

HOME LEARNING ENVIRONMENT AS A PREDICTOR OF PRESCHOOL CHILDREN'S ACHIEVEMENT

Daniela NECȘOI

Transilvania University of Brașov, Romania

ABSTRACT

In the literature, children's achievement is often associated with family background and characteristics, but also with parental educational practices, or the home learning environment that families create for their children. The objective of this study was to investigate the relationship between different family variables and children's achievement. More specific, we intended to identify which aspects of the family environment predict better children's social and cognitive development: the parents' education, family income, or the home learning environment that parents create for their children. In the study we used self-reported data, based on questionnaires administrated to parents of preschool children. The questionnaire contained items about the activities that parents engaged at home with their children, activities that had the potential to provide learning experiences and to contribute to children's social and cognitive development, such as reading to children, playing with them, painting and drawing, and so on. Data were analyzed using hierarchical linear regression. Our results support the importance of the home learning environment and its prevalence in generating social and cognitive development, comparing to family characteristics.

KEYWORDS: home learning environment, parental practices, preschool children's achievement.

1. INTRODUCTION

Family is an important factor that influences directly the personality development of children, from all points of view: social, emotional, intellectual and physical. Inside the family children have their first social experiences, learn the rules of moral conduct, and develop their own moral values. Family occasions first knowledge experiences of children. Inside the family children learn language, the volume, richness of vocabulary and correct expression largely depending on family effort made in this regard. As the first factor of education, family provides the child most knowledge about the surrounding environment: plants, animals, various phenomena, occupations of people, various objects, etc. Parents try to explain their children the meaning of phenomena, the relations between objects, phenomena, events and people, thus contributing to the early development of observation, memory, thinking and curiosity of children.

There is a wide range of family factors that exert long-term influences upon children's cognitive and social development, from the parents' level of education, the occupational status of parents, and their income to the home learning environment that parents create for their children. Extensive literature highlights the greater importance to achievement of parental involvement rather than the family's socio-demographic characteristics.

Many studies link children social and cognitive development in the early years to parents' educational practices in general [1, 2], but more specifically, to parental practices that have the potential to provide learning experiences for children, such as: reading to children, using complex language, responsiveness and warmth in interactions, playing with numbers, painting and drawing, learning about numbers and letters, going to the library [3, 4, 5].

2. STUDY AIMS

This study is focused on the influence on preschool children achievement of a group of family variables, both socio-demographic and educational (parental practices that provide learning or home learning environment). We intended to examine the relationship of both family and socio-demographic variables to children's cognitive and social development and determine which type of variable better predicts the achievement of children.

3. METHODOLOGY

3.1. Participants

The sample consisted of 36 Romanian parents, aged between 28 and 41, parents with preschool children aged between 5 and 6, from county of Braşov, Romania.

3.2. Measurements

3.2.1. Cognitive and social development of children

Children social and cognitive development was measured using an observation scale containing behavioural indices measured on a scale from 1 to 5, where 1 means that the behaviour was manifested very rarely, and 5 that the child displayed the behaviour very often. In order to calculate the children's total score, we summed the points for each of the two domain subscales (sample items for cognitive and social domains: "uses spatial relations: above, below, near, upper, lower, etc"; uses temporal relations: "today, yesterday, tomorrow, earlier, later"; "identifies and names objects shaped as triangle, circle, square, rectangle in the environment and in printed material"; "demonstrates initiative in interaction with others"; "demonstrates openness in helping others"; "cooperates when works and plays in groups"; "demonstrates appropriate behaviour (respect) in relationships with adults"). The score of 40 represented the maximum score a child could obtain for social domain, and 70 the maximum score for the cognitive domain.

3.2.2. Family variables: socio – demographics and educational practices (home learning environment)

3.2.2.1. Family income

Each family was assigned to one of the three types of income: (1) low family income, (2) medium family income, or (3) high family income. The three categories were recorded as 0, 1 and 2.

3.2.2.2. Parents' educational level

Measures of parents' educational level had five categories [6]: both parents with elementary level completed (1), one parent with elementary level and the other with high school diploma (2), both parents with high school completed (3), one parent with high school completed and the other is college or university graduated (4), and both parents are college or university-graduated (5).

3.2.2.3. Parental educational practices (home learning environment)

Measures of parental educational practices or home learning environment were based on a questionnaire administrated to parents of preschool children. The questionnaire contained 15 items about the activities that parents engaged at home with their children, activities that had the potential to provide learning experiences and to contribute to children's social and cognitive development, such as: reading to children, playing with them, painting and drawing, playing with numbers and letters, learning poems and riddles, singing and dancing together, hiking with children, visiting various attractions (zoo, cities, castles, museums etc), going to the theatre for children, children having a clear eating, resting and playing program, watching TV together, etc. The frequency of each of the 15 activities or practices was coded on a 0 – 7 scale (0= not occurring, 7= very frequent), and the 15 scores were added to produce a total score with a possible range of 0 – 105.

4. RESULTS

In order to examine the relationship between different variables and the children achievement, we used the statistical procedure of SPSS Windows, Pearson r (Pearson-Product Moment Correlation Coefficient). Correlations among variables demonstrate positive correlations between parents' educational level, family income and cognitive development and social development of children ($r= 0.23 - 0.28$). The results also show significant strong correlations between children cognitive achievements and the total score of home learning environment ($r=0.18$). The same relation was identified between social achievements and home learning environment total score ($r= 0.21$).

In order to examine if home learning environment that parents create for their children is a better predictor of children cognitive and social development than family background and family characteristics, we used multilevel models which included the home learning environment total score in addition to the family socio-demographic factors (level of education and family income).

By adding the score for home learning environment to the model, the explanatory power of the model increased with 19% for cognitive development and with 16% for social development.

The results support the conclusion that the home learning environment is an important independent predictor of cognitive and social development of preschool children and its influence is above that of the parent level of education and family income.

We also wanted to see which of the 15 home activities predicts children cognitive and social achievement. To address this question, each of the 15 home activity was individually tested in regression analysis. The activities that proved to provide clear learning opportunities and had significant positive effects on boosting cognitive and social development were: frequency of being read to, playing different games, playing with numbers and letters, painting and drawing, being taught poems and riddles, going to theatre, visiting various attractions.

5. CONCLUSION

This study demonstrated that the influence of parental educational practices upon child development is pervasive. It may be possible that the strong relationship that we found between the home learning environment and social and cognitive development of preschool children is mediated by some intervening unmeasured factors like family values and expectations or children motivation to learn. Whatever the mechanism, it is clear that the home learning environment is a significant factor that exerts a long-term influence on cognitive and social development of children.

The study shows that parents should be aware of the great impact that they have on educational attainment of their children. A better family setting, with explicit educational activities, provides children a better start in school and life.

REFERENCES

[1] Melhuish, E., Sylva, K., Sammons, P., Siraj-Blatchford, I., Taggart, B., Phan, M. (2008). Effects of the home learning environment and pre-schools centre experience upon literacy and numeracy development in early primary school, *Journal of Social Issues*, 64, 157–188.

- [2] Sylva, K., Scott, S., Totsika, V., Ereky-Stevens, K. and Crook, C. (2008). Training parents to help their children read: a randomized control trial, *British Journal of Educational Psychology*, 78, 435-455.
- [3] Bradley, R. (2002). Environment and parenting, in M. Bornstein (ed.) *Handbook of Parenting*, 2nd ed, Hillsdale, N.J: Lawrence Erlbaum Associates.
- [4] Barnes, J., Freude-Lagevardi, A. (2003). *From Pregnancy to Early Childhood: Early Interventions to Enhance the Mental Health of Children and Families*, London: Mental Health Foundation.
- [5] Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B. (2010). *Early childhood matters: evidence from the effective pre-school and primary education project*. New York: Routledge.
- [6] Deslandes, R., Potvin, P., & Leclerc, D. (1999). Family characteristics as predictors of school achievement: parental involvement as a mediator. *MCGILL Journal of Education*, 34(2), 135- 153.