

Parent Involvement and Young Children Behavior Performance in School

Ellen Hsieh

Background

Parents play important roles in the development of the children. Izzo et al. (1999) suggested that better parental involvement may lead to a better school performance. However, Sad and Gurbuzturk (2013) pointed out that parental involvement has been declined in time. The degree of participation of parents in education for the young children may be influenced by various factors such as socioeconomic status (Chavkin & Williams Jr, 1989) or working hours. With limited time and resources, how parents involve in children's education effectively and efficiently become a critical issue. The purpose of this study is to find out the most important involvements for parents to participate in children's learning process that influence children behavior in school with a focus on the young kids (pre-k until 2nd grade).

Data

This study will use the open data provided by National Center of Education Statistics (NCES). The dataset is related to "Parent Involvement in Education from Kindergarten to High School" and "Young Children's Care and Education Before Kindergarten", which is collected through conducting the survey in 2016. The dependent variable of the study is times contacted about very good behavior as an indicator of children behavior performance in school. The main potential features that may considered to be associated with children's behavior: 1) the parents' participation in school activities such as attend a school event, serve as a volunteer, and involve

in teacher-parent meeting conference. 2) the time parents spent with their children such as times child has been told a story, time spent on arts and crafts, and time worked on a project together. 3) the days that eaten meals together. Other potential variables might be the environment provided by the parents such as language spoken at home and the extra time parents spend on their children such as checking the homework for their children.

Table 6. Percentage of students in kindergarten through grade 12 whose parents reported participation in various activities, by selected school, student, and family characteristics: 2015–16—Continued

Characteristic	Number of students in kindergarten through grade 12 (thousands)	Activities in the past month						
		Visited library	Visited bookstore	Gone to a play, a concert, or other live show	Visited an art gallery, a museum, or a historical site	Visited a zoo or an aquarium	Attended a community/religious/ethnic event ¹	Attended athletic/sporting event ²
Highest education level of parents/guardians								
Less than high school	5,530	30	22	24	16	28	40	31
High school graduate or equivalent	9,986	29	23	28	20	25	47	38
Vocational/technical or some college	13,174	32	32	31	23	23	52	41
Bachelor's degree	13,789	36	40	39	30	23	59	46
Graduate or professional school	8,683	44	45	45	34	22	64	47
English spoken at home by parents/guardians⁷								
Both/only parent(s)/guardian(s) speak(s) English	43,115	35	35	35	26	23	55	43
One of two parents/guardians speaks English	1,882	36	28	33	20	22	51	38
No parent/guardian speaks English	6,165	29	28	28	21	29	48	31
Poverty status⁸								
Poor	8,971	36	23	24	21	29	47	35
Nonpoor	42,191	34	36	36	26	23	55	43

¹ Actual question wording asks if anyone in the family has attended an event sponsored by a community, religious, or ethnic group with the student.

² Actual question wording asks if anyone in the family has attended an athletic or sporting event outside of school in which this child was not a player.

³ School type classifies the school currently attended as either public or private. Public schools are further classified according to whether the school was chosen or assigned. Private schools are also classified as being religious or nonreligious. School type also excludes 67 cases where the Common Core of Data (CCD) indicated that the school was public but the respondent indicated the student attended a private school.

⁴ Excludes 81 cases because of missing data on the Common Core of Data (CCD)/Private School Survey (PSS) data files.

⁵ Locale of student's household classifies the residential ZIP code into a set of four major locale categories: city, suburban, town, rural.

⁶ "Other, non-Hispanic" includes American Indian and Alaska Native children who are not Hispanic and children reported as a race/ethnicity not listed.

⁷ Complete descriptions of the categories for English spoken at home by parents/guardians are as follows: (1) Both parents/guardians or the only parent/guardian learned English first or currently speak(s) English in the home, (2) One of two parents/guardians in a two-parent/guardian household learned English first or currently speaks English in the home, and (3) No parent/guardian learned English first and both parents/guardians or the only parent/guardian currently speak(s) a non-English language in the home.

⁸ Students are considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household's needs, given its size and composition. Income is collected in categories in the survey, rather than as an exact amount, and therefore the poverty measures used in this report are approximations of poverty. Detailed information on the poverty status calculation used in this report is available in appendix B.

NOTE: Students who were homeschooled were excluded from the table. Detail may not sum to totals because of rounding. Variables for school characteristics (school type and school size) have a certain number of missing cases owing to school nonreport; therefore, the number of students across the categories for each school variable does not sum to the total number of students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2016.

Method

First, to discover significant features that may contribute to the prediction of the children's good behavior in schools: times contacted about very good behavior, variable selection methodologies

will be performed such as the lasso and ridge regression. After that, with the selected features, supervised learning techniques will be applied to not only predict children's behavior, but also explore which features are significant in both physical and statistical senses that may help us to improve education systems.

References

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Available from https://nces.ed.gov/nhes/data_files.asp