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## Article

Do parents expect too much or is it all about grades? The discrepancy between parents' aspirations and child's academic performance, and parental satisfaction with the school

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# **GENERAL & APPLIED ECONOMICS | RESEARCH ARTICLE**

Do parents expect too much or is it all about grades? The discrepancy between parents' aspirations and child's academic performance, and parental satisfaction with the school

Stefani Milovanska-Farrington<sup>1,2\*</sup>

**Abstract:** Schooling is related to health and future labor market outcomes. The school parents choose for their children often depends on feedback received from other parents. Therefore, it is important to understand whether parental satisfaction with the school depends only on objective measures of the quality of the school. We examine the association between children's academic performance, parents' aspirations, the mismatch between the two, and parents' satisfaction with different aspects of children's schooling. The findings suggest that excellent academic performance of the child is associated with higher parental satisfaction, regardless of parents' aspirations. High expectations accompanied by low performance are

### ABOUT THE AUTHOR

Stefani Milovanska-Farrington obtained her PhD in economics from the University of South Florida in 2018. Her research interests include Labor, Family, Health and Education economics. She has won a number of mathematical contests, and has published articles in academic journals including Economics and Human Biology, Education Economics, Journal of Family and Economic Issues, Journal of Economics and Finance, Journal of Economic Studies, International Economics and Economic Policy, Research in Economics, and others. She joined the IZA network as a Research Affiliate in 2021, and received the Dean's Researcher of the Year Award from the Sykes College of Business at the University of Tampa in 2022. In 2020, she also published the book "Microeconomics: The Science of Choice" designed for Principles of Microeconomics classes.

### PUBLIC INTEREST STATEMENT

Schooling is related to health and future labor market outcomes. The school parents choose for their children often depends on feedback received from other parents. Therefore, it is important to understand whether parental satisfaction with the school depends only on objective measures of the quality of the school. We explore the association between children's academic performance, parents' aspirations, the discrepancy between the two, and parents' satisfaction with the child's school, teachers, academic standards, discipline and order, and staff – parent interaction.

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The findings suggest that children's grades are a significant determinant of parental satisfaction. We observe negligible differences in parental satisfaction between parents who have different aspirations regarding their children's future educational attainment, but significant differences in satisfaction based on children's grades, regardless of parents' expectations about the future education of the child. The lower the grades of the child, the less satisfied parents are with the school, the teachers, the academic standards, the order and discipline, and the staff's interaction with the parents. Additionally, the combination of low grades while the parents have high expectations about the future education of the child is adversely related to parental satisfaction with the child's school.

The study has implications related to school rankings and parental school reviews.





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negatively related to parental satisfaction with all aspects of children's schooling. The results have implications related to school rankings and the significance of parental school reviews.

#### Subjects: Education - Social Sciences; Multidisciplinary Psychology; Economics

Keywords: academic performance; educational aspirations; parent satisfaction; schooling JEL codes: J01; J13; I21; I31; D10

#### 1. Introduction

Schooling is associated with higher future earnings (Belfield & Bailey, 2017), better health (Blanchflower & Oswald, 2004; Chevalier & Feinstein, 2006; Cutler & Lleras-Muney, 2010; Groot & Maassen van den Brink, 2007; Grossman, 2006), healthy behaviors (Lawrence, 2017), labor market (Heckman, 2000) and social outcomes (Ma and Welch 2016). As such, it is important for parents to feel confident about the quality of the school their children attend.

Prior literature finds that predictors of parental satisfaction with their children's school include the expectations of the school from the child and the clarity with which these expectations are communicated with the students and their parents (Charbonneau & Van Ryzin, 2012), students' enjoyment at the school (Gibbons & Silva, 2011), parents' involvement, adequate school communication with the parents, teachers' involvement and quality, school resources, budget management, safety and environment (Bond & King, 2003; Friedman et al., 2007; Ham et al., 2003; Hausman & Goldring, 2000). Teacher likeability, average standard test-based academic performance of the students in the school, social and academic climate in the classroom are also positively related to satisfaction with the school (Gibbons & Silva, 2011; Verkuyten & Thijs, 2002).

However, it is possible that parental satisfaction with the school might not be solely dependent on the school characteristics that are expected to similarly influence the opinion of all parents whose children attend a given school. We therefore contribute to the literature by testing the hypothesis that parental satisfaction also depends on their own child's academic performance, parents' aspirations, and the discrepancy between the two. Specifically, we explore the effect of parents' expectations for the child's future education and child's grades on parental satisfaction with the school, teachers, academic standards, discipline and order, and staff—parent interaction. We also examine whether high parental expectations about the child's future education accompanied by low grades of the child make parents more dissatisfied with the forementioned measures of the quality of the school. To the best of our knowledge, previous literature has not explored the impact of the discrepancy between parental aspirations and child academic performance on parents' satisfaction with such an extensive list of aspects of schooling.

We find that parents whose children earn primarily A's are more likely to be satisfied with all measures of parental satisfaction with children's schooling than parents whose children earn mainly lower grades, regardless of parents' expectations about the future education of the child. However, earning mainly C's and lower grades while the parents expect that the child would obtain a Bachelor's or a higher degree is negatively associated with parental satisfaction with all aspects of children's schooling. The result is mainly driven by families in the lower end of the income distribution but the differences in the effects are negligible based on parental education.

This study raises concerns about the significance of parental reviews about schools that might not be providing academic preparation of adequate quality to the students despite the excellent grades that children earn. Our findings also have implications for school rankings based on factors different from standardized tests and alumni's post-graduation performance. The remainder of this paper is structured as follows. In Section 2, we review the most relevant literature. Section 3 specifies the model. We discuss the data and present summary statistics in Section 4. Section 5 provides the results. In Section 6, we discuss the policy implications of the study and conclude the paper.

#### 2. Literature review

The importance of schooling for children's health (Blanchflower & Oswald, 2004; Chevalier & Feinstein, 2006; Cutler & Lleras-Muney, 2010) and future outcomes in the labor market (Heckman, 2000) motivates extensive literature exploring the determinants of parents' satisfaction with their children's school in the US (e.g., Charbonneau & Van Ryzin, 2012; Friedman et al., 2007; Goldenberg et al., 2001), the UK (e.g., Gibbons & Silva, 2011), the Netherlands (e.g., Verkuyten & Thijs, 2002) and other countries. For example, Verkuyten and Thijs (2002) find that teacher likeability, educational performance, social and academic climate in the classroom are positively associated with the satisfaction with the school, while the class size, the girls-to-boys ratio, and the proportion of minorities in the class do not have a statistically significant effect on parents' satisfaction with the school (Verkuyten & Thijs, 2002). Friedman et al. (2007) show that teacher and school involvement, school resources, and adequate management of the school budget are key determinants of parental satisfaction with the school, both before and after controlling for demographic and district characteristics. Jacob and Lefgren (2007) find that parents prefer primary schools in which students are happier rather than those where students' performance on standardized exams is higher although both factors matter, that is parents value children's happiness and enjoyment of the school more than excellent performance on exams during the primary school years.

Parents' satisfaction is also dependent upon whether the school keeps them informed about their children and involved in the learning process. Specifically, adequate school communication with the parents (Friedman et al., 2007) and parents' involvement have a positive effect on parental satisfaction. The quality of the teachers and the safety of the school environment have a similar positive impact (Bond & King, 2003; Ham et al., 2003; Hausman & Goldring, 2000). Pride (2002) finds that critical events, such as school shootings, political interventions, and others, rather than the average performance of the students in a given school on standardized tests, determine public's evaluation of schools' quality.

School performance as a measure of the quality of schools and parents' perceptions about that quality, is found to be among the strong predictors of parental satisfaction, both at aggregate (e.g., Charbonneau & Van Ryzin, 2012) and individual level (e.g., Gibbons & Silva, 2011). Quality is hard to measure and therefore, there is no single measure of the quality of schools. However, the standard approach used in the literature has been to use school-average test scores because they are assumed to be an objective measure of the performance, or the quality of schools (Gibbons & Silva, 2011). Alternatively, Charbonneau and Van Ryzin (2012) construct a measure of school performance based on whether the school has high expectations from the child, clarity of the expectations teachers communicate with the child and the parents, and parents' overall level of satisfaction with the school (Charbonneau & Van Ryzin, 2012).

All fore mentioned determinants of parental satisfaction with the school depend on its performance, and can therefore be thought of as relatively objective measures of quality. Parental perceptions about the quality of the school are at least partially influenced by these determinants. However, literature also finds that expectations are not always or entirely based on school performance. For instance, Hao and Bonstead-Bruns (1998) find that parent-child interaction increases both children's and parents' expectations, and immigrants generally have higher expectations than natives (Hao & Bonstead-Bruns, 1998). In addition, parents' expectations depend on the performance of their child at school although expectations do not influence children's performance (Goldenberg et al., 2001). Gibbons and Silva (2011) find that more educated parents are generally less satisfied with the school of their child, and as a potential explanation of this result claim that more educated parents are more likely to have higher expectations. Given the importance of the topic, it is interesting that there is not much literature

that studies whether factors that do not entirely reflect the performance of the school still influence parental satisfaction with it.

Therefore, in this research, we attempt to narrow this gap in the literature by focusing on the expectations of the parents from their child and the actual academic performance of *their* child measured by the grades he or she usually earns, and the mismatch between the two. More precisely, we contribute to the literature by examining the impact of parents' aspirations about their child's future educational attainment, child's school performance, and the discrepancy between aspirations and actual performance, on parents' satisfaction with different aspects of schooling, including overall satisfaction with the school the child attends, satisfaction with the teachers, academic standards, discipline and order, and staff—parent interaction.

#### 3. Empirical strategy

Because the dependent variables used in this analysis are categorical, we estimate ordered Logit models as follows:

$$\begin{aligned} \Pr(\text{Satisfaction}_{i} = j | X_{i}) &= \Pr\left(\rho_{j-1} < \text{Satisfaction}_{i}^{*} \le \rho_{j}\right) \\ &= \Lambda\left(\rho_{j} - \text{Interactions}_{i}^{'} \alpha + \textbf{X}^{'} \beta\right) - \Lambda\left(\rho_{j-1} - \text{Interactions}_{i}^{'} \alpha + \textbf{X}^{'} \beta\right) \end{aligned}$$
(1)

In this specification, the outcomes Satisfaction include parental satisfaction with the school, teachers, academic standards, discipline, and staff interaction with the parents. Each outcome can take one of four ordered values *j*: vary satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. The model assumes proportional odds. The set of explanatory variables Interactions includes interaction terms of dummies capturing parental aspirations regarding child's educational attainment (i.e., expect at most a high school diploma, some college, a Bachelors' degree, or a graduate degree) and indicators of the academic performance of the child (i.e., earning mostly A's, mostly B's, or mostly C's and lower grades). To prevent perfect multicollinearity, we omit the highest expectations (i.e., expect the child to obtain a graduate degree)—highest grades (i.e., mostly A's) interaction. In equation (1), X is a vector of conditioning variables for individual *i* that includes an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the father is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. The vector of regression parameters of interest that we estimate is  $\alpha$ . The function  $\Lambda$  is a cumulative standard logistic distribution function (cdf), and  $\rho_{i-1}$  and  $\rho_i$  are threshold parameters from a latent variable model Satisfaction<sup>\*</sup><sub>i</sub> = Interactions'<sub>i</sub> $\alpha$  + X' $\beta$  +  $\varepsilon_i$ , i.e., Satisfaction<sub>i</sub> = j if  $\rho_{i-1}$ <Satisfaction<sup>\*</sup><sub>i</sub>  $\leq \rho_i$ . Here,  $\varepsilon_i$  is an error term depicting measurement errors and transitory shocks that can influence the outcome. Marginal effects are also estimated.

Although in our main analysis, we use an ordered logistic regression specification, we verify the marginal effects using ordered Probit. To further examine specifically the relationship between the discrepancy between expectations and current performance, we also investigate a specification in which instead of all interaction terms, we create a dichotomous variable equal to 1 if the responding parent expects that the child will obtain a BA or a graduate degree whereas the child earns mostly C's and lower grades.

We also explore whether the effects vary depending on parental education. This is likely if parents with different educational attainment are intrinsically more or less satisfied with children's school, teachers, and so on.

To check the sensitivity of the findings to household income and household type (i.e., single parent versus traditional family), we estimate the major regressions in subsamples of families within different household income brackets and separately, in a subsample of single parents. As a final robustness experiment, we distinguish between birth/adoptive and step/foster parents.

#### 4. Data

Repeated cross-sectional data for this study are extracted from three waves of the Parent and Family Involvement in Education (PFI) survey, collected in 2012, 2016 and 2019. PFI is a part of the National Household Education Survey (NHES). The U.S. Census Bureau conducts the survey on behalf of the National Center for Education Research (NCES) within the US Department of Education. They ask a nationally representative sample of randomly selected parents of children in kindergarten through grade 12 (17,563 observations in 2012, 14,075 in 2016, and 16,446 in 2019), about school choice, educational experiences, parental involvement in child's education, homework and activities. Prior to 2012, the survey was administered over the phone. Starting in 2012, NCES transitioned to mail surveys. Due to the data collection method, we chose to utilize data from 2012 onward (National Center for Education Statistics (NCES), 2021).

Data are presented at child level. PFI contains variables eliciting information about the respondents' satisfaction with the school, teachers, academic standards, discipline, and school staff parent interaction. Specifically, respondents were asked the following survey question: "How satisfied or dissatisfied are you with each of the following," and the categories include "the school the child attends this year," "the teacher this child has this year," "the academic standards of the school," "the order and discipline at the school," and "the way that school staff interacts with parents." The values these satisfaction variables can take are very satisfied, somewhat satisfied, somewhat dissatisfied, and very dissatisfied. These variables serve as outcomes in this research.

Because parental satisfaction is of interest in this study, we use only observations where the respondent is a birth, adoptive, step or foster mother or father. We also exclude observations where both parents are listed as fathers for three reasons. First and most importantly, in the original NCES—PFI dataset, there is a variable stating the relationship of the child with the respondent of the survey. According to the 2019 codebook of the data, father was imputed for this variable in the cases where the household listed two fathers and no mothers. This was done "to ensure consistency between items" (National Center for Education Statistics (NCES), 2021). Second, we conduct a subsample analysis based on mother's and father's education. If we randomly choose the education of which parent listed to report as mother's and which one as father's highest education, this might make the results inaccurate. Finally, it is likely that there is a reporting error in the instances where both parents are listed as fathers. Although this is not necessarily true, we choose to focus on traditional families which represent the majority of the households in this research. The sample we use after the fore mentioned omission consists of 42,304 observations, out of which 15,306, 12,565 and 14,433 individuals are interviewed in 2012, 2016 and 2019, respectively.

The variables of interest provide information about parents' expectations about the future educational attainment of the child and the current grades of the child as an indication of the child's current performance. Parents' expectations are extracted from the survey question "How far do you expect this child to go in his/her education?". Child's current educational performance is elicited from the question "Please tell us about this child's grades during this school year. Overall, across all subjects, what grades does this child get?" We distinguish between four categories of parental aspirations about child's (highest) future education: high school or lower education (exp1), vocational/technical school (after high school) or some college (exp2), completed Bachelor's (BA) degree (exp3), and graduate or professional degree (exp4). In our study, child's grades belong to one of the following categories: mostly A's, mostly B's, or mostly C's or lower grades. We additionally drop observations where the question about child's grades has been

Table 1. Summary statistics		
Variable	Mean/Frequency	Std. deviation
Panel A. Dependent variables		
Satisfaction with the school the child attends this year Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied	0.597 0.325 0.057 0.021	
Satisfaction with the teacher this child has this year Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied	0.569 0.355 0.061 0.015	
Satisfaction with the academic standards of the school Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied	0.590 0.334 0.057 0.019	
Satisfaction with the order and discipline at the school Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied	0.578 0.319 0.072 0.031	
Satisfaction with the way that school staff interacts with parents Very satisfied Somewhat satisfied Somewhat dissatisfied Very dissatisfied	0.506 0.365 0.095 0.034	
Panel B. Main variables of interest		
Parents' expectations about child's future education High school or lower education Vocational/technical school (after high school) or some college Bachelor's (BA) degree Graduate or professional degree	0.059 0.192 0.323 0.426	
Child's grades Mostly A's Mostly B's Mostly C's or lower	0.544 0.331 0.125	
Panel C. Control variables and variab	les used in subsample analyses	
Private school (private = 1, public = 0)	0.115	0.319
Female child (girl = 1, boy = 0)	0.487	0.500
Female respondent (mother = 1, father = 0)	0.697	0.460
Single parent	0.259	0.438
Child's age	12.667	3.535
Number of children	2.069	0.959
Mother's employment status (employed = 1, not = 0)	0.746	0.435
Father's employment status (employed = 1, not = 0)	0.909	0.287

(Continued)

Variable	Mean/Frequency	Std. deviation
Panel A. Dependent variables		
Parents' marital status (married = 1, not = 0)	0.702	0.457
Black child	0.095	0.293
Hispanic child	0.212	0.408
Child's health below very good (below very good = 1, very good or excellent = 0)	0.111	0.314
Mother's highest education High school or lower education Vocational/technical school (after high school) or some college Bachelor's (BA) degree Graduate or professional degree	0.217 0.323 0.272 0.188	
Father's highest education High school or lower education Vocational/technical school (after high school) or some college Bachelor's (BA) degree Graduate or professional degree	0.257 0.294 0.249 0.200	
Household income bracket Up to \$20,000 \$20,001-50,000 \$50,001-75,000 \$75,001-100,000 \$100,001-150,000 Above \$150,000	0.115 0.227 0.158 0.146 0.171 0.183	

Notes: The source of the data are the 2012, 2016 and 2019 waves of the Parent and Family Involvement in Education (PFI) survey.

skipped or the school does not give these grades. The remaining number of observations is 36,119 (13,236 in 2012, 10,629 in 2016, and 12,256 in 2019).

Other information necessary for our analysis that PFI provides includes the type of school (private versus public) the child attends, child's health status, gender, age, race and ethnicity, parent's employment status, highest educational attainment, marital status, gender of the respondent, number of children in the family, and household income bracket. A complete list of the variables used in this research and their descriptions are available in Appendix A1.

Table 1 provides summary statistics (dependent variables in Panel A, main explanatory variables in Panel B, and controls and other variables used in the analysis in Panel C). Parental satisfaction with different aspects of children's schooling is primarily high, i.e., between 50.6% and 59.7% of the parents report that they are very satisfied with each aspect of schooling. Satisfaction with the school the child attends and satisfaction with the interaction of the school staff with the parents rank, respectively, the highest and the lowest in terms of percentage of very satisfied parents. Fewer parents are somewhat satisfied, followed by somewhat dissatisfied. Between 1.5% and 3.4% of the respondents are very dissatisfied with each of the considered satisfaction measures.

The statistics of parents' expectations show that 42.6% of the parents expect that their child will obtain a graduate or professional degree, followed by 32.3% hoping for a Bachelor's (BA) degree, and 19.2% and 5.9% expecting some college/ vocational/ technical school, and high school or lower education, respectively. More than half of the children in the analysis (54.4%) earn mostly A's, 33.1% earn mostly B's, and 12.5% have primarily C's or lower grades.

In the sample, 11.5% of the children attend private schools, 48.7% of the students are girls, and children's mean age is 12.7. About 9.5% of the children are Black, and 21.2% of them are Hispanic. More than 90% of the children enjoy excellent of very good health. The average number of children in the participating families is 2.07. Most of the responding parents are mothers (69.7%), and 25.9% are single parents. About 70% of the parents are married. Employed mothers and fathers represent 74.6% and 90.9% of the sample, respectively.

The summary statistics for parental education indicate that 32.3%, 27.2%, 21.7% and 18.8% of the mothers have some college, BA degree, high school or lower education, and a graduate degree, correspondingly. Similarly, 29.4%, 25.7%, 24.9% and 20% of the fathers have some college, high school or lower education, a BA degree, and a graduate degree, respectively. Finally, the families belonging to each of the household income brackets considered in this study are as follows: 11.5% have below \$20,000; 22.7% between \$20,001 and \$50,000; 15.8% between \$50,001 and \$75,000; 14.6% between \$75,001 and \$100,000; 17.1% between \$100,001 and \$150,000; and 18.3% above \$150,000.

#### 5. Results

We report the results from the first set of main regressions in Table 2. Each column contains the results from a regression on one of the measures of parental satisfaction with child's schooling. Marginal effects on the likelihood of being very satisfied with the school, teachers, academic standards, discipline, and staff-parent interaction, after ordered Logit regressions are reported in square parentheses. The results indicate the importance of children's grades for parental satisfaction. Specifically, all interaction terms of an indicator denoting that the child earns mostly A's with any indicator of parental expectations about child's future educational attainment are statistically insignificant determinants of parental satisfaction. In contrast, interactions of dummies denoting that the child earns mostly B's or C's or lower grades with any parental expectation are highly statistically significant and adversely affect parental satisfaction. Moreover, the lower the grades, the lower the level of parental satisfaction, while given similar grades, differences in expectations change the adverse effect only slightly. For example, earning mostly B's while expecting that the child would obtain at most a high school diploma, some college, a BA degree, and a graduate degree is associated with a reduction in the likelihood of being satisfied with the school by 12.1%, 12.3%, 10.6%, and 11%, respectively. The same effects when the child earns mostly C's or lower scores become 36.6%, 27.2%, 23.7% and 33.7%. The trends are similar for other parental satisfaction outcomes. For satisfaction with the teachers, earning mostly B's and mostly C's or lower grades while having low expectations about the child's future educational attainment predicts a reduction in the likelihood of being very satisfied with the child's teachers by 14% and 31.6%, respectively. These effects are only slightly different for higher expectations but again, statistically significant at any significance level. The probabilities that the parents are satisfied with the academic standards of the child's school, discipline and staff-parent interaction are affected similarly. All results are available in Table 2.

In relation to previous studies, our finding that grades are an important determinant of parental satisfaction with children's schooling would be consistent with the prior evidence that higher average performance on standardized tests of the students in a school is associated with higher parental satisfaction (Gibbons & Silva, 2011; Verkuyten & Thijs, 2002) provided that higher grades of students in classes are associated with better performance on standardized exams as well. Alternatively, if a given individual student's grades in classes are unrelated to average standardized test scores, then, it must be the case that the effect of individual grades on parental satisfaction dominates the effect of average standard-test-based scores on parental satisfaction. More research is necessary to explore the latter case.

Other findings presented in Table 2 indicate that attending a private school is associated with higher likelihood of being very satisfied with any of the school features of interest. Mothers, parents of younger children, parents of girls, and those whose child's health is less than very good are less likely

Table 2. Effect of ex	pectations and perfo	rmance on satisfactio	on: Coefficients and n	narginal effects	
		Parer	ntal satisfaction outc	omes	
Variable	School	Teacher	Academic standards	Order and discipline	Interaction
Expect high school or less * Grade A	-0.126 (0.181) [0.027]	-0.162 (0.209) [0.035]	0.088 (0.186) [0.020]	0.132 (0.208) [-0.030]	-0.090 (0.205) [0.021]
Expect high school or less * Grade B	0.565*** (0.157) [-0.121***]	0.649*** (0.146) [-0.140***]	0.456*** (0.159) [-0.102***]	0.485*** (0.157) [-0.109***]	0.252* (0.148) [-0.058*]
Expect high school or less * Grade C or lower	1.172*** (0.157) [-0.366***]	1.464*** (0.161) [-0.316***]	1.359*** (0.149) [-0.303***]	1.259*** (0.163) [-0.282***]	1.119*** (0.151) [-0.259***]
Expect some college * Grade A	0.033 (0.085) [-0.007]	-0.078 (0.083) [0.017]	0.016 (0.084) [-0.004]	0.231*** (0.082) [-0.052***]	0.166** (0.082) [-0.038**]
Expect some college * Grade B	0.575*** (0.072) [-0.123***]	0.566*** (0.081) [-0.122***]	0.550*** (0.074) [-0.123***]	0.511*** (0.077) [-0.115***]	0.387*** (0.068) [-0.089***]
Expect some college * Grade C or lower	1.274*** (0.104) [-0.272***]	1.142*** (0.097) [-0.246***]	0.981*** (0.101) [-0.219***]	0.849*** (0.098) [-0.190***]	0.824*** (0.104) [-0.190***]
Expect BA * Grade A	-0.023 (0.054) [0.005]	0.044 (0.051) [-0.009]	0.040 (0.052) [-0.009]	0.094* (0.051) [-0.021*]	0.031 (0.048) [-0.007]
Expect BA * Grade B	0.497*** (0.060) [-0.106***]	0.584*** (0.060) [-0.126***]	0.379*** (0.061) [-0.084***]	0.379*** (0.058) [-0.085***]	0.328*** (0.058) [-0.076***]
Expect BA * Grade C or lower	1.108*** (0.143) [-0.237***]	1.059*** (0.122) [-0.228***]	0.934*** (0.122) [-0.208***]	0.664*** (0.114) [-0.149***]	0.696*** (0.117) [-0.161***]
Expect a graduate degree * Grade B	0.517*** (0.069) [-0.110***]	0.577*** (0.067) [-0.124***]	0.424*** (0.068) [-0.095***]	0.320*** (0.068) [-0.072***]	0.386*** (0.065) [-0.089***]
Expect a graduate degree * Grade C or lower	1.576*** (0.181) [-0.337***]	1.568*** (0.150) [-0.338***]	1.207*** (0.137) [-0.269***]	1.253*** (0.127) [-0.281***]	1.001*** (0.144) [-0.231***]
Private school	-0.926*** (0.065) [0.179***]	-0.665*** (0.057) [0.135***]	-0.960*** (0.065) [0.194***]	-1.038*** (0.066) [0.210***]	-0.881*** (0.058) [0.195***]
Female child	0.093** (0.038) [-0.020**]	0.137*** (0.037) [-0.029***]	0.019 (0.037) [-0.004]	0.077** (0.037) [-0.017**]	0.050 (0.035) [-0.012]
Child's age	0.044*** (0.006) [-0.009***]	0.097*** (0.006) [-0.021***]	0.034*** (0.006) [-0.007***]	0.060*** (0.006) [-0.013***]	0.086*** (0.005) [-0.020***]
Number of children	-0.021 (0.021) [0.004]	-0.059*** (0.020) [0.013***]	0.0003 (0.021) [-0.0001]	0.003 (0.039) [-0.001]	-0.036* (0.020) [0.008*]
Female respondent	0.142*** (0.040) [-0.030***]	0.062 (0.038) [-0.013]	0.077** (0.039) [-0.017**]	0.120*** (0.039) [-0.027***]	0.100*** (0.037) [-0.023***]
Employed mother	-0.045 (0.045) [0.010]	0.021 (0.044) [-0.004]	-0.046 (0.043) [0.010]	0.023 (0.043) [-0.005]	0.024 (0.042) [-0.006]
Employed father	-0.142** (0.071) [0.031**]	0.027 (0.072) [-0.006]	-0.128* (0.069) [0.029*]	-0.173** (0.073) [0.039**]	-0.082 (0.068) [0.019]

(Continued)

#### Table 2. (Continued)

	Parental satisfaction outcomes				
Variable	School	Teacher	Academic standards	Order and discipline	Interaction
Married parents	-0.020 (0.088) [0.004]	0.012 (0.088) [-0.003]	-0.078 (0.079) [0.018]	-0.017 (0.085) [0.004]	-0.052 (0.083) [0.012]
Black child	0.319*** (0.077) [-0.070***]	0.201*** (0.076) [-0.044***]	0.103 (0.078) [-0.023]	0.125 (0.078) [-0.028]	0.054 (0.072) [-0.013]
Hispanic child	-0.066 (0.050 [0.014]	-0.058 (0.051) [0.012]	-0.024 (0.049) [0.005]	-0.079 (0.049) [0.018]	-0.024 (0.046) [0.006]
Child's health below very good	0.505*** (0.065) [-0.113***]	0.373*** (0.062) [-0.083***]	0.372*** (0.061) [-0.085***]	0.355*** (0.062) [-0.082***]	0.321*** (0.060) [-0.075***]
Observations	26,725	26,725	26,725	26,725	26,725
R-squared	0.0554	0.0582	0.0389	0.0393	0.0405

Estimates are obtained from ordered Logit regressions of different measures of satisfaction with child schooling on parental aspirations and child's current academic performance and a set of controls. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\* Significant at 5% level. \* Significant at 10% level.

to be very satisfied with any school feature, but the effects are economically small although they are highly statistically significant. Marital status, mother's employment status, and ethnicity (i.e., Hispanic or not) do not have a statistically significant impact on parental satisfaction outcomes.

In Table 3, we investigate the effect of high parental expectations (i.e., expecting that the child would earn a BA or higher degree) combined with low performance of the child at school (i.e., earning mostly C's and lower grades) on the previously considered parental satisfaction outcomes. Marginal effects on the likelihood of reporting high satisfaction are presented in square parentheses again. All effects are consistent with our previous results, are highly statistically and quantitatively significant. High expectations combined with low performance are associated with 20.5%, 19.8%, 16.9%, 14% and 13.3% reduction in the likelihood of being very satisfied with the school, teachers, academic standards, discipline and staff-parent interaction, correspondingly. This implies that a discrepancy between aspirations and actual performance has an adverse impact on parental satisfaction. Provided the previous results presented in Table 2, low grades are likely to be the main driver of this negative effect.

The negative impact of the discrepancy between expectations and performance on parental satisfaction is consistent with the economics and psychology literature that in a different context, shows that life satisfaction depends on experienced utility compared with expectations of life satisfaction (Ferrante, 2009). Again in a different context from this research, Clark et al. (2015) show that higher aspirations are associated with lower life satisfaction. Specifically, any event that increases both educational attainment and educational expectations cancels out the effect of this additional education on happiness (Clark et al., 2015).

The fore mentioned adverse effect is also in accordance with the findings of previous studies that show that shared expectations between children and parents improve children's academic performance, while larger differences are associated with worse performance (Hao & Bonstead-Bruns, 1998), even though parents' expectations themselves do not influence children's performance (Goldenberg et al., 2001).

Table 3. Effect of high expectations and low performance on satisfaction: Coefficients and marginal effects Parental satisfaction outcomes					ects
		Pare	ntal satisfaction outo	omes	I
Variable	School	Teacher	Academic standards	Order and discipline	Interaction
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.929*** (0.112) [-0.205***]	0.891*** (0.096) [-0.198***]	0.741*** (0.092) [-0.169***]	0.614*** (0.087) [-0.140***]	0.570*** (0.092) [-0.133***]
Private school	-1.007***	-0.739***	-1.025***	-1.101***	-0.941***
	(0.064)	(0.056)	(0.065)	(0.066)	(0.058)
	[0.198***]	[0.153***]	[0.208***]	[0.224***]	[0.210***]
Female child	-0.026	0.023	-0.073**	-0.006	-0.021
	(0.038)	(0.037)	(0.037)	(0.037)	(0.035)
	[0.006]	[-0.005]	[0.017**]	[0.001]	[0.005]
Child's age	0.059***	0.110***	0.046***	0.070***	0.095***
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)
	[-0.013***]	[-0.025***]	[0.011***]	[-0.016***]	[-0.023***]
Number of children	-0.006	-0.048**	0.013	0.014	-0.027
	(0.021)	(0.020)	(0.021)	(0.021)	(0.020)
	[0.001]	[0.011**]	[0.003]	[-0.003]	[0.006]
Female respondent	0.179***	-0.095**	0.109***	0.152***	0.126***
	(0.040)	(0.038)	(0.039)	(0.039)	(0.037)
	[-0.039***]	[-0.021**]	[-0.025***]	[-0.035***]	[-0.029***]
Employed mother	-0.063	0.009	-0.059	0.010	0.014
	(0.044)	(0.043)	(0.043)	(0.043)	(0.042)
	[0.014]	[-0.002]	[0.013]	[-0.002]	[-0.003]
Employed father	-0.240***	-0.067	-0.209***	-0.242***	-0.143**
	(0.068)	(0.068)	(0.067)	(0.071)	(0.067)
	[0.054***]	[0.015]	[0.048***]	[0.056***]	[0.034**]
Married parents	-0.140*	-0.092	-0.171**	-0.100	-0.121
	(0.084)	(0.085)	(0.079)	(0.084)	(0.082)
	[0.031*]	[0.021]	[0.040**]	[0.023]	[0.028]
Black child	0.418***	0.299***	0.176**	0.174**	0.124*
	(0.075)	(0.074)	(0.077)	(0.077)	(0.071)
	[-0.096***]	[-0.068***]	[-0.041**]	[-0.040**]	[-0.029*]
Hispanic child	-0.004	0.008	0.019	-0.055	0.014
	(0.049)	(0.050)	(0.048)	(0.048)	(0.046)
	[0.001]	[-0.002]	[-0.004]	[0.013]	[-0.003]
Child's health below very good	0.683*** (0.062) [-0.159***]	0.533*** (0.060) [0.123***]	0.519*** (0.058) [-0.123***]	0.493*** (0.059) [-0.116***]	0.445*** (0.058) [-0.105***]
Observations	26,725	26,725	26,725	26,725	26,725
R-squared	0.0350	0.0402	0.0264	0.0300	0.0328

Estimates are obtained from ordered Logit regressions of different measures of satisfaction with child schooling on an indicator of high parental aspirations (i.e., expect a BA or a graduate degree) whereas child's current grades are mostly C's or lower, and a set of controls. The following are the conditioning variables: an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the father is currently employed, whether the father is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\* Significant at 5% level. \* Significant at 10% level.

Tables 4, 5 are devoted to subsample analyses by parental educational attainment and household income bracket, respectively. Table 4 suggests that regardless of the education of the parents, the discrepancy between expectations and children's performance has a highly statistically significant adverse effect on parental satisfaction with child's schooling. The largest negative effects of the aspirations—performance mismatch on satisfaction with the school, the teachers, the academic standards, and the interaction of the school staff with the parents, are observed in the subsample of mothers with a graduate degree. The largest impact of the discrepancy on

child schooling		-	Parental satisfaction outcom	les	
	School	Teacher	Academic standards	Order and discipline	Interaction
Panel A. Mother's education: I	High school or lower				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.652*** (0.242) [-0.147***]	0.625*** (0.174) [-0.141***]	0.574*** (0.167) [-0.134***]	0.532*** (0.167) [-0.124***]	0.419** (0.169) [-0.099**]
	5,408	5,408	5,408	5,408	5,408
Panel B. Mother's education: Techn	ical or vocational degree afte	er high school or some colleg	e	-	
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.955*** (0.168) [-0.220***]	0.918*** (0.151) [-0.109***]	0.897*** (0.150) [-0.209***]	0.526*** (0.134) [-0.124***]	0.536*** (0.141) [-0.126***]
	8,164	8,164	8,164	8,164	8,164
Panel C. Mother's education: Bache	lor's degree				
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.161*** (0.193) [-0.241***]	1.151*** (0.216) [-0.145***]	0.738*** (0.190) [-0.159***]	0.816*** (0.185) [-0.178***]	0.731*** (0.206) [-0.168***]
	7,810	7,810	7,810	7,810	7,810
Panel D. Mother's education: Gradu	late degree		_	-	
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.380*** (0.218) [-0.286***]	1.248*** (0.231) [-0.269***]	1.006*** (0.215) [-0.218***]	0.823*** (0.224) [-0.174***]	0.999*** (0.222) [-0.231***]
	5,343	5,343	5,343	5,343	5,343
Panel E. Father's education: High sc	chool or lower				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.809*** (0.209) [-0.184***]	0.756*** (0.159) [-0.171***]	0.729*** (0.159) [-0.171***]	0.533*** (0.148) [-0.125***]	0.498*** (0.154) [-0.117***]
	6,840	6,840	6,840	6,840	6,840
Panel F. Father's education: Technic	cal or vocational degree after	r high school or some college			
					(Continued)

Table 4. (Continued)					
			Parental satisfaction outcom	les	
	School	Teacher	Academic standards	Order and discipline	Interaction
Panel A. Mother's education: H	ligh school or lower				
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.067*** (0.157) [-0.243***]	1.039*** (0.168) [-0.234***]	0.872*** (0.146) [-0.199***]	0.755*** (0.131) [-0.175***]	0.728*** (0.141) [-0.171]
	7,762	7,762	7,762	7,762	7,762
Panel G. Father's education: Bachelo	or's degree				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.979*** (0.180) [-0.205***]	0.952*** (0.184) [-0.205***]	0.599*** (0.175) [-0.132***]	0.488*** (0.174) [-0.107***]	0.432** (0.204) [-0.099**]
	6,712	6,712	6,712	6,712	6,712
Panel H. Father's education: Gradua	te degree				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.921*** (0.267) [-0.189***]	0.865*** (0.241) [-0.186***]	0.567** (0.240) [-0.122**]	0.719*** (0.256) [-0.151***]	0.632** (0.258) [-0.146**]
	5,411	5,411	5,411	5,411	5,411
Estimates are obtained from ordered whereas child's current grades are m a female child, a dummy variable for whether the mother is currently emplc errors are provided in parentheses. N Significant at 1% level. ** Significant c	Logit regressions of different ostly C's or lower, and a set c attending a private school, a byed, whether the father is cur Aarginal effects on the likelih at 5% level. * Significant at 10	measures of satisfaction with of controls, conditional on diffe ge of the child, number of chil rently employed, whether the ood of being very satisfied wi % level.	n child schooling on an indicator of erent levels of education of the par- idren in the family, an indicator der parents are married, and dummy vo th each measure of parental satist	high parental aspirations (i.e., exi ents. The following are the condit noting whether the respondent is rriables for Hispanic, Black and chil faction with child schooling are p	pect a BA or a graduate degree) ioning variables: an indicator for the mother, indicators capturing d at bad health. Robust standard resented in square brackets. ***

Table 5. Subsample analysis by household in	come: Marginal effects of high ex	xpectations and low performan	ce on the likelihood
of being very satisfied with child schooling			

		Pare	ntal satisfaction outc	omes	
	School	Teacher	Academic standards	Order and discipline	Interaction
Panel A. Up to \$20,0	000				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.794** (0.398) [-0.175**]	1.156*** (0.348) [-0.240***]	1.237*** (0.322) [-0.276***]	0.808*** (0.307) [-0.182***]	0.965*** (0.260) [-0.220***]
	1,490	1,490	1,490	1,490	1,490
Panel B. Between \$20,0	01 and \$50,000				
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.018*** (0.216) [-0.228***]	0.931*** (0.163) [-0.206***]	0.727*** (0.152) [-0.168***]	0.613*** (0.152) [-0.141***]	0.659*** (0.180) [-0.154***]
	4,816	4,816	4,816	4,816	4,816
Panel C. Between \$50,0	01 and \$75,000				
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.074*** (0.305) [-0.249***]	0.730*** (0.241) [-0.167***]	0.707*** (0.248) [-0.166***]	0.610*** (0.196) [-0.145***]	0.364 (0.241) [-0.086]
	4,218	4,218	4,218	4,218	4,218
Panel D. Between \$75,0	01 and \$100,000				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.787*** (0.235) [-0.176***]	0.693*** (0.216) [-0.154***]	0.696*** (0.228) [-0.160***]	0.546** (0.239) [-0.124**]	0.424* (0.223) [-0.098*]
	4,448	4,448	4,448	4,448	4,448
Panel E. Between \$100,	001 and \$150,000				
Expect BA or a graduate degree whereas grades are mostly C's or lower	1.036*** (0.224) [-0.224***]	1.072*** (0.251) [-0.236***]	0.780*** (0.211) [-0.176***]	0.603*** (0.208) [-0.138***]	0.624*** (0.202) [-0.146***]
	5,562	5,562	5,562	5,562	5,562
Panel F. Above \$150,000	0				
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.888*** (0.231) [-0.182***]	0.931*** (0.195) [-0.202***]	0.589*** (0.224) [-0.126***]	0.650*** (0.209) [-0.136***]	0.698*** (0.244) [-0.159***]
	6,191	6,191	6,191	6,191	6,191

Estimates are obtained from ordered Logit regressions of different measures of satisfaction with child schooling on an indicator of high parental aspirations (i.e., expect a BA or a graduate degree) whereas child's current grades are mostly C's or lower, and a set of controls, conditional on different household income brackets. The following are the conditioning variables: an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\* Significant at 5% level. \* Significant at 10% level.

satisfaction with the discipline in the school is extracted from the subsample of mothers with BA degrees, followed by fathers with some college and mothers with graduate degrees (but the differences between these subsamples are less than 1%).

In a previous study, Gibbons and Silva (2011) find that more educated parents are less satisfied with the school their child attends. They hypothesize that a possible explanation might be that more educated parents might also have higher expectations for their children. Our finding that the adverse

effect of a mismatch between aspirations and performance on parental satisfaction with children's schooling is the largest for mothers with college and graduate degrees supports the hypothesis of Gibbon and Silva (2011).

We also estimate the effects of all interaction terms of various expectations and current grades (as in the first main specification) but conditional on different highest education of the mother and separately the father of the child. The significance, signs and ranking of the effects are consistent with our previous findings. Because of the sizes of the tables showing these effects, these results are available upon request. One difference is worth mentioning. Specifically, for mothers with a BA degree, having low expectations while the child earns mostly A's is associated with an increase in the likelihood of being very satisfied with the school by 27.68% although other effects are similar to before.

An identical analysis in a subsample of families in which both parents are birth or adoptive parents of the child of interest produces results identical in signs, significance and magnitude. More precisely, none of the effects differs from the previous effects of interest reported in Table 4 by more than 3%. The previous results presented in Table 4 seem to be driven by this subsample of parents as the subsample of families in which both parents are step or foster parents consists of only 41 observations, making the results unreliable. Estimations in a subsample of families in which one of the parents is a birth or an adoptive parent while the other one is a step or a foster parent lead to slightly different findings. Using the latter sample, having high expectations while the child has low grades has an insignificant effect on parental satisfaction with the school, the academic standards, the discipline, and the interaction of the staff with the parents, and makes it less likely to be very satisfied with the teachers (but the effect is smaller than that in the entire sample). The results from the subsample analyses by type of parents are available upon request.

Next, the results from subsample analysis by household income level presented in Table 5 confirm the previous results. They are quite robust to the choice of household income bracket in that the effects of the mismatch between aspirations and performance on parental satisfaction vary only slightly when we consider different subsamples based on income. An exception that stands out is that the effect of the fore mentioned discrepancy on parental satisfaction with the academic standards at the school is mainly driven by families in the lowest end of the income distribution. A potential explanation of this result is the possibility that low-income parents might be able to afford only lower-quality schools they are not satisfied with, or live in neighborhoods that lack high-quality schools. Further research is necessary to test this hypothesis.

All results reported in Tables 2–5 are not sensitive to the use of ordered Probit rather than ordered Logit specification in that the statistical significance and the direction of the marginal effects remains unchanged, and the magnitudes of these effects change negligibly. The results from the alternative ordered Probit specification are provided in Appendix A2. Tables A1–A3 report the major results from Tables 2–5 from the main analysis, respectively, but rather than ordered Logit utilize an ordered Probit specification.

#### 6. Discussion and conclusion

This study finds that children's grades are a significant determinant of parental satisfaction. We observe negligible differences in parental satisfaction between parents who have different aspirations regarding their children's future educational attainment, but significant differences in satisfaction based on children's grades, regardless of parents' expectations about the future education of the child. The lower the grades of the child, the less satisfied parents are with the school, the teachers, the academic standards, the order and discipline, and the staff's interaction with the parents. Additionally, the combination of low grades while the parents have high expectations about the future education of the child is adversely related to parental satisfaction with the child's school. The association between this discrepancy and parental satisfaction is irrespective of parental education, but primarily driven by low-income families.

This study has limitations. Specifically, grades are self-reported in the survey, so they are subject to misreporting. In addition, grades are reported on the basis of whether the child earns mostly As, Bs, etc. More precise measure of children's academic performance, such as actual GPA, would provide better understanding of the effect of grades and aspirations on parents' satisfaction with the school. Further, parents can choose whether they are very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied with different characteristics of the school. However, it is unclear how respondents interpret these possible ordered responses. Also, parents whose children attend schools in given areas or neighborhoods might report higher or lower satisfaction, regardless of the controls we account for. Parents' responses might also be influenced by the opinion of their friends, relatives and other parents about the school. Finally, a concern might be the low explanatory power of the models we present in this study. While we attempt to control for as many potential determinants of parental satisfaction with children's schooling as we have available in the data, as previously mentioned, respondents' satisfaction might depend on many other factors such as peers' opinion, mood of the respondent at the time of the survey, level of optimism of the respondents, and other factors that are hard to control for. These data are unavailable, but even if available, their subjective nature make them unreliable. From statistics point of view, ceteris paribus, it is also preferred to utilize models with fewer parameters although the use of more variables would improve the goodness of fit.

Despite the shortcomings, the results have several implications. First, the findings raise concerns about the significance of the reviews parents write about schools. This feedback can be influenced by children's grades and might not reflect the actual quality of the school. If this is the case, choosing a school based on biased feedback might mislead parents and have adverse effects on their children's future educational attainment. Similarly, if parents' satisfaction with the school is influenced to a large extent by children's grades and this reported satisfaction is used for developing school rankings rather than solely basing rankings on student's performance on standardized tests, then school rankings might be a deceptive measure of schools' true quality. Finally, from a policy perspective, if school funding depends on school "quality" according to reported parents' satisfaction, or the number of students in a school which might depend on biased feedback, then funds for schools might be inefficiently allocated, especially if schools manipulate distribution by artificially increasing students' grades to affect parents' opinion about the school.

More research is necessary to explore the connection between school rankings and parents' satisfaction. Controlling for students' performance on standardized exams would allow researchers to compare the effect of children's grades and parents' aspirations on parents' satisfaction relative to the impact of the level of preparation the school provides on parents' happiness with the school. Exploring these effects using data from other countries can test the external validity of the findings and is another area of future research.

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#### Appendix A1 A complete set of the variables used in the analysis

- Satisfaction with the school the child attends this year (SatisfSchool): a variable that takes one of 4 ordered values (very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied)
- Satisfaction with the teacher this child has this year (SatisfTeacher): a variable that takes one of 4 ordered values (very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied)
- Satisfaction with the academic standards of the school (SatisfAcadStandards): a variable that takes one of 4 ordered values (very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied)
- Satisfaction with the order and discipline at the school (SatisfDiscipline): a variable that takes one of 4 ordered values (very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied)
- Satisfaction with the way that school staff interacts with parents (SatisfInteract): a variable that takes one of 4 ordered values (very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied)
- A dummy variable which takes a value of 1 if the parents expect that the highest education the child would attain would be a high school diploma or lower education, and 0 otherwise (ExpectChildEducHSorLess)
- A dummy variable which takes a value of 1 if the parents expect that the highest education the child would attain is attending a vocational/ technical school (after high school) or some college, and 0 otherwise (ExpectChildEducSomeColl)
- A dummy variable which takes a value of 1 if the parents expect that the highest degree the child would obtain is a Bachelor's degree, and 0 otherwise (ExpectChildEducBA)
- A dummy variable which takes a value of 1 if the parents expect that the highest degree the child would obtain is a graduate or professional degree, and 0 otherwise (ExpectChildEducGradDegr)
- A dummy variable which takes a value of 1 if the child earns mostly A's, and 0 otherwise (ChildGradeA)
- A dummy variable which takes a value of 1 if the child earns mostly B's, and 0 otherwise (ChildGradeB)
- A dummy variable which takes a value of 1 if the child earns mostly C's and lower grades, and 0 otherwise (ChildGradeCorLower)
- A dummy variable equal to 1 if the child attends a private school, and 0 if (s)he attends a public school (PrivateSchool)
- An indicator equal to 1 if the child is a girl, and 0 if the child is a boy (ChildGirl)
- Age of the child (AgeChild)
- Number of children in the family (NumChildren)
- An indicator that takes a value of 1 if the respondent is the mother, and 0 if the respondent is the father (RespondentMother)
- · An indicator equal to 1 if the mother is currently employed, and 0 otherwise (MotherEmployed)
- An indicator equal to 1 if the father is currently employed, and 0 otherwise (FatherEmployed)

- An indicator equal to 1 if the parents are married, and 0 otherwise (MarriedParents)
- A dummy variable equal to 1 if the child is Hispanic, and 0 otherwise (HispanicChild)
- A dummy variable equal to 1 if the child is Black, and 0 otherwise (BlackChild)
- A dummy variable equal to 1 if the child's health is below very good, and 0 if it is very good or excellent (ChildHealthGoodOrWorse)
- An interaction term of a dummy variable indicating that the parents expect the child to obtain a Bachelor's or a graduate degree and a dummy variable denoting that the child earns mostly C's or lower grades (HighExp3or4LowGrade)
- An interaction term of ExpectChildEducHSorLess and ChildGradeA (IntExp1xGradeA)
- An interaction term of ExpectChildEducHSorLess and ChildGradeB (IntExp1xGradeB)
- An interaction term of ExpectChildEducHSorLess and ChildGradeCorLower (IntExp1xGradeC)
- An interaction term of ExpectChildEducSomeColl and ChildGradeA (IntExp2xGradeA)
- An interaction term of ExpectChildEducSomeColl and ChildGradeB (IntExp2xGradeB)
- An interaction term of ExpectChildEducSomeColl and ChildGradeCorLower (IntExp2xGradeC)
- An interaction term of ExpectChildEducBA and ChildGradeA (IntExp3xGradeA)
- An interaction term of ExpectChildEducBA and ChildGradeB (IntExp3xGradeB)
- An interaction term of ExpectChildEducBA and ChildGradeCorLower (IntExp3xGradeC)
- An interaction term of ExpectChildEducGradDegr and ChildGradeB (IntExp4xGradeB)
- · An interaction term of ExpectChildEducGradDegr and ChildGradeCorLower (IntExp4xGradeC)

# Table A1. Effect of expectations and performance on satisfaction, and effect of high expectations and low performance on satisfaction: Coefficients and marginal effects

		Pare	ental satisfaction outco	omes	
Variable	School	Teacher	Academic standards	Order and discipline	Interaction

Panel A. Effect of expectations and performance on satisfaction: Coefficients and marginal effects (Reflects Table 2 in the article, but using an ordered Probit specification)

Expect high school or less * Grade A	-0.066 (0.115) [0.023]	-0.075 (0.127) [0.027]	0.061 (0.115) [-0.022]	0.117 (0.126) [-0.043]	-0.024 (0.123) [0.009]
Expect high school or less * Grade B	0.339*** (0.094) [-0.120***]	0.374*** (0.085) [-0.133***]	0.275*** (0.094) [-0.101***]	0.288*** (0.091) [-0.105***]	0.154* (0.090) [-0.058*]
Expect high school or less * Grade C or lower	0.980*** (0.079) [-0.347***]	0.853*** (0.084) [-0.305***]	0.780*** (0.077) [-0.285***]	0.745*** (0.093) [-0.273***]	0.655*** (0.083) [-0.246***]
Expect some college * Grade A	0.005 (0.050) [-0.002]	-0.046 (0.049) [0.017]	-0.001 (0.050) [-0.0002]	0.132*** (0.048) [-0.049***]	0.086* (0.048) [-0.032*]
Expect some college * Grade B	0.316*** (0.042) [-0.112***]	0.352*** (0.054) [-0.126***]	0.312*** (0.044) [-0.114***]	0.304*** (0.044) [-0.111***]	0.211*** (0.039) [-0.079***]
Expect some college * Grade C or lower	0.741*** (0.057) [-0.262***]	0.667*** (0.053) [-0.239***]	0.578*** (0.056) [-0.211***]	0.507*** (0.055) [-0.186***]	0.491*** (0.057) [-0.185***]
Expect BA * Grade A	-0.027 (0.032) [0.010]	0.015 (0.030) [-0.005]	0.012 (0.030) [-0.004]	0.049* (0.030) [-0.018*]	0.003 (0.029) [-0.001]
Expect BA * Grade B	0.281*** (0.036) [-0.099***]	0.349*** (0.036) [-0.125***]	0.217*** (0.036) [-0.079***]	0.222*** (0.035) [-0.082***]	0.191*** (0.035) [-0.072***]
Expect BA * Grade C or lower	0.652*** (0.079) [-0.230***]	0.628*** (0.070) [-0.224***]	0.546*** (0.069) [-0.200***]	0.389*** (0.066) [-0.143***]	0.401*** (0.066) [-0.151***]
Expect a graduate degree * Grade B	0.295*** (0.041) [-0.104***]	0.332*** (0.039) [-0.119***]	0.249*** (0.041) [-0.091***]	0.191*** (0.040) [-0.070***]	0.221*** (0.038) [-0.083***]
Expect a graduate degree * Grade C or lower	0.899*** (0.093) [-0.318***]	0.913*** (0.082) [-0.326***]	0.698*** (0.077) [-0.255***]	0.722*** (0.072) [-0.265***]	0.578*** (0.079) [-0.217***]
Observations	26,725	26,725	26,725	26,725	26,725
R-squared	0.0558	0.0557	0.0386	0.0394	0.0404

Panel B. Effect of high expectations and low performance on satisfaction: Coefficients and marginal effects (Reflects Table 3 in the article, but using an ordered Probit specification)

-					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.536*** (0.060) [-0.195***]	0.519*** (0.054) [-0.190***]	0.428*** (0.052) [-0.159***]	0.350*** (0.050) [-0.130***]	0.328*** (0.051) [-0.124***]
Observations	26,725	26,725	26,725	26,725	26,725
R-squared	0.0350	0.0372	0.0260	0.0296	0.0324

In Panel A, estimates are obtained from ordered Probit regressions of different measures of satisfaction with child schooling on parental aspirations and child's current academic performance and a set of controls. In Panel B, estimates are obtained from ordered Probit regressions of different measures of satisfaction with child schooling on an indicator of high parental aspirations (i.e., expect a BA or a graduate degree) whereas child's current grades are mostly C's or lower, and a set of controls. The following are the conditioning variables: an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the father is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\* Significant at 5% level. \* Significant at 10% level.

### Appendix A2 Tables with results from ordered Probit specifications

Table A2. Subsample	e analysis by parental	education: Marginal e	effects of high expecta	tions and low performa	nce on the likelihood	
of being very satisfie	Parental satisfaction outcomes					
	School	Teacher	Academic standards	Order and discipline	Interaction	
Denal A. Mathania advan	tion. With otheral on lower	reacher	Acqueinic Standards	order und discipline	Interaction	
Panel A. Motner's eauca	tion: High school or lower	0.252+++	0.220+++	0.202+++	0.222++	
Expect BA or	0.396***	0.353***	0.328***	0.293***	0.222**	
whereas arades are	[-0.146***]	[-0.131***]	[-0 124***]	[-0.111***]	(0.093)	
mostly C's or lower	[ 0.140 ]	[ 0.151 ]	[ 0.124 ]	[ 0.111 ]	[ 0.005 ]	
	5,408	5,408	5,408	5,408	5,408	
Panel B. Mother's educat	ion: Technical or vocational	degree after high school	or some college	•		
Expect BA or	0.546***	0.537***	0.520***	0.309***	0.313***	
a graduate degree	(0.091)	(0.085)	(0.084)	(0.077)	(0.081)	
whereas grades are	[-0.205***]	[-0.201***]	[-0.197***]	[-0.118***]	[-0.119***]	
mostly C's or lower						
	8,164	8,164	8,164	8,164	8,164	
Panel C. Mother's educat	ion: Bachelor's degree		1	1		
Expect BA or	0.661***	0.662***	0.418***	0.464***	0.412***	
a graduate degree	(0.102)	(0.111)	(0.103)	(0.101)	(0.108)	
whereas grades are	[-0.228***]	[-0.234***]	[-0.148***]	[-0.16/***]	[-0.154***]	
	7 810	7 810	7 810	7 810	7 810	
Papel D. Mother's educat	ion: Graduate dearee	7,010	7,010	7,010	7,010	
		0 707+++	0 574+++	0 ( 0 ( ***	0 57 6444	
Expect BA or	0.771^^^	0.737***	0.5/1^^^	0.484***	0.576^^^	
u gruduute degree	(0.112)	(0.124)	(0.110)	(0.125)	(0.119)	
mostly C's or lower	[ 0.205 ]	[ 0.202 ]	[ 0.205 ]	[ 0.105 ]	[ 0.217 ]	
	5,343	5,343	5,343	5,343	5,343	
Panel E. Father's education	on: High school or lower					
Expect BA or	0.464***	0.426***	0.422***	0.299***	0.281***	
a graduate degree	(0.110)	(0.089)	(0.090)	(0.086)	(0.087)	
whereas grades are	[-0.172***]	[-0.158***]	[-0.160***]	[-0.114***]	[-0.108***]	
mostly C's or lower	6.04.0	<u> </u>	6.040	6.04.0	6.04.0	
	6,840	6,840	6,840	6,840	6,840	
Panel F. Father's education	on: Technical or vocational	degree after high school	or some college			
Expect BA or	0.622***	0.618***	0.492***	0.423***	0.406***	
a graduate degree	(0.089)	(0.096)	(0.084)	(0.075)	(0.079)	
mostly C's or lower	[-0.231 ]	[-0.228 ]	[-0.165 ]	[-0.100 ]	[-0.155]	
	7,762	7,762	7,762	7,762	7,762	
Panel G. Father's education	on: Bachelor's degree					
Expect BA or	0.568***	0.560***	0.367***	0.292***	0.275**	
a graduate degree	(0.099)	(0.103)	(0.099)	(0.098)	(0.110)	
whereas grades are	[-0.197***]	[-0.200***]	[-0.133***]	[-0.106***]	[-0.102**]	
mostly C's or lower						
	6,712	6,712	6,712	6,712	6,712	
Panel H. Father's educati	on: Graduate degree					
Expect BA or	0.538***	0.527***	0.340**	0.438***	0.374**	
a graduate degree	(0.142)	(0.140)	(0.136)	(0.143)	(0.138)	
whereas grades are mostly ('s or lower	[-0.183***]	[-0.188***]	[-0.121**]	[-0.152***]	[-0.141**]	
	5 411	5 411	5 411	5 411	5 411	
	5,711	5,711	5,711	5,711	5,711	

Estimates are obtained from ordered Probit regressions of different measures of satisfaction with child schooling on an indicator of high parental aspirations (i.e., expect a BA or a graduate degree) whereas child's current grades are mostly C's or lower, and a set of controls, conditional on different levels of education of the parents. The following are the conditioning variables: an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the father is currently employed, whether the father is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\*

Table A3. Subsample analysis by household income: Marginal effects of high expectations and low performance on the likelihood of being very satisfied with child schooling (Reflects Table 5 in the article, but using an ordered Probit specification)

-	Parental satisfaction outcomes					
	School	Teacher	Academic standards	Order and discipline	Interaction	
Panel A. Up to \$20,0	00					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.474** (0.214) [-0.172**]	0.703*** (0.195) [-0.244***]	0.712*** (0.179) [-0.261***]	0.453*** (0.170) [-0.167***]	0.532*** (0.146) [-0.199***]	
	1,490	1,490	1,490	1,490	1,490	
Panel B. Between \$20,0	01 and \$50,000					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.574*** (0.113) [-0.210***]	0.538*** (0.093) [-0.195***]	0.408*** (0.087) [-0.153***]	0.339*** (0.088) [-0.127***]	0.374*** (0.100) [-0.142***]	
	4,816	4,816	4,816	4,816	4,816	
Panel C. Between \$50,001 and \$75,000						
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.601*** (0.154) [-0.226***]	0.407*** (0.133) [-0.152***]	0.406*** (0.133) [-0.154***]	0.326*** (0.110) [-0.125***]	0.224 (0.136) [-0.086]	
	4,218	4,218	4,218	4,218	4,218	
Panel D. Between \$75,0	01 and \$100,000					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.443*** (0.130) [-0.162***]	0.376*** (0.115) [-0.138***]	0.408*** (0.138) [-0.152***]	0.356** (0.146) [-0.132**]	0.249** (0.125) [-0.094**]	
	4,448	4,448	4,448	4,448	4,448	
Panel E. Between \$100,0	001 and \$150,000					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.613*** (0.123) [-0.218***]	0.632*** (0.132) [-0.229***]	0.460*** (0.115) [-0.169***]	0.343*** (0.114) [-0.128***]	0.358*** (0.111) [-0.136***]	
	5,562	5,562	5,562	5,562	5,562	
Panel F. Above \$150,000	)					
Expect BA or a graduate degree whereas grades are mostly C's or lower	0.540*** (0.128) [-0.184***]	0.580*** (0.122) [-0.208***]	0.354*** (0.125) [-0.124***]	0.388*** (0.116) [-0.135***]	0.413*** (0.129) [-0.154***]	
	6,191	6,191	6,191	6,191	6,191	

Estimates are obtained from ordered Probit regressions of different measures of satisfaction with child schooling on an indicator of high parental aspirations (i.e., expect a BA or a graduate degree) whereas child's current grades are mostly C's or lower, and a set of controls, conditional on different household income brackets. The following are the conditioning variables: an indicator for a female child, a dummy variable for attending a private school, age of the child, number of children in the family, an indicator denoting whether the respondent is the mother, indicators capturing whether the mother is currently employed, whether the father is currently employed, whether the parents are married, and dummy variables for Hispanic, Black and child at bad health. Robust standard errors are provided in parentheses. Marginal effects on the likelihood of being very satisfied with each measure of parental satisfaction with child schooling are presented in square brackets. \*\*\* Significant at 1% level. \*\* Significant at 5% level. \* Significant at 10% level.



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