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ABSTRACT

The relationship between parent-child interactions during free play and a teaching situation and children's school functioning was studied, focusing specifically on the relationships between mediated-learning-experience (MLE) interactions between mothers, fathers, and children and teachers' ratings of the child's adaptive behavior. MLE involves an active human mediator who operates between the individual and the environment and mediates the experience for the individual. Subjects were 26 preschool Puerto Rican children and their parents. Parent-child dyads were videotaped, and the videotapes were scored for mediated learning. Head Start teachers assessed the adaptive behavior of the children. Results confirm the tendency of MLE to explain variation in school functioning and suggest that the component of transcendence in fathers' interactions is a factor that may account for school functioning. Intentionality and contingent responsivity also show significance as predictors of school functioning. Four components of maternal MLE (meaning, joint regard, task regulation, and transcendence) account for school functioning. (Contains 13 references.) (SLD)

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**MEDIATED LEARNING EXPERIENCE AND CHILDREN'S  
SCHOOL FUNCTIONING AMONG PUERTO RICAN  
PRESCHOOLERS**

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*Objective*

The purpose of this study was to investigate the relationship between parent-child interactions during free play and a teaching situation and the childrens' school functioning. More specifically, the relationships between "mediated learning experience" interactions between mothers and fathers and their children and teachers' ratings of the child's adaptive behavior were investigated.

*Theoretical Framework*

The concept of mediated learning experience (MLE) is discussed by Feuerstein (1979, 1980) and his colleagues, and is supported by parent-child interaction literature that links specific parental behaviors with the child's cognitive and social development. There are two ways in which the learning experience of an individual is modified through interaction with his or her environment. The first is the modification that occurs as a result of direct contact or exposure to stimuli perceived through the sensory mechanisms (Piaget, 1974; Klein and Feuerstein, 1985). The second way is the mediated learning experience which involves an active human mediator who operates between the individual and the environment and mediates the experience to the individual (Vygotsky, 1978). The mediation enables the individual to benefit from direct experience, preparing him or her to learn and become modified by this experience (Klein & Feuerstein, 1985). Thus, the focus of the study was to explore what aspects of parents' mediates learning experience may enhance their children's school functioning.

While Feuerstein and his associates tend to emphasize the centrality of three to five parameters of Mediated Learning Experience, there are now twelve characteristics that they have defined. These include: intentionality/reciprocity, transcendence, meaning, joint regard, sharing, self regulation, praise, psychological differentiation, planning/goal, change, challenge, and search for an optimistic alternative. The operational definitions of these components/characteristics have been modified and a rating scale for measuring this aspect of parent/child interations has been developed (Lidz, 1992).

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### *Method*

The subjects of this study were 26 preschool Puerto Rican children of ages from 36 to 60 months (Mean age = 50.15 months) and their parents from a Head Start Program in two communities in San Juan. The families came from a low SES background (Mean income = \$5652). Twenty one mothers and four fathers were unemployed.

Each child was matched with his or her mother and father separately to make dyads. The dyads were videotaped individually in 2 sessions of 10 minutes each. Parents were videotaped in a free play situation included a standard set of toys where the parent was asked to play with her or his child as he or she normally does at home. During the teaching interaction situation the parent was given a construction toy and asked to teach the child to build a house. Videotapes were scored on Lidz's (1991) Mediated Learning Experience Rating Scale (MLERS) by two Puerto Rican psychologists. Interraters reliability coefficients ranged from .88 to .99.

The MLERS was designed by Lidz (1991) to provide diagnostic impressions of adults in interaction with young children, as well assess the mediator determining the degree of MLE provided by her or him. The scale incorporates the components described by Feuerstein (1979, 1980) and extended by Lidz (1987): intentionality, transcendence, meaning, joint regard, sharing of experience, task regulation, praise, psychological differentiation. It also includes two additional components, namely, affective involvement and contingent responsiveness (Lidz, 1987). Each component was scored by the two raters on a continuum of 0 to 3, with 3 representing the optimal amount. The total score possible on the MLERS was 30.

The school functioning variable was assessed with the Vineland Adaptive Behavior Scale (VABS). The Survey Edition in Spanish of this scale (Sparrow, Balla & Cicchetti, 1984) measures adaptive behavior in the communication, daily living skills, socialization, motor skills domains, and the total score. This was completed independently by the teachers of the preschool children.

### *Results and Discussion*

The relationship between MLW and school functioning was determined using Pearson correlations and multiple regression analyses. The aggregated MLE scores were used in both statistical analyses. The correlation analyses indicated differences in the relationship between the child's school functioning and mothers' and fathers' MLE. mothers' total mediation score was found to be

significantly related to school functioning retarding daily living skills ( $r = .38, p < .05$ ). Other mothers' MLE components (i.e., meaning, joint regard, and task regulation) were also significantly correlated with daily living skills ( $r = .46, r = .47, r = .39, p < .05$ , respectively). This indicated that mothers showed a wider repertoire of MLE related to daily living skills than with others school functioning variables. This may support the social role of the mother at home, and how she channels and reproduces it in the form of mediation for her child. As Guevara and Sesman (1978), Nieves-Falcón (1972), and Ramos (1985) have pointed out, Puerto Rican mothers of low SES tend to regulate their children's activities around the home and self-care activities.

In contrast, fathers showed a narrow repertoire of overall MLE behaviors. Only transcendence significantly correlated with three of the school functioning variables (i. e., communication, daily living skills, and socialization). This supports Feuerstein's theory (1979; 1980) which places a great emphasis on transcendence also a significant association between the father's mediation of affect involvement ( $r = -.42, p < .05$ ), praise/encouragement ( $r = .61, p < .05$ ) and the total scale of motor development on the VAB'. However, the negative direction of this correlation suggests that the higher level of mediation on affect-laden components, the lower the child's score on motor development.

Multiple regression analysis on the components of MLE was conducted in order to determine how they account for school functioning. Only those predictors with significant Beta's results were included. These multiple regression coefficients need to be interpreted cautiously because of the small size of the sample ( $N = 26$ ) and the large number of demographic and socioeconomic variables of the sample in this study. The cognitive screening measure, defined by the scores on the Peabody Picture Vocabulary Test-Hispanoamerican Version was partialled out with the MLE scores and the VABS scores.

The results of these analyses confirmed the tendency of MLE to explain the variation on school functioning. The results indicated that the component of transcendence in the fathers' interactions is a factor that may account for children's school functioning. Two other components, intentionality and contingent responsivity, showed significance as predictors of school functioning. In this case, fathers' mediation of transcendence, intentionality and praise/encouragement showed the most significant results in predicting school functioning on daily living skills, socialization skills, and motor skills, respectively.

Mothers' interactions, on the other hand, had significance predicting daily living skills on mediation of meaning and transcendence; and in socialization skills with mediation of joint regard. By the same token, fathers' interactions had marginal significance predicting socialization skills on mediation of meaning, contingent responsiveness, and affective involvement. Other father's interactions had marginal significance predicting motor skills on mediation of transcendence and joint regard.

According to these results, Puerto Rican mothers and fathers contribute in different ways to their children's functioning in school. With a larger sample, the results would be more conclusive. Seven components (intentionality, meaning, transcendence, praise/encouragement, contingent responsiveness, joint regard, and affective involvement) of fathers' MLE may account for school functioning in all areas except communication. While four components of mothers' MLE account for school functioning (i.e., meaning, joint regard, task regulation and transcendence). These findings support the importance of behaviors considered cognitively-laden that promote personal, domestic, social, interpersonal, motor, play, coping, and community skills on low SES Puerto Rican preschoolers. However, the lack of predictive value on language skills as defined by the VABS evidences how important are the match cultural, school values, and expectations of behavior. Therefore, Puerto Rican preschoolers' expressive and receptive skills cannot be clearly represented through this scale. Other instruments and procedures are necessary for assessing these behaviors.

### *Educational Importance*

This study provides some understanding of how Puerto Rican parents' MLE can promote and enhance school functioning of the preschool child using the MLERS as the vehicle to identify the MLE. Although, the MLE Rating Scale needs some adaptations in the non-verbal communication portion and a redefinition of the sharing of experience component in order to better understand the parental contributions. This scale can extend the examiner's assessment repertoire into the Puerto Rican family domain, allowing a multidisciplinary and sensitive approach in working with parents to develop better integration and correspondence between home and school. The most illuminating finding of this study was that Puerto Rican parents of low SES contribute in a different and complementary fashion to their children's school. This can help to a better understanding of the linkage between the parent-child interaction and the children's school performance.

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