

2001

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<https://doi.org/10.7275/7765779>

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PARENT INVOLVEMENT: PREDICTORS AND RELATION TO
CHILDREN'S BEHAVIOR AND EMERGENT ACADEMIC PERFORMANCE

A Thesis Presented

by

ALEXANDRA L. ZELJO

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

September 2001

Clinical Psychology

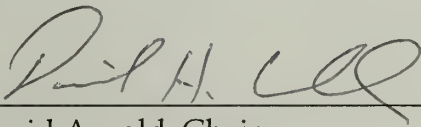
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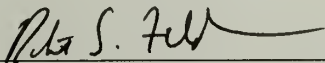
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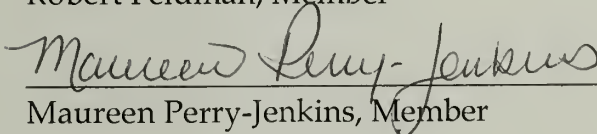
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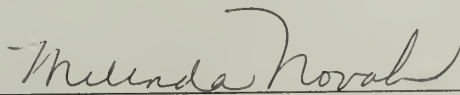
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ABSTRACT

PARENT INVOLVEMENT: PREDICTORS AND RELATION TO CHILDREN'S BEHAVIOR AND EMERGENT ACADEMIC PERFORMANCE

SEPTEMBER 2001

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The present study examines the relationship between parent involvement in preschool and children's emergent academic performance and behavior. It also examines predictors of parent involvement in preschool, including parent psychopathology, social support, and socioeconomic status. Participants were 168 mostly minority preschool children from low-income families, their parents, and their preschool teachers. Teachers rated parent involvement. Emergent academic skills were assessed using standardized tests of language skills. Teachers reported on child behavior, and parents rated their levels of psychopathology and social support. We expected that greater parental involvement would be associated with higher emergent academic skills and lower behavior problems. Also, we expected that lower ratings of parent psychopathology and higher ratings of social support would predict higher levels of parent involvement in preschools. We expected single parents and parents with more children to be less involved in preschool. We found that,

indeed, greater parent involvement predicted higher emergent academic skills. We did not find a clear relationship between parent involvement and children's behavior problems. Parent-initiated involvement was higher when teacher and parent ethnicity matched. Parent response level to teacher invitations was indirectly related to parents' depression levels and showed a trend toward being indirectly related to parents' anxiety levels. Single parents were less involved; however, number of children was not a factor in level of parent involvement.

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CHAPTER 1

INTRODUCTION

Parent involvement in children's schooling is thought to be important because it is associated with higher academic achievement. Previous work has documented this relationship across all school ages (i.e., 6-18 years). For example, Bogenschneider (1997) found that parental involvement in school activities was related to high school students' grade point averages, even after controlling for parents' education level. Grolnick and Slowiaczek (1994) found that parental school involvement correlated with grades achieved by students in grades 6-8. Reynolds (1992) has extensively studied parental involvement in school as part of his work exploring factors related to cognitive readiness in moving from kindergarten to first grade. He found that teacher reports of parent involvement in kindergarten were related to both grade retention and later academic achievement in the sixth grade. However, there is not much research on children younger than five years old, nor is there much information about other effects of parent involvement, such as on children's behavior problems. In addition, more research is needed on the factors that influence parents' involvement.

Current findings on the relationship between parental school involvement and emergent academic development at the preschool level are sparse and inconsistent. Taylor and Machida (1994) used the DIAL-R, a developmental screening instrument commonly used by Head Start centers to assess motor,

conceptual, and language skills of children ages 2-6. They found a moderate correlation between DIAL-R scores and teacher ratings on five questionnaire items pertaining to parent participation in school. On the other hand, Manziopoulous (1997), who also used a Head Start sample, but used the K-ABC, a widely-used standardized measure of academic achievement, found that academic scores were not correlated significantly with teacher ratings on a global ranking of parents' overall involvement in school.

It is of value to clarify the relationship between parent involvement and emergent academic skills because early academic development is important to future reading skills and success in school (Edmiaston, 1984; Lindquist, 1982; Pikulski & Tobin, 1989; Stevenson & Newman, 1986; Wells, 1985). Edmiaston (1984) found strong support for a relationship between oral language skills and reading comprehension in third graders. Lindquist (1982) found that preschool scores on the Denver Developmental Screening Test, a test that screens children for delay in language development as well as in other areas, predicted scores on the Gates-MacGintie Reading Test for 351 1st-3rd graders. Pikulski and Tobin (1989) found that lower levels of vocabulary development in pre-kindergartners were associated with poor reading skills. Scarborough (1989) found that early literacy skills at age 5 predicted reading ability at grade 2 regardless of socioeconomic status. Given that early academic development is associated with

later school performance, it would be worthwhile to further examine the relationship between children's emergent academic development and degree of parental involvement in preschool.

Even less is known about the relationship between parent involvement and other aspects of child development. For example, research on the relationship between parent involvement and children's behavior is sparse. There is no specific information on the relationship between parent involvement in school and children's clinical and subclinical behavior problems as observed by their teachers. In perhaps the most closely related work, Taylor and Machida (1994) used the Teachable Pupil Survey to look at classroom behavior and found that teacher ratings of parent involvement in school were associated with better classroom behavior. The items on the Teachable Pupil Survey are attributes characterizing ideal pupils and thus focus on positive behaviors (Kornblau, 1982). Some of the items on the survey are similar to items on certain dimensions of clinical behavior problem checklists. There are a few items that could be considered related to attention problems ("attention span appropriate for age and grade," "alert," "attentive to classroom proceedings"), social problems ("considerate of others," "empathetic," "well-accepted and liked by peers"), and depression/anxiety ("happy," "cheerful," "calm," "emotionally stable"). Because of the partial overlap between items on the Teachable Pupil Survey and

topics on clinical behavior checklists such as the Child Behavior Profile (t-CBP; Achenbach & Edelbrock, 1986), one may expect to find a similar relationship for parent involvement and clinical behavior problems in the classroom.

In addition, other research on parent involvement provides theoretical reasons suggesting that the relationship between involvement and children's behavior is worth exploring. Grolnick, Ryan and Deci (1991) suggest that parental involvement does not necessarily affect the child through teaching skills, but instead impacts children's attitudes and motivations related to school by affecting their perceptions of their parents' interest in school. If this is the case, children whose parents show interest by participating in school activities may be indirectly encouraging positive behaviors in the classroom. This theory also has wider implications for the importance of parental involvement: if true, even those parents with less education and less academic skills can be confident that by participating in school activities they will influence their children positively. On the other hand, the relationship between parents' level of involvement and child behavior in the classroom may be more complicated, especially when measured by the amount of contact the parent has with the teacher and classroom events. It is possible that both children with lots of behavior problems and those with none may have very involved parents. In this potential scenario, the first set of parents will have no choice but to be involved because their children's negative classroom behaviors will constantly bring them into contact with teachers, whether they would have chosen to be or not. The

second set of parents may be choosing to be involved in their children's school and affecting positive classroom behaviors in their children. Thus, since parent and child effects may be operating in opposing directions, this relationship may be difficult to uncover in a cross-sectional design.

Additionally, this study expands on what is known about the characteristics of parents who participate in school activities. We have made an effort to uncover barriers to parental involvement so that we can better understand how to facilitate involvement. It is already established in the literature that parents with less education and those in lower socioeconomic brackets participate less in their children's schools (Reynolds, 1996; Bhagwanji & McCollum, 1998). We expected to find a similar pattern in our preschool sample. However, socioeconomic status encompasses and is associated with a broad range of variables and no work has been done towards identifying the specific barriers to parent involvement in this population. One factor we will look at is whether parents are more likely to participate in their children's preschool if the teachers are also from similar ethnic backgrounds. It is possible that parents will feel more comfortable and confident interacting with someone they perceive is more likely to understand their cultural background and issues that are associated with it.

We looked at levels of psychopathology and the amount of social support reported by parents as potential predictors of the level of parent involvement in preschool. Parents with higher levels of psychopathology, especially those who

are depressed or anxious, may tend to be less involved in their children's school because they may have difficulty attending meetings and initiating discussions with teachers. For similar reasons, parents who report less than adequate social support may be less likely to participate in their children's schools regardless of their socioeconomic status. This information has not yet been examined and may provide more insight into the mechanism for how parental involvement affects child success in school. Another factor that is almost certainly important in determining the level of parent involvement is the amount of time a parent is able to set aside to participate in school activities. For this reason, we explored whether single parents or parents with more children are less involved.

Finally, parent involvement is a construct with multiple components and can be looked at from many perspectives such as whether the involvement is direct or indirect, from home or at school, teacher-initiated or parent-initiated, etc. These different aspects of parent involvement have not been very well studied. Often, one type of involvement is measured and then described using the broad label "parent involvement". However, it is likely that different components of parent involvement vary in their importance in predicting different outcomes. Thus, in our study, we employed exploratory analyses to identify components of involvement that appear more important than others, potentially influencing the direction of future work in this area.

CHAPTER 2

METHOD

Participants

Participants were 168 preschool children, their parents, and their preschool teachers from seven day care centers in Springfield and Holyoke, Massachusetts, who were participating in a larger study. The children averaged 4.5 years in age ($sd=0.5$, range 3.0-6.1). The children were diverse in terms of their ethnic and socioeconomic background. About 70% were from low-income families, with a median income of \$21,500. The median income of the families who attend the higher income daycare centers was \$57,000. The ethnic breakdown of the sample of children was 32% Hispanic, 29% African-American, 32% Caucasian, 7% other. There were approximately equal numbers of boys and girls in each ethnic group.

Procedure

Parents were invited to participate in the study through a letter sent home with all children in each preschool. Interested parents, who were mostly mothers, attended a one-hour session as part of the larger study where they completed a series of questionnaires, including inventories of their demographic background, their level of psychopathology, their social support systems, and their children's levels of behavior problems. Teachers completed a measure of child behavior and a measure of parent involvement for each participating child. In most cases, two teachers responded for each child in the study. Children's

emerging academic development was assessed in a quiet room at their preschool using three different language tests described below. The tests took approximately 45 minutes per child and were administered by University of Massachusetts clinical psychology doctoral students with extensive experience.

Measures

Parent involvement. Teachers completed a 20-item measure rating different aspects of parent involvement for each child in the study. Items included specific questions about the degree to which parents initiate contact with teachers, how often parents attend meetings, conferences and events, as well as more global items ranking parents' interest in education, the importance parents place on education, and their overall attitude about their children's education and school.

Four items were not analyzed as part of the factor analysis: items 2, 3 because they ask about teacher behavior, not parent behavior; and items 15, 20 because one of the potential responses was impossible to discern, "Don't Know or Not At All." Item 3 was used in exploratory analysis for Hypothesis 2. Items 5/6, 7/8, and 9/10 were considered as pairs. Each pair consists of one item asking about teacher behavior and one item asking about parent response. These items were collapsed according to a scoring system that we devised. For example, item 5 asks how often the teacher invited the parent to school for a special event. Item 6 asks how often the parent attended special events. The scoring system assigned the highest possible score if the parent attended every

possible event to which she was invited. The lowest possible score was assigned if she attended none of the events, and so on. A copy of the measure has been included in the Appendix.

Academic development. The following standardized measures of emergent academic skills were chosen because they are highly related to future academic success. Together these tests assess a wide range of language and emergent literacy skills.

The Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981) asks children to choose the appropriate picture from a four-picture array. This instrument provides a well-normed and extensively validated measure of receptive vocabulary.

The Expressive One-Word Picture Vocabulary Test (EOWPVT; Gardner, 1981) is a measure of expressive vocabulary which asks children to name pictures of common objects. This test has demonstrated reliability and validity and extensive normative data.

The Illinois Test of Psycholinguistic Abilities, Expressive Subscale (ITPA-E; Kirk, McCarthy, & Kirk, 1968) is a standardized test of verbal fluency. Children are asked to describe common objects such as a ball, a block, and a button.

Child behavior. Teachers completed the teacher form of the Child Behavior Profile (t-CBP; Achenbach & Edelbrock, 1986) for each child participating in the study. This 113-item instrument assesses the degree to which

each child displays internalizing and externalizing symptomatology. It includes standardized norms, with good psychometric properties, and has extensive validity data supporting its use.

Parents completed the internalizing scale of the Child Behavior Checklist for ages 4 to 16 (CBC-L; Achenbach & Edelbrock, 1983). The internalizing scale of the CBC-L is composed of 31 items that assess withdrawn behavior, somatic complaints, anxiety, and depression. The CBC-L includes standardized norms for internalizing problems, with good psychometric properties and extensive validity data. Parents also completed the Eyberg Child Behavior Inventory (ECBI; Robinson, Eyberg, & Ross, 1980). The ECBI is comprised of 36 items that assess externalizing problem behaviors in children. The scale is appropriate for children ages 2 to 17. Data suggests that the ECBI is a valid (Boggs, Eyberg, & Reynolds, 1990) and reliable measure of child externalizing behaviors.

Parent psychopathology. Parents completed the Brief Symptom Inventory (BSI) to assess levels of parental depression and anxiety. The BSI is a 53-item self-report symptom inventory with 9 clinical scales, two of which are depression and anxiety. The scales of the BSI have good internal consistency and test-retest reliabilities. The BSI also provides a Global Severity Index (GSI) that measures overall psychiatric distress and has excellent test-retest reliability. Good validity data support the use of the BSI (BSI; Derogatis, 1993).

Social Support. As a measure of social support we used the Social Support Appraisals Scale, which is a 23-item self-report instrument filled out by the parents in our study. The scale has good internal consistency and validity (SS-A; Vaux, Phillips, Holly, Thomson, Williams & Stewart, 1986).

Socioeconomic Status. We formed a standardized composite measure for socioeconomic status using parents' level of education and family income. Variables were standardized and then averaged together.

CHAPTER 3

RESULTS

Initial analyses

Parent Involvement Scale. Factor analysis yielded three factors with Eigenvalues above 1 that correspond with three general types of parent involvement (see Table 1.) Factor 1 includes items that fall under the theme of parent-initiated contact with the school. Factor 2 includes items asking whether the parent responds to teacher-initiated contact. Factor 3 includes items that combine to form a global measure of the parent's level of interest and involvement in the child's education. There are three items that overlap on Factors 1 and 3. This seems reasonable because they are general questions that ask about parent-initiated behaviors, which is appropriate for both scales. Thus, we used three factors in exploring our hypotheses, "Parent Initiated," "Responsiveness to Teacher," and "Attitude about Preschool," separately as well as collectively to obtain a total score for parent involvement, "Total."

Descriptive statistics. The means and standard deviations of parent involvement scores, pre-academic scores, behavior scores, ethnic match scores, psychopathology scores, social support scores, marital status and number of children are presented in Table 2. Pre-academic scores are a composite of the three language development test scores, PPVT-R, EOWPVT, ITPA-E.

Main Analyses

Hypothesis 1. Parent involvement is directly related to preschool children's emergent academic achievement above and beyond a family's socioeconomic status (SES). This hypothesis was tested by regressing pre-academic achievement on parent involvement and SES. All three involvement factors as well as Total parent involvement scores predicted pre-academic achievement, even when controlling for SES, see Table 3.

Hypothesis 2. Higher levels of parent involvement are related to better levels of children's clinical behavior as measured on the Child Behavior Checklist. This hypothesis was tested using linear regression with child behavior score as the dependent variable and parent involvement score and SES as independent variables. Parent involvement scores did not predict behavior scores (all p-values > 0.50). We also looked at this relationship using nonlinear regression to predict child behavior scores with SES as a linear component and parent involvement as a quadratic component. Parent involvement scores did not significantly predict behavior scores (all p-values > 0.38). Given the lack of a clear relationship between child behavior and parent involvement, we decided to look at simple correlations between parent involvement and each of the behavior subscales. We found that Total scores and Attitude about Preschool scores were inversely related to child scores on the Attention Problems subscale of the Child Behavior Checklist ($r = -.30$, $p = .006$; $r = -.29$, $p = .008$, respectively). We also found an inverse relationship between Responsiveness to Teacher scores and child

scores on both the Somatic Complaints and Social Problems subscales ($r=-.30$, $p=.005$; $r=-.23$, $p=.038$, respectively). In another exploratory regression analysis, we found that item 3 on the Parent Involvement scale, "Have you (the teacher) written a note or called this child's parent in the past 2-3 months?", was significantly related to child scores on some of the subscales of the Child Behavior Checklist: Withdrawn ($b=.26$, $SE=.34$, $p=.004$), Anxious/Depressed ($b=.292$, $SE=.28$, $p<.001$), Aggressive Behavior ($b=.17$, $SE=.51$, $p=.052$), Social Problems ($b=.27$, $SE=.33$, $p=.002$), Internalizing ($b=.30$, $SE=.49$, $p<.001$). Item 3 was not related to Externalizing ($p=.13$) or Total ($p=.17$).

Hypothesis 3. Parents from higher socioeconomic brackets are more likely to participate in their child's preschool. This hypothesis was tested using regression analysis with Total parent involvement score as the dependent variable and SES level as the independent variable. Total involvement scores were significantly related to SES ($b=.22$, $SE=.07$, $p=.02$).

Hypothesis 4. Parents are more likely to participate in their child's preschool if the teachers are from a similar ethnic background. This hypothesis was explored by creating a variable called "Ethnic Match" which assigned a score of 0 if the parent and teachers were of different ethnicity, 1 if the parent was the same ethnicity as one of the two teachers, and 2 if the parent was the same ethnicity as both teachers. Regression analysis was used with parent

involvement score as the dependent variable and Ethnic Match as the independent variable. We found that Ethnic Match was important in Parent Initiated involvement ($b = .20$, $SE = .08$, $p = .019$).

Hypothesis 5. Parents with higher levels of anxiety and depression will be less involved in their children's preschool. This hypothesis was explored using regression analysis with parent psychopathology and SES as independent variables and with parent involvement as the dependent variable. Parent reports of anxiety and depression levels were related to Responsiveness to Teacher scores even when controlling for SES. Higher scores on the BSI for depression are significantly correlated with lower Responsiveness to Teacher scores ($b = -.34$, $SE = .01$, $p < .005$). Scores on the BSI for anxiety show a trend toward being inversely correlated with Responsiveness to Teacher scores ($b = -.21$, $SE = .01$, $p = 0.07$).

Hypothesis 6. Parents with less social support will participate less in their children's preschool. This hypothesis was also explored using regression analysis with level of social support as the independent variable and parent involvement as the dependent variable. In our sample, the parents' Social Support scores show a trend toward being positively correlated with Total scores ($b = .17$, $SE = .10$, $p = .09$).

Hypothesis 7. Parents with more than one child and single parents will participate less in their children's preschool. This hypothesis was explored using regression analysis with parent involvement as the dependent variable and

number of children and marital status as independent variables. Our data show that marital status is significantly related to parents' Total scores ($\underline{b}=.18$, $\underline{SE}=.09$, $\underline{p}=0.047$). However, number of siblings was not significantly related to parents' level of involvement ($\underline{b}=.001$, $\underline{SE}=.09$, $\underline{p}=.99$).

CHAPTER 4

DISCUSSION

The data support the hypothesis that more involvement by parents in their children's preschools is related to greater emergent academic development in their children. This finding confirms previous work showing that parent involvement in school is important even at the preschool level (Taylor & Machida, 1994). Although the direction of causation cannot be assumed from our results, it is encouraging to note that all three types of parent involvement studied were related to children's language scores. Thus, children with higher scores had parents who initiated contact with the school more often, responded to teacher invitations more often, and had higher global attitude scores. Preschoolers with more involved parents seem to be doing well academically.

The correlations to children's behavior problems are less clear. Previous research shows a strong association between academic failure and behavior problems (e.g., Frick et al., 1991); thus, we expected to find that less involvement by parents would be associated with more behavior problems in our preschool sample. On the contrary, we did not find any significant association between level of involvement and overall behavior scores. As discussed earlier, it is possible that more involved parents consist of two groups: one associated with children who are doing well behaviorally, and another associated with children who have behavior difficulty. The second group of parents may be scoring high on the involvement scale because teachers are contacting them more often to

discuss problems with their children's behavior. If this is the case, it would explain why we are not finding any significant correlation between parent involvement and child behavior. To explore this further, we looked at whether teachers are contacting parents more often if children had more behavior problems. We found that, indeed, teachers contacted parents significantly more often the higher the child scored on the Withdrawn, Anxious/Depressed, Aggressive Behavior and Social Problems subscales of the Child Behavior Checklist. We also found that parents were more involved when their children showed fewer problems with attention. These results are exploratory and should be interpreted with caution. But they do support our explanation and thus a further look into the relationship between parent involvement and child behavior in future work is warranted.

Knowing that parent involvement is related to the academic success of children as early as preschool, we aimed to uncover barriers making it difficult for some parents to participate more fully in their children's schooling. In agreement with what is established in the literature, we found that parent involvement level is related to socioeconomic status (Reynolds, 1996; Bhagwanji & McCollum, 1998). In addition, our study uncovered some other interesting relationships that may help schools understand how to help parents be more involved.

We found that parents were more involved when their children's preschool teacher had a similar ethnic background. This factor was not

important in how parents responded to teacher invitations or to their global attitude about preschool, but it was related to how often the parents initiated contact with the teacher. Our finding is compatible with results of research on intercultural relations. Gudykunst and Shapiro (1996) found that participants in contrived encounters reported significantly less anxiety and more positive expectations when involved in encounters with someone of the same ethnicity. This research implies that schools should attempt to match the ethnic backgrounds of teachers or aides with those of the students in order to make parents more comfortable interacting with them, or to find ways to help teachers reach across cultural barriers.

Another interesting finding of the study was that parents who reported anxiety or depression responded less often than other parents to teacher invitations to attend parent-teacher conferences, special events or school meetings. Some common symptoms of depression include lack of motivation, low energy, and low self-confidence, all of which could contribute to a parent being less involved in her child's school. Anxiety can be associated with a fear of social interactions which certainly would inhibit parental involvement in school activities (American Psychiatric Association, Diagnostic and statistical manual of mental disorders IV, 1994). We found a trend in our data suggesting that parents who report less social support participate less in their children's schools as well. These findings may encourage teachers to put more personal effort into encouraging parents to get more involved. Perhaps, teachers could follow

letters sent home with a phone call to parents who do not respond. Preschools could become a valuable resource for isolated parents by providing information on where to get help.

Additionally, we found that single parents were less involved in their children's schools. Single parents probably are less able to find free time to participate as often as couples in their children's schools since they are one person shouldering the responsibilities of two parents. This finding is consistent with other work concerning single-parent status and lower levels of parent involvement in school (Reynolds, Weissberg, & Kaspro, 1992). Preschools may be able to help these parents by providing childcare for evening meetings and events.

There are a number of inherent limitations to interpreting the results of our study. First, it should be noted that this study was planned post hoc. The data were collected as part of a larger study that was not designed with parent involvement as a major focus. As a result, measuring parent involvement is not optimized. The involvement questionnaire is not a well-validated measure of parent involvement. It was filled out only by the children's teachers. Perhaps, important aspects of parent involvement would have been captured by using parent and child reports as additional sources of information. Also, because both the parent involvement and child behavior data were collected via teacher reports, there is the possibility of measurement error. With respect to the sample, we do not know how these parents, who choose to send their children to

preschool, would compare with a universal set of parents of grade school children. Our sample is also limited by the fact that parents self-selected to participate in this study. Some parents in the classrooms chose not to participate. Lastly, this study is limited by its correlational design whereby we cannot infer causation.

Future work should investigate further both ethnic match and parental psychopathology in relation to level of parental involvement. Our preliminary findings imply that preschools have potential to improve the level of parental involvement by increasing sensitivity to ethnic differences and parent psychopathology. It seems important for future work to investigate teacher variables such as preschool teachers' attitudes towards parents, whether teachers encourage or discourage involvement by parents, and also look more specifically at parents' comfort levels in communicating with the teachers. Unfortunately, due to study limitations, our findings on the relationship between child behavior problems and parent involvement provide more questions than answers. Future work is needed to elucidate that relationship.

Table 1

Items Loading Greater than .50 on Each Factor

Factor loading	Survey Item
Factor 1: Parent Initiated	
.74	Has this child's parent called you in the past 2-3 months?
.59	Has this child's parent stopped by to talk to you in the past 2-3 months?
.53	How often has this parent asked questions or made suggestions about his/her child in the past 2-3 months?
.64	To the best of your knowledge how much does this parent do things to encourage this child's positive attitude towards education (e.g., take child to the library, play games to teach child new things, read to child)?
.83	How often has this parent volunteered in the classroom in the past 2-3 months?
.64	How important is education in this family?
Factor 2: Responsiveness to Teacher	
.66	Has this child's parent visited your school for a special event (e.g. book fair) in the past 2-3 months? (if s/he was invited)
.80	Has this child's parent attended a parent-teacher conference in the past 2-3 months? (if s/he was invited)
.80	How often has this child's parent been to school meetings in the past 2-3 months? (if s/he was invited)

Continued Next Page

Table 1 Continued

Factor 3: Attitude about Preschool	
.69	How much is this parent interested in getting to know you?
.88	How well do you feel you can talk to and be heard by this parent?
.90	If you had a problem with this child, how comfortable would you feel talking to his/her parent about it?
.54	How often has this parent asked questions or made suggestions about his/her child in the past 2-3 months?
.52	To the best of your knowledge how much does this parent do things to encourage this child's positive attitude towards education (e.g., take child to the library, play games to teach child new things, read to child)?
.51	How important is education in this family?

Table 2

Means and Standard Deviations of Main Variables

Variable	<u>M</u>	<u>SD</u>	<u>n</u>
Parent Involvement			
Parent Initiated	1.3	0.8	166
Responsiveness to Teacher	1.4	0.7	181
Attitude about Preschool	2.8	0.8	165
Total	1.8	0.7	167
Composite Academic	85.4	20.7	167
Child Behavior			
Total T-score	51.3	8.4	170
Internalizing T-score	48.8	7.4	170
Externalizing T-score	54.3	8.9	170
Ethnic Match	1.2	0.9	160
Parent BSI anxiety	46.5	9.4	124
Parent BSI depression	50.4	9.5	122
Parent Social Support	42.9	37.2	117
Parent Marital Status	0.7	.46	129
Number of Children	2	1.1	194

Table 3

Parent Involvement as Related to Children's Pre-academic Development

Parent Involvement	Pre-academic Development		
	<u>b</u>	<u>SE</u>	<u>p</u>
Parent Initiated	.19	.09	.03
Responsiveness to Teacher	.20	.09	.02
Attitude about Preschool	.28	.09	.002
Total	.25	.09	.006

*Note, Overall $R^2 = 0.2$

APPENDIX

PARENT INVOLVEMENT MEASURE

DATE

TEACHER NAME

CHILD NAME

LENGTH OF TIME YOU HAVE WORKED WITH CHILD (weeks)

INSTRUCTIONS: A number of teachers have mentioned to us that attempts to get parents to be more involved in their child's school life are not successful with some parents as with others. With that in mind, we would like you to answer the following questions about your relationship with this student's parents and their involvement with the school in the past 2 to 3 months. If you have worked with the child less than two months, please answer these based on the time you have known the child. Choose the response that comes closest to your ideas.

1 Has this child's parent called you in the past 2-3 months?

Never Once/Twice Every Month Every Week More than Once/wk

2 Have you called this child's parent in the past 2-3 months?

Never Once/Twice Every Month Every Week More than Once/wk

3 Have you written a note or called this child's parent in the past 2-3 months?

Never Once/Twice Every Month Every Week More than Once/wk

4 Has this child's parent stopped by to talk to you in the past 2-3 months?

Never Once/Twice Every Month Every Week More than Once/wk

5 Has this child's parent been invited to visit your school for a special event (e.g. book fair) in the past 2-3 months (verbal or written invitation from you)?

Never Once/Twice Every Month Every Week More than Once/wk

6 Has this child's parent visited your school for a special event (eg book fair) in the past 2-3 months?

Never Once/Twice Every Month Every Week More than Once/wk

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Parent Involvement Measure Continued

- 7 Has this child's parent been invited to attend a parent-teacher conference in the past 2-3 months?
Never Once/ Twice Every Month Every Week More than Once/ wk
- 8 Has this child's parent attended a parent-teacher conference in the past 2-3 months?
Never Once/ Twice Every Month Every Week More than Once/ wk
- 9 How often has this child's parent been invited to attend a school meeting in the past 2-3 months? (verbal or written invitation from you)
Never Once/ Twice Every Month Every Week More than Once/ wk
- 10 How often has this child's parent been to school meetings in the past 2-3 months?
Never Once/ Twice Every Month Every Week More than Once/ wk
- 11 How much is this parent interested in getting to know you?
Not at All A Little Somewhat Interested Very Interested
- 12 How well do you feel you can talk to and be heard by this parent?
Not at All A Little Somewhat Well Very Well
- 13 If you have a problem with this child, how comfortable would you feel talking to his/ her parent about it?
Not at All A Little Some Comfortable Very Comfortable
- 14 How often has this parent asked questions or made suggestions about his/ her child in the past 2-3 months?
Never Once/ Twice Every Month Every Week More than Once/ wk
- 15 How much do you feel this parent has the same goals for his/ her child that the school does?
Don't know/ Not at All A Little Some A Lot A Whole Lot
- 16 To the best of your knowledge how much does this parent do things to encourage this child's positive attitude towards education (eg take child to the library, play games to teach child new things, read to child)?
Don't know/ Not at All A Little Some A Lot A Whole Lot
- 17 How often has this parent volunteered in the classroom in the past 2-3 months?
Never Once/ Twice Every Month Every Week More than Once/ wk

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Parent Involvement Measure Continued

18 How involved is this parent in his/her child's education and the classroom?

Not at All A Little Somewhat Involved Very Much Involved

19 How important is education in this family?

Don't know/ Not at All A Little Some A Lot A Whole Lot

20 Do you think that the parent is more interested in her child's education than the parent's participation indicates? (ie fulltime work, student, several young children at home)

Don't Know/Not at all A Little Somewhat Interested Very Interested

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