

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.

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

Izzo, C. V., Weissberg, R. P., Kasprow, W. J., & Fendrich, M. (1999). A longitudinal assessment of teacher perceptions of parent involvement in children's education and school performance. *American journal of community psychology*, 27(6), 817-839.

Sad, S. N., & Gurbuzturk, O. (2013). Primary School Students' Parents' Level of Involvement into Their Children's Education. *Educational Sciences: Theory and Practice*, 13(2), 1006-1011.

Chavkin, N. F., & Williams Jr, D. L. (1989). Low-income parents' attitudes toward parent involvement in education. *J. Soc. & Soc. Welfare*, 16, 17.

National Center of Education Statistics. (2018). 2016 Early Childhood Program Participation Survey, 2016 Parent and Family Involvement in Education Survey [Data file and code book]. Available from https://nces.ed.gov/nhes/data_files.asp