The predictors of school adaptation in early childhood

*Berna Akçinar

Department of Psychology, Koç University, Rumelihisarı Yolu, 34450, Sarıyer, İstanbul, Turkey

Abstract

This study explored the predictors of early school adaptation with the family (economic status and parenting) and child characteristics (socio-behavioral development). The data were obtained by maternal reports (N=655) from the participants of the Study of Early Childhood Developmental Ecologies in Turkey (ECDET). The sample consisted of six year old children and their mothers. The results indicated that higher socio-economic status, adaptive parenting discipline strategies, and higher levels of socio-behavioral competence in children lead to better school adaptation at the first grade. The results are discussed in the light of prevention programs for school adaptation.

Keywords: School adaptation; socio-behavioral development; parenting; school transition.

1. Introduction

Successful adaptation to school is one of the important issues for developmental and educational psychologists, because healthy transition to school can be built on healthy cognitive and socio-behavioral development (Cicchetti, 1990). The rationale to study the school adaptation is that it predicts later school achievement. Children who are better adapted to school during the first grade elementary school have higher school success and higher self-esteem, are better in peer relationships, and are less likely to drop-out of the school (Reynolds, 1989; Haynes, Ben-Avie, & Ensign, 2003).

Healthy adaptation to school includes both cognitive and social adaptation. Although the link between socio-behavioral development and school adaptation is not well established and consistent as the link between cognitive development and school adaptation in children, socio-emotional and socio-behavioral development are found to be associated with early school adaptation. Children should have the ability to control their impulsive behaviors, to cope with problems with peers and adults, to deal with new situations, and to meet their self-care needs in school life so that they can be adapted to take turns, follow the rules, understand the routine of the classroom, and be successful (Haynes, Ben-Avie, & Ensign, 2003).
The school adaptation of children can be explained by the Ecological Systems Theory (Bronfenbrenner, 1979) and the Family Systems Theory (Cowan, Powell, & Cowan, 1998). According to Bronfenbrenner, children are exposed to and affected by the direct influence of family and the indirect influence of socio-economical environment. The family systems theory also suggests that families are formed by different systems (e.g., parent-child interaction, mother-father interaction) and these systems are interrelated. In this study, the parent-child interaction and the family’s demographic characteristics are addressed.

Parents from low SES backgrounds become more neglectful and/or controlling towards their children when they experience economic stress, because they do not have the energy to deal with their children (McLoyd, 1990). These types of parenting lead to immaturity and low self-regulation that result in lower levels of socio-behavioral competence in children (Brooks-Gunn & Duncan, 1997; Gurland & Grolnick, 2005). Children’s experiences and interactions with their parents, especially with the mothers, play a crucial role in their socio-behavioral development. Children of parents, who are attentive to their needs and display affectionate and responsive parenting, develop a secure base of trust to their parents. This sense of security reflects on other relationships of children, that helps them to feel sense of relatedness to school and be able to form the secure readiness to adapt to and learn at school (Deci, Vallerand, Pelletier, & Ryan, 1991; Lynch & Cicchetti, 1997).

Parents who are supportive, responsive and set developmentally appropriate limits help our children to increase their self-competence, social competence and self-regulation skills. In contrast, children of parents who emphasize high control and rejection, and use punitive discipline strategies tend to show anxiety and frustration which leads to low levels of socio-behavioral development. When the parents are responsive, warm and use inductive reasoning in their discipline, children are more likely to regulate their behaviors because they are active in controlling their own behaviors through the internalization of parental reasoning (Bornstein, 1995; Grusec, Goodnow, & Kuczynski, 2000; Knafo & Plomin, 2006). The internalization of the decision making and reasoning process through the use of induction and warmth, rather than power assertion, leads children to be more emphatic, have more tolerance for differences, be responsible and helpful towards their peers rather than being aggressive (Knafo & Plomin, 2006).

The effective parenting also has an indirect influence to school adaptation through the mediating role of socio-behavioral development (Chen, Dong, & Zhou, 1997). The warm, consistent and responsive parenting leads children to learn to calm themselves when they feel any stress, such as school transition, because they have the secure based attachment with their parents. They learn the feelings of confidence and security, how to regulate themselves, and how to be more self-reliant, thus are able to adapt and deal with school related problems. (Cowan et al., 2005; Deater-Deckard & Dodge, 1997). In their study, Cowen et al. (2005) found that warm, responsive parenting with age appropriate control and discipline strategies sets the stage for a successful school transition.

2. Methodology

The purposes of this study are (1) to compare children’s school adaptation with respect to different environmental backgrounds (socioeconomic status and mother education); (2) to identify the strength of the association between parenting behaviors and school adaptation; (3) to identify the direct and indirect effects of parenting (through the child’s socio-behavioral development) on school adaptation. It is important to study the effects of parenting and socio-behavioral development on school adaptation in Turkey, because the preschool attendance rates are low in Turkey (35% at 5 years of age in year 2009, according to the ECDET data). Also, with the new educational law, children of 60-66 months of age will start to first grade elementary school. Thus, most children in Turkey start to elementary school without a previous preschool education and being ready for school both socially and cognitively.

The following hypotheses were generated for the study: (i) Children of mothers who have higher educational level and higher SES will show better adaptation to school; (ii) Children of mothers who display higher levels of parental warmth and parental use of inductive reasoning will show higher levels of socio-behavioral development; (iii) When mothers use high levels of parental punishment, children will show low levels of socio-behavioral development; (iv) Socio-behavioral development of the children will have a mediating role for the effect of parenting on school adaptation (Children who show better socio-behavioral development will show better adaptation to school).
2.1. Participants

Children and mothers of this study were the participants of the Study of Early Childhood Developmental Ecologies in Turkey (ECDET) which is a 5 year longitudinal study with a nationally representative sample. The sample for this particular study was composed of the participants of ECDET study’s 4th wave (N= 821 children of 6 years of age, and their mothers). From the sample of the 4th wave, 166 children and their mothers were not included in this study, because these children did not attend to elementary school by the time the data were collected. The participants were recruited from 24 communities in 19 provinces of Turkey that were selected with a stratified clustered design. Mother reported quantitative data were collected through home visits that lasted 2-3 hours. Interviewers screened the neighborhoods with the help of the local officials, public health clinics that served the neighborhoods, or by door-to-door screening in order to identify eligible families.

2.2. Materials and procedure

2.2.1. Demographic and Socio-Economic Characteristics

Demographic information for the parents and children is composed of the mothers’ education level, and the socio-economic status (SES) of the family. In order to group the mothers according to their SES, the composite SES measure was computed as a factor score based on the level of mother’s and the father’s education, a measure of material well-being of the family, and an estimate of the total monthly expenses of the family based on the maternal reports.

2.2.2. Parenting Questionnaire – TR

The original Parenting Questionnaire (PQ; Sanson, 1994) is a self-report measure for parenting practices. It consists of 30 items that parents rate their own parenting behaviors with respect to frequency. The Turkish version of the PQ was adapted by Yağmurlu and Sanson (2009). PQ-TR includes 30 items and maintains the original structure that the frequencies of behaviors are rated on 5 point Likert scales. The items used for the estimation of 3 subscales: punishment (e.g., “When my child misbehaves, I use physical punishment.”), parental warmth (e.g., “There are moments in which my child and I are so close.”), and inductive reasoning (e.g., “I discuss reasons for rules with my child.”). The PQ scores, scaled to range between 0-100 were used here. The internal reliability of these scales are 0.82, 0.88, and 0.82 for punishment scale, parental warmth scale, and inductive reasoning scale respectively.

2.2.3. Adaptive Social Behavior Inventory

The original Adaptive Social Behavior Inventory (ASBI; Hogan, Scott, & Bauer, 1992) is a 30 item questionnaire, addressing the preschool social competence. The Inventory was translated into Turkish by the ECDET team (Baydar et al., 2007). It includes 30 items (e.g., “Understands others’ feelings, like when they are happy, sad or mad.”, “Is helpful to other children.”) rated on a 5 point Likert scale with respect to frequency. The items allow the estimation of a total adaptive social behavior frequency scale and internal reliability of the total scale is 0.85. The total ASBI-TR score, scaled to range between 0-100 was used here.

2.2.4. School Adaptation Questionnaire: Maternally reported, the school adaptation scale measures the social and behavioral adaptation of the children entering the elementary school. The questionnaire was created by ECDET team (Baydar, et. al., 2007). It consists of 19 items (e.g., “My child has difficulty to obey the class rules”, “My child prepares her/his school bag by her/himself”, “My child can get along with her/his friends”) rated on a 5 point Likert scale with respect to frequency. The total scale score ranged between 0-100. The internal reliability of the scale was 0.79.
3. Results

The effects of the level of maternal education and SES on children’s school adaptation were analyzed by one-way ANOVA. The results revealed that children of mothers with higher educational level ($F(4, 648) = 5.20, p = 0.00$) and higher SES showed better adaptation to school ($F(2, 640) = 15.41, p = 0.00$). The effect of mother education was separately included in order to explore its own effect on school adaptation. For the following analyses, mother education was not included separately, because the composite score of SES also includes the mothers’ educational level.

Correlations among the composite parental measures and the correlations of each parental measure and children’s socio-behavioral development with the levels of school adaptation were calculated in order to reveal the structure of association among these constructs. The correlations are presented in Table 1. The results of the correlational analysis showed that parental use of inductive reasoning and parental warmth had positive association, whereas parental punishment had negative and moderate association with children’s school adaptation.

Table 1. Correlations between variables

| Correlations          | 2   | 3    | 4    | 5    | Mean | SD  |
|-----------------------|-----|------|------|------|------|-----|
| 1. Parental punishment| -0.28** | -0.33** | -0.44** | -0.33** | 27.94 | 17.10 |
| 2. Parental warmth    | 0.68** | 0.47** | 0.39** | 84.68 | 13.40 |
| 3. Parental use of inductive reasoning | 0.50** | 0.38** | 79.86 | 14.16 |
| 4. Socio-behavioral development | 0.55** | 70.30 | 11.10 |
| 5. School adaptation  | 72.90 | 11.75 |

In order to analyze the effects of parenting on socio-behavioral development of children, separate regression analyses for each type of parenting were conducted. The results supported the second and third hypotheses that when the parents used high levels of parental warmth ($B= 0.200, p = 0.00$), and parental use of inductive reasoning ($B= 0.264, p = 0.00$), their children showed higher levels of socio-behavioral development, whereas when the parents used high levels of parental punishment ($B= -0.301, p = 0.00$) their children showed lower levels of socio-behavioral competence (with the values of unstandardized coefficients).

The mediating role of socio-behavioral development of children for the effects of parenting on school adaptation was analyzed. The composite scores for different types of parenting (parental warmth, parental punishment, and parental use of inductive reasoning) were included in the analyses together, because the correlational analyses showed that the parents used different types of parenting behaviors simultaneously. The regression analyses showed that, SES had indirect influence to school adaptation when the parenting and child characteristics were entered into the model. The effect of the parenting behaviors also decreased when the child socio-behavioral development was entered into the regression model suggesting the direct effect of socio-behavioral development and the indirect effect of parenting behaviors on the school adaptation. The results indicated that parental warmth and parental punishment were partially mediated, and parental use of inductive reasoning was fully mediated by the children’s socio-behavioral competence. These three parenting factors and socio-behavioral development of children accounted for 33 % of the variance in school adaptation of children. The results for the mediation analyses are given in the Table 2.

Table 2. The results of the hierarchical regression model to predict school adaptation

| Variables                  | Model 1   | Model 2   | Model 3   |
|----------------------------|-----------|-----------|-----------|
| SES                        | 2.494**   | 0.373     | 0.436     |
| Parental warmth            | 0.184**   | 0.102*    | 0.102*    |
| Parental punishment        | -0.144*** | -0.056*   | -0.056*   |
| Parental use of inductive reasoning | 0.126**   | 0.030     | 0.461**   |
| Socio-behavioral development |         |           |           |

Note. * p<.05, ** p<.01; The values are unstandardized coefficients. 
$R^2=0.04$ for Model1; 0.21 for Model2; 0.33 for Model3
4. Discussion and conclusion

The main purpose of the current study was to investigate the effect of family and child characteristics on the early school adaptation of first grade students in Turkey. The mediating role of the child socio-behavioral competence was also considered. The findings indicated that children of mothers with higher educational and economical status showed better adaptation to school during the transition to first grade elementary school. This result provided support for the family systems theory which suggests that the family’s demographic characteristics indirectly influence the child development through the parenting behaviors.

Consistent with previous research, the present analyses indicated that children whose mothers were high in parental warmth and parental use of inductive reasoning displayed better socio-behavioral competence and school adaptation. Thus, parental warmth and parental use of inductive reasoning, rather than high parental punishment, teach children to become self-reliant and have self regulatory abilities in order to adapt the school life. The results considering the mediating role of the socio-behavioral competence of children on school adaptation indicated that parental warmth and parental punishment had both indirect and direct influences on school adaptation, whereas parental use of inductive reasoning had an important role on school adaptation through its effect on socio-behavioral competence of children. Turkish mothers were found to use low levels of inductive reasoning in their discipline strategies (Kagitcibasi, Sunar, & Bekman, 2001). In this study, the indirect effect of inductive reasoning stressed the importance of socio-behavioral development of children in a way that if one cannot improve the use of inductive reasoning in parents, then there would be a chance for them to increase the children’s socio-behavioral development with some other strategies (e.g., warmth) which would allow their healthy adaptation to school. This full mediation also showed that children were able to transform the things they had learned at home environment to school environment. The results of the study provide evidence for the role of parenting behaviors in children’s socio-behavioral development and school adaptation. It is important to develop parenting programs in order to improve their positive and adaptive discipline strategies in child rearing, especially when the educational level and economic status of the mothers are low. The results also suggest the notion that there must be screening programs for the level of school readiness and adaptation in social developmental area in early years. This idea keeps its importance in Turkish educational system due to low preschool education rates and new educational system. The school readiness and adaptation should be considered together with all developmental areas, rather than just cognitive competence.

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