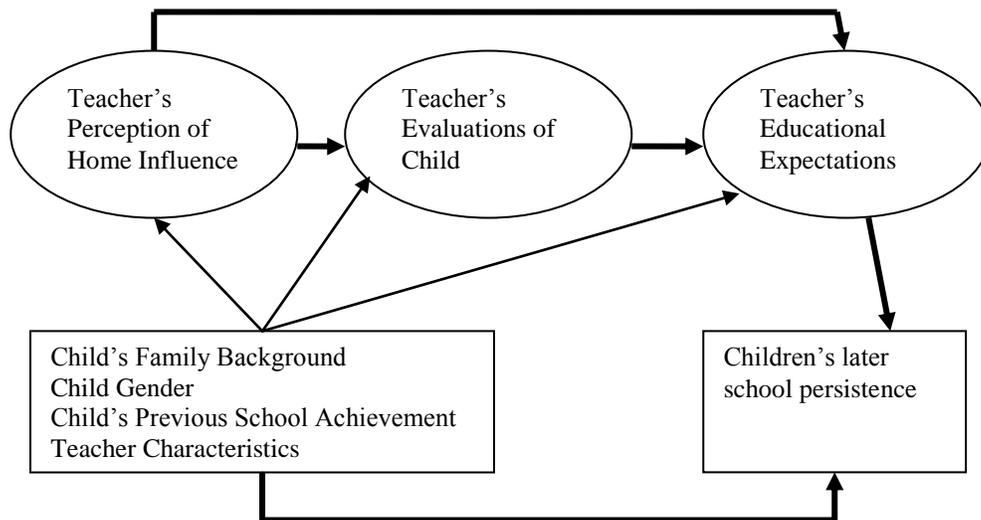
### ***2.3 China: Context and Research***

Many empirical studies of educational stratification in rural China have investigated how policy changes brought by economic reform, poverty, and traditional gender norms affect parents' educational decisions for their children and children's educational achievement and attainment (Brown 2003; Brown and Park 2002; Hannum 2002, 2003; Zheng, Niu, and Xing 2002; Hannum and Adam 2007; Zhang, Kao, and Hannum 2007, Kong, Hannum and Zhang 2009). In addition to the family's SES and poverty at household and community levels, children's previous school performance, their attachment and engagement in schooling, the quality of the teachers, and school and classroom social climate all affect children's school outcomes (Hannum and Adams 2007; Hannum and Adams 2008; Hannum and Park 2007). Some qualitative studies investigating the problem of dropouts found that too much pressure from school work and "not getting along with teachers" were listed by students as major reasons to drop out, especially among junior high school students, in addition to family financial difficulties (Xiao 2001; Liu 2004).

In sum, research in educational stratification has recognized that the student-teacher relationship is an important aspect of a child's school experience, and has pointed to the importance of examining student-teacher relationships by looking at the noncognitive criteria that teachers use to judge students and parents.

## **3. CONCEPTUAL MODEL AND ANALYTICAL APPROACH**

Figure 1 presents this study's conceptual model and hypotheses. The model indicates that objective measures of the children's family SES, child gender, and their previous school achievements, as well as teacher characteristics, have a direct impact on the children's school persistence, as indicated by the bold arrow at the bottom. In addition to this conventional explanation, the model incorporates the teachers' perceptions of the importance of children's home environment into the study, to test whether teachers' evaluative standards concerning children's home environment are associated with their evaluations and expectations, which in turn may influence children's school persistence, as indicated by the bold arrows at the top of the graph.



**Figure 1. Conceptual Model of Analysis**

This model is adapted from the example of Farkas et al.'s (1990) study on how student and teacher background characteristics affect teachers' judgment of student noncognitive behavior, which in turn affects the students' mastery of coursework. The course grade assigned by the teacher is affected by mastery of coursework, the student's and the teacher's background, and the teacher's judgment of student noncognitive behavior (Farkas et al. 1990).

Two parts of analysis are conducted to test the conceptual model. The first part includes two steps to test whether the teachers' perceptions of the importance of home influence are 1) associated with the teachers' evaluations of children; and 2) tied with their educational expectations of children, both directly, and indirectly through teachers' evaluations. The second part tests whether teachers' educational expectations at early time point help to predict the children's later actual school persistence.

This model does not take into account the longitudinal and simultaneous feedbacks between the teachers' evaluations and expectations of children, and the children's behavior at school. For instance, the children's behavior at school may serve as the basis for the teachers' evaluations; at the same time, the children's behavior may be influenced and changed by the teachers' evaluations. Nevertheless, this model may bring new insights into the factors that influence student-teacher relationships at school from the teachers' perspective.

#### **4. DATA**

This study uses the Gansu Survey of Children and Families (GSCF) data collected in Gansu Province, China. Gansu is an inland province in northwestern China with a comparatively high rate of illiteracy, prevalent poverty, and a low level of economic growth. The GSCF used a representative sample of 2,000 rural children aged 9–12 from 100 villages using a stratified multi-stage sampling procedure. The first wave of data was collected in 2000 and the children were revisited in 2004. There are also linkable secondary samples of the target children's mothers, teachers, school administrators, and village heads (for a detailed description of GSCF, see Hannum and Park 2002). This study mostly uses information from the first wave of target

children's homeroom teachers and children's household, as well as children's schooling status from second wave in 2004.

The GSCF data is unique in that it provides information on how teachers perceive the importance of children's home cultural environment and the family social status on children's schooling. These direct measures of teachers' opinions provide an ideal opportunity to test the subtle influence of the children's family background on children's schooling through teachers' evaluations and expectations.

This study is limited to children who were in grade 3 or above in year 2000 and should have been in junior high school or higher in 2004. The limitation is based on the consideration that with almost universal enrollment at primary school level, we start to see dropout rate when children advanced to junior high, for the transition from primary school to junior high is often associated with higher direct and opportunity costs. Using this criteria, and with the elimination of cases with missing data, there are 1,316 children and 444 homeroom teachers in the analytical sample..

## 5. MEASURES

To make use of the rich information on homeroom teachers' opinions of the importance of children's family background influence and their evaluations of children, an exploratory factor analysis was conducted to identify different dimensions of the teachers' evaluations of children and the teachers' views on the importance of the children's home environment. The identification of factors was based on the results of oblique rotation, because it was expected that the factors were correlated (Brown 2003; Costello and Osborne 2005). Fifty-nine items from wave 1 of the homeroom teacher questionnaire were used in the factor analysis. These items reflect the teachers' evaluations of the children's learning capacity and their behavior at school, as well as the teachers' views on the importance of children's home influence, including the parents' social status and their ability and willingness to facilitate their children's schooling. Four factors were extracted, which accounted for 61 percent of the total variance of the fifty-nine items. Two factors measure teachers' evaluations of children and another two factors tap the teachers' opinions on the importance of the children's home environment. Factor-based scales were created by summing up variables that have high loading on the same factor. Cronbach's alpha was calculated for each factor scale to test the internal consistency. (See the appendix for definitions and descriptive statistics for all the items used in creating the scales.)

### 5.1 Teachers' Perceptions of Home Influence

*Home cultural environment.* This factor includes the teachers' answers to questions on whether they think the following factors are problematic for the child's future: (你认为下列因素会影响这个孩子的将来吗? 不成问题, 有些问题, 问题严重) 1) whether the parents share the school's values on education; 2) whether the parents are illiterate; 3) whether the parents are able to make good study plans for their children; and 4) whether the parents care about their children's schooling. The construction of this factor reflects what teachers consider as valuable cultural resources from home that could facilitate children's schooling, and the importance of these resources.

*Family social status.* This scale reflects teachers' concern that a child's future may not depend only on their education, but also on the family's social network and social status. The factor includes the teachers' answers to questions about whether they think any of the following is important for the child's future (你认为这些对这个孩子的将来是不重要, 重要, 或是很重

要): 1) the parent is in cadre position<sup>2</sup>; 2) the family has a wide social network; 3) the parents are able to locate good jobs for the child.

### **5.2 Teachers' Evaluations of Children**

*Being a good student.* The factor for a teacher's evaluation of a child being good student includes the teacher's rating of the child's learning capacity and achievement levels in language and mathematics comparing with other children. It also includes teachers' ratings of child's study habits, whether the child finishes homework, whether the child makes efforts to achieve better grades, and if the child participates actively in the classroom.

*Experiencing problems.* The factor for the teachers' evaluation that a child is experiencing problems includes items that tap the teachers' assessment of the child's behavioral engagement at school. Questions include whether the child has disciplinary problems, is passive and/or disengaged in class, has problems interacting with other children, and seems to have already given up on school. The scale also includes the teachers' assessment of whether the child has any emotional adjustment problems, including whether the teacher thinks the child is nervous, lacks confidence, or is unhappy or depressed.

### **5.3 Teachers' Educational Expectations**

*Teachers' educational expectation* for children is measured by the homeroom teachers' answers to the question "What is the highest level of education you think this child can attain?" Teachers chose from ten categories, ranging from "some primary school," "graduate from primary school," "some junior high school," and "graduate from junior high school," all the way to "graduate from four-year college." In the analysis, the teachers' expectations are translated into the number of years required to complete those levels.

### **5.4 Teacher Characteristics**

Teacher characteristics include the *teacher's gender* and whether the teacher is *local*, that is the teacher is from the same village as the child. Teachers may have a better understanding of the children and their families if they are from the same village. In many schools in China, a teacher often teaches the same class for more than one year, as the teacher follows the children when they advance to higher grades. The length of time a teacher and a child work together may lead to a better understanding of each other, thus improving the relationship. A measure of the total number of years that the teacher has taught a child, *length taught the child*, is included in the analysis.

### **5.5 Child Family Background**

Child family socioeconomic status is measured by the *mother's education*, *father's education*, as measured by years of formal schooling completed, and *family wealth*. In a rural setting, people do not have access to much cash income, and income from farming varies from year to year. Family wealth is a more stable measure of the economic situation than income. Family wealth is calculated by summing up the value of family property and assets, including housing, farm machinery and equipment, and household durable goods. The logged family wealth was used in multivariate analysis.

### **5.6 Child gender and Performance**

*Child gender* was included in all analyses, because gender may influence the teacher's evaluations and expectations, and the child's later school outcomes. *Child academic achievement* was measured by the teachers' reports on the children's previous semester's math grade.

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<sup>2</sup> A cadre usually holds local administrative position, which carries some political and social privileges, and a wider social network.

Children's academic performance may be an important criterion that teachers use to form their expectations and make their evaluations of children.

## 6. ANALYSIS

### 6.1 Descriptive Results

Table 1 presents the basic descriptive statistics of the sample. Forty-five percent of the sample are girls. The boys and girls average about 11 years of age. The children's previous school achievement, as measured by their math grade, averages about 74 out of 100. At year 2004, when the second wave of data was collected, 14 percent of the children who should be in junior high school or higher had dropped out.

On the whole, the children's parents have limited education: approximately seven years of schooling for the fathers, and about four years for the mothers. Among homeroom teachers of sample children, about 34 percent of teachers are female, and 36 percent of the teachers are from the same village as the children. On average, these homeroom teachers have taught the sample children about two years.

[Table 1 about here]

Table 2 shows the descriptive statistics of the teachers' educational expectations and the factor scales that measure the teachers' evaluations of children and the teachers' opinions about the importance of the children's home environment. Teachers have high educational expectations for children: On average, teachers expect children to have about eleven years of education, which is a little less than the time needed to complete high school. They expect about 18 percent of the children to achieve some college education or above, and they expect that only about 36 percent of the children will not continue their education after finishing junior high school (calculation results not shown). On average, teachers' rating of children being good student is 15.8 on a scale from 7 to 21, and 14.5 on the problematic scale of from 10 to 26. Table 2 also presents the Cronbach alpha for the scales. The teachers' perceptions on the importance of home cultural environment average about 9 on a scale of 4 to 12, and their perceptions on the importance of family social status is about 4.5 on a scale of 3 to 9.

[Table 2 about here]

Next, I consider whether the teachers' perceptions of the importance of the children's home cultural environment are associated with the teachers' educational expectations for children. Figure 2 presents the mean years of the teachers' expectations by the quartiles, as well as the two extreme 5 percent, of the teacher's scores on the scale measuring the importance they place on children's home cultural environment. As the teachers' scores on the scale increase, their educational expectations for the children drop. There are significantly higher expectations among teachers who are in the first quartile of the scale than among those in the fourth quartile. Those teachers who are at the bottom 5 percent of the scale, that is, those teachers who consider the children's home cultural environment least important have the highest educational expectations for the children: an average of 12.4 years, which is about two years higher than those teachers who consider the children's home cultural environment being very important. It is clear that how teachers perceive the importance of children's home cultural environment is closely associated with how they form their educational expectations for children. The children's family wealth is also noted at the bottom of Figure 2. Family wealth remains about the same across different quartiles of the teachers' scores on the scale of family importance. It indicates that the differences in teachers' opinions on the importance of home cultural environment are not associated with child family's actual economic situation. It reveals that what teachers consider as important for

children's schooling are more about parents' willingness and capacity to help children's education, but not so much of family's economic situation.

The results here indicate clearly that it is very important to incorporate teachers' perceptions when examining teachers' educational expectations. Next, I further test these results in multivariate analysis to see if teachers' perceptions on the importance of home influence are associated with their evaluations and expectations of children, and if the associations hold when other factors, including objective measures of family SES and children's previous school achievements, are taken into consideration.

**[Figure 2 about here]**

## **6.2 Multivariate Analysis Results**

### **6.2.1. Teachers' Evaluations of Children**

To test the first part of the conceptual model—that teachers' perceptions of the importance of children's home environment may influence their evaluations of children—two sets of OLS regression are estimated with the teachers' evaluations of children being good students or experiencing problems as dependent variables separately. School fixed effect is used for all models based on the consideration that school context may have influence on the teachers' evaluations and expectations. Table 3 presents the estimate results.

**[Table 3 about here]**

Model 1 serves as the baseline model, with only the two measures of teachers' perceptions included. The teachers' opinions of the importance of the children's home cultural environment and the family social status are significantly associated with both measures of the teachers' evaluations. Model 2 adds the children's gender, age, and their academic achievements as measured by their mathematics grades. As expected, children's achievements are closely associated with teachers' evaluations of children. The close association between teachers' perceptions of home cultural environment and their evaluations remains, while teachers' opinions on the importance of family social status are only significantly associated with teachers' evaluations of children experiencing problem. The objective measures of children's family SES are added to model 3: father's and mother's education, and logged term of family wealth. Teachers' evaluations of children are not influenced by children's family socioeconomic situation as measured in conventional terms. The full model (Model 4) also includes teachers' characteristics. They have no impact on teachers' evaluations, except teachers who are from the same village as target children tend to rate children higher on the experiencing problem scale. The association between teachers' opinions of home importance and their evaluations of children remain significant. The results points to the importance of bringing in teachers' perceptions in explaining teachers' evaluations of children: among children with same achievement and family SES, teachers tend to evaluate students lower if they think home cultural environment and family social status have much impact on children's schooling.

### **6.2.2. Teachers' Educational Expectations**

The next set of models test whether teachers' perceptions of home importance and their evaluations of children are associated with teachers' educational expectations. Again school fixed effect is used to control for school level characters. Model 1, the baseline model, contains only the teachers' perceptions. The higher the teachers on the scale of the importance of home cultural

environment, the lower their educational expectations for children are, as we see in the descriptive results. However, teachers' opinions about the importance of family social status are not closely tied with their expectations. Model 2 adds children's gender, age, and their academic achievements. Teachers' expectations are closely tied with children's achievement, as shown in many studies. After controlling for children's previous achievements, teachers' opinions on the importance of the home's cultural environment are still significantly associated with teachers' expectations, with only some decrease in magnitude.

**[Table 4 about here]**

Parents' education and family wealth are added in Model 3. Adding the objective measures of the family SES does not change the association between teachers' perceptions of the importance of the home's cultural environment and teachers' expectations. At the same time, teachers tend to have higher expectations for a child whose father has more education. Teachers' characteristics are added into Model 4. They have no impact on teachers' expectations, except local teachers tend to have lower expectations for children. After taking into consideration of children's achievement, family SES measures and teachers' characteristics, the close association between teachers' perceptions of home importance and their expectations remain.

In models 5 and 6, teachers' evaluations of children as being good students or as experiencing problems are included, each in a separate model. Teacher's evaluations are strongly associated with teachers' expectations, as expected. A one-point increase on the scale of teachers' evaluation of children being good students is associated with about 0.4 year increase in teachers' expectations, whereas a point higher on the problem scale is associated with 0.17 year decrease in teachers' expectations. Controlling for teachers' evaluations, teachers' perceptions of the importance of home cultural environment are still closely associated with teachers' expectations.

This part of the analysis reveals that teachers' perceived family background importance are associated with teachers' educational expectations both directly and indirectly through their evaluations of children. Teachers' opinions add variations to their expectations that cannot be caught by the conventional objective measures of family SES. Among children with the same school achievement and family socioeconomic background, teachers tend to have lower expectations if they believe those children's home environment may have a large impact on their schooling.

The results of these models also reveal that children's gender is an important factor which influences teachers' educational expectations for children. There is no gender difference in teachers' expectations when looking at it alone. However, after taking into account other factors in the model, including teachers' evaluations, the results show that teachers hold lower expectations for girls than boys, in spite of the fact teachers have better evaluations of girls. Teachers' evaluations show that teachers appreciate girls meeting their criteria of being good students, and do not have gender bias in their judgment of children in school. Their lower expectations may not indicate that teachers have gender discrimination. It could be more of the teachers' awareness of the constraints that girls will face in future: constraints introduced by traditional gender norms, economic limitations at both household and community levels, and the structure of the labor market.

### 6.2.3. Children's School Persistence

Finally, I test the last part of the conceptual model: teachers' educational expectations at early time point help to predict children's later school enrollment. Table 5 shows the results of logistic regressions on children's schooling status in 2004. Model 1 contains only teachers'

educational expectations for children in year 2000. A one-year increase in teachers' expectations will increase the odds of children staying in school by 18 percent ( $1 - \exp[0.164]$ ). Model 2 adds children's gender, age, and their previous achievements. Children's previous achievements are strong predictors of their school persistence, and girls are more likely to drop out than boys, which are in consistent with many previous studies. Teachers' expectations remain significant, at a smaller magnitude, even after adding these factors to the model. Model 3 adds in parents' education and family wealth. Consistent with many previous studies, family wealth and fathers' education are significant predictors of children staying in school. Model 4 also includes teachers' characteristics. They have no influence on children's school persistence. In the full model, teachers' expectations remain significant. A one-year increase in teacher's expectations is still associated with about a 9-percent ( $1 - \exp[0.084]$ ) increase in the odds of children staying in school after controlling for all other factors in the model.

**[Table 5 about here]**

## **7. CONCLUSION**

The findings from this study can be summarized into two main points: first, net of objective measures of children's family SES and achievement at school, teachers' perceptions of the importance of children's home environment are closely associated with teachers' evaluations of children's academic competence and behavior in school; furthermore, teachers' perceptions of home importance are closely associated with teachers' educational expectations, both directly, and indirectly through teachers' evaluations of children. Second, teachers' expectations of children's future school attainment at an early point in time are significant predictors of children's later school persistence.

These results are in consistence with previous findings in research on student-teacher relationships: the cultural resources from children's home have an impact on their school experience through its influence on student-teacher relationships. What is innovative about this study is that it incorporates teachers' voices when examining the influence of the children's home environment on teacher-student relationships. The unique measurement of teachers' perceptions of the importance of children's home cultural environment and social status on children's schooling brings out the subtle influence of family background, which is often missed if only the conventional measures of families' socioeconomic situation are used. The interesting finding—that families' economic situation has almost no impact on teachers' evaluations and expectations, but that teachers' perceptions of the importance of home influence are closely associated with both teachers' evaluations and expectations—points to the importance of bringing teachers' attitudes and perceptions into research on teacher-student relationships at school.

The finding that teachers' expectations at early time point can help to predict children's school persistence later may indicate that when teachers have high expectations for children they are likely to provide more support and guidance to the children, which results in better chances for children to stay in school. It could also indicate that teachers predict accurately children's potential for further schooling. One thing is certain: teachers play an important role in shaping children's school experience, which are closely connected to children's school persistence, especially in the setting or rural China, where resources from children's home are very much limited. Children would benefit from closer connection and better understanding between their teachers and parents.

As changes in China's educational policies concerning the financing of education is helping to reduce the financial barriers on children's schooling, these findings point to the increasingly importance of examining the school-related factors that may create educational stratifications. This study also provides the timely information for the newly launched campaign that stress education at home, and the collaborative efforts of school and family in education, as

indicated in the *Guidelines for Educational Reform and Development 2010-2020* (国家中长期教育改革和发展规划纲要(2010-2020年))(Central Government of China 2010).

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**Table 1. Descriptive of Child and Teacher Characteristics**

	mean (or Proportion)	SD
Child Characteristics		
Girls	0.45	0.50
Age	11.31	0.99
Achievement in 2000	74.42	14.07
Schooling Status in 2004	0.86	0.34
Family Socioeconomic Status		
Family Wealth	16638.34	18688.33
Logged Family Wealth	9.32	0.92
Father's Education	7.42	3.40
Mother's Education	4.60	3.50
Teacher Characteristics		
Female Teacher	0.34	0.47
Local	0.36	0.48
Length Taught the Child (year)	1.91	1.13
Educational Expectations (year)		
Teacher Expectation	11.57	2.69
Child Expectation	13.79	2.80

Note: N=1,316

**Table 2. Descriptive of Teacher's Expectation and Perception Factors**

	Mean	Standard Deviation	Minimum	Maximum	Cronbach Alpha
Educational Expectations	11.57	2.69	3	16	
Evaluation of Children					
Being Good Student	15.82	3.15	7	21	0.84
Experiencing Problems	14.52	3.22	10	26	0.77
Perceptions of Home Influence					
Home Cultural Environment	9.00	1.82	4	12	0.63
Family Social Status	4.60	1.63	3	9	0.70

**Table 3. OLS Regression of Teacher Evaluation (School Fixed Effect)**

		Being Good Student				Experiencing Problem			
		(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Teacher Perception of Home Influence									
Home Cultural Environment		-0.255***	-0.139***	-0.130***	-0.125***	0.194***	0.135***	0.134***	0.131***
		(-4.565)	(-3.438)	(-3.205)	(-3.039)	(3.581)	(2.699)	(2.664)	(2.580)
Family Social Status		-0.140**	-0.121**	-0.117**	-0.121**	0.135**	0.116	0.116	0.121**
		(-2.081)	(-2.484)	(-2.395)	(-2.470)	(2.067)	(1.920)	(1.923)	(2.008)
Child Characteristics									
Female			0.283**	0.279**	0.281**		-0.450***	-0.438***	-0.428***
			(2.164)	(2.142)	(2.147)		(-2.795)	(-2.719)	(-2.655)
Age			-0.038	-0.030	-0.033		0.126	0.111	0.120
			(-0.560)	(-0.435)	(-0.478)		(1.490)	(1.302)	(1.407)
Achievement			0.158***	0.156***	0.157***		-0.086***	-0.085***	-0.085***
			(32.727)	(32.069)	(31.964)		(-14.383)	(-14.184)	(-14.118)
Family Background									
Father Education (Year)				0.024	0.024			0.005	0.006
				(1.164)	(1.156)			(0.191)	(0.233)
Mother Education (Year)				0.038	0.037			-0.046	-0.044
				(1.765)	(1.733)			(-1.743)	(-1.663)
Family Wealth (Logged)				0.040	0.039			0.111	0.121
				(0.481)	(0.469)			(1.093)	(1.189)
Teacher Characteristics									
Female					-0.017				-0.230
					(-0.089)				(-0.989)
Length Taught Child (Year)					-0.029				-0.061
					(-0.396)				(-0.682)
Local					-0.227				0.517**
					(-1.191)				(2.205)
Constant		18.753***	5.908***	5.122***	5.251***	12.156***	18.371***	17.652***	17.425***
		(31.743)	(5.852)	(4.082)	(4.169)	(21.229)	(14.750)	(11.388)	(11.224)
N		1,316	1,316	1,316	1,316	1,316	1,316	1,316	1,316
Adjusted R-Squared		0.021	0.491	0.494	0.495	0.015	0.170	0.172	0.177
note: *** p<0.01, ** p<0.05									

**Table 4. OLS Regression of Teacher Expectation (School Fixed Effect)**

	(1)	(2)	(3)	(4)	(5)	(6)
Teacher Perception of Home Influence						
Home Cultural Environment	-0.202***	-0.123***	-0.109***	-0.106***	-0.052	-0.084**
	(-4.405)	(-3.265)	(-2.880)	(-2.782)	(-1.545)	(-2.254)
Family Social Status	-0.063	-0.065	-0.059	-0.059	-0.007	-0.039
	(-1.138)	(-1.431)	(-1.289)	(-1.296)	(-0.173)	(-0.867)
Child Characteristics						
Female		-0.370***	-0.368***	-0.357***	-0.477***	-0.429***
		(-3.038)	(-3.039)	(-2.942)	(-4.428)	(-3.615)
Age		-0.083	-0.079	-0.081	-0.067	-0.061
		(-1.293)	(-1.240)	(-1.264)	(-1.175)	(-0.972)
Achievement		0.106***	0.104***	0.104***	0.037***	0.090***
		(23.668)	(22.943)	(22.946)	(6.709)	(18.748)
Family Background						
Father Education (Year)			0.049**	0.049**	0.039**	0.050***
			(2.544)	(2.561)	(2.284)	(2.680)
Mother Education (Year)			0.031	0.031	0.015	0.024
			(1.570)	(1.573)	(0.868)	(1.230)
Family Wealth (Logged)			0.127	0.122	0.106	0.143
			(1.656)	(1.597)	(1.556)	(1.910)
Teacher Characteristics						
Female				0.088	0.096	0.050
				(0.506)	(0.617)	(0.292)
Length Taught Child (Year)				-0.045	-0.032	-0.055
				(-0.664)	(-0.542)	(-0.837)
Local				-0.379**	-0.282	-0.292
				(-2.151)	(-1.803)	(-1.697)
Teacher Evaluation						
Being Good Student					0.429***	
					(17.773)	
Experiencing Problems						-0.168***
						(-7.817)
Constant	13.675***	6.526***	4.838***	5.021***	2.770***	7.952***
	(28.160)	(6.928)	(4.151)	(4.302)	(2.656)	(6.636)
N						
Adjusted R-Squared	-0.102	0.259	0.268	0.271	0.426	0.306

note: \*\*\* p<0.01, \*\* p<0.05

**Table 5. Logistic Regression of Child Schooling Status in 2004**

	(1)	(2)	(3)	(4)
Teacher Expectation (Year)	0.164*** (0.033)	0.101** (0.039)	0.086** (0.040)	0.084** (0.040)
Child Characteristics				
Female		-0.374** (0.172)	-0.375** (0.174)	-0.362** (0.174)
Age		-0.923*** (0.104)	-0.908*** (0.104)	-0.913*** (0.105)
Achievement		0.026*** (0.007)	0.023*** (0.007)	0.025*** (0.007)
Family Background				
Father Education (Year)			0.052** (0.025)	0.050* (0.026)
Mother Education (Year)			0.042 (0.027)	0.041 (0.027)
Family Wealth (Logged)			0.206** (0.099)	0.194* (0.100)
Teacher Characteristics				
Female				-0.101 (0.196)
Length Taught Child				-0.073 (0.076)
Local				-0.210 (0.190)
Constant	0.027 (0.359)	9.770*** (1.256)	7.499*** (1.498)	7.839*** (1.517)
N				
Pseudo R-Squared	0.026	0.135	0.152	0.155
Log-Likelihood	-507.86	-451.14	-442.39	-440.64

note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure 2: Teacher's Expectation and Family Wealth by Teacher's Perception of Home Importance**

