

Parent involvement, parental depression, and program satisfaction among low-income parents participating in a two-generation early childhood education program.

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Abstract:

Research Findings: This study simultaneously examined parental depression and parent involvement as predictors of satisfaction with an early childhood intervention program. Parents (N = 203) of Head Start children participated in this short-term longitudinal study. Measures of parent involvement and satisfaction assessed multiple dimensions of these constructs. Nearly 40% of low-income mothers reported being sometimes or chronically depressed over the course of 1 year of the Head Start program. Compared with mothers who were never depressed, those who were sometimes depressed reported less involvement in home- and school-based activities as well as fewer interactions with their child's teacher. Never depressed parents were more likely to be satisfied with their child's teacher compared with either group of depressed mothers. Higher levels of parent involvement and parent-teacher interaction predicted optimal satisfaction with Head Start services. Practice or Policy: Implications of results for practice are considered in terms of teacher training to recognize unique needs involved in working to establish a home-school connection with mothers experiencing depression. Strategies for building community partnerships to assist with mental health needs are discussed.

Keywords: parenting | depression | low income parents | parental involvement | early childhood education | child development | early education | psychology

Article:

Introduction

Two-generation early intervention programs are predicated on the importance of parent involvement to either directly or indirectly augment child outcomes (St. Pierre, Layzer, & Barnes, 1998). Specifically, two-generation intervention programs espouse providing services

that target both children (e.g., child development goals) and the broader family ecology (e.g., parent functioning; Smith & Zaslow, 1995). This approach rests on transactional models of development (e.g., Bronfenbrenner, 1979) and argues for continuity between home and school contexts (Christenson, 2004; Epstein, 1995). The value of parent involvement during the preschool years has been documented by research linking parent involvement with enduring cognitive and social benefits for children (e.g., Fantuzzo, McWayne, Perry, & Childs, 2004; Marcon, 1999; Taylor & Machida, 1994). In addition, theoretical models have posited that engagement in parent involvement activities can have positive impacts on enhancing the home learning environment and improving the parent–child relationship (Lamb-Parker, Boak, Griffin, Ripple, & Peay, 1999). However, there continues to be fewer studies of parent involvement in preschool relative to older children, and studies that have examined barriers to parent involvement during preschool are limited (Arnold, Zeljo, Doctoroff, & Ortiz, 2008; Lamb-Parker et al., 2001). The purpose of the present study was to examine parents' psychological health (i.e., depressive symptoms) as a family process variable potentially affecting parent involvement among low-income African American families participating in a two-generation early intervention program (i.e., Head Start). In addition, we investigated whether parental depression and parent involvement predicted parents' program satisfaction as another aspect of parents' intervention engagement.

As the nation's most visible two-generation early intervention program, Head Start is an ideal setting for examining how family processes relate to parent involvement and program satisfaction. Two-generation interventions integrate program goals directed at child and family well-being. Specifically, “self-sufficiency services” primarily target enhancing parents' economic viability via improvements in parent education, job training, and employment opportunities, whereas “child development services” attend to preventive health care, parenting programs, and quality child care/early childhood education (Smith & Zaslow, 1995). Within this framework, the Head Start program is mandated to provide opportunities for parent involvement in program activities targeting children (e.g., volunteering in the classroom) as well as the family (e.g., developing family partnerships with program staff; Lamb-Parker, Piotrkowski, Horn, & Greene, 1995). Thus, the structure of Head Start program is designed to attract parent involvement by offering services to improve the well-being of both children and parents.

BARRIERS TO PARENT INVOLVEMENT

Theoretical frameworks depicting barriers to parent involvement have focused on both stable demographic characteristics as well as dynamic or process variables. Single parenthood, ethnic minority status, parent education, and employment status have been linked to decreased parent involvement (Castro, Bryant, Peisner-Feinberg, & Skinner, 2004; Christenson & Sheridan, 2001; Fantuzzo, Tighe, & Childs, 2000; Kohl et al., 2000). However, such “social address” markers (i.e., variables reflecting one's position in the socioeconomic system) do little to uncover the underlying processes that explain these associations (Talbert & McLaughlin, 1999). Indeed, Eccles and Harold (1993, 1996) asserted that demographic characteristics serve as indicators of

dynamic factors that likely have more direct impact on parent involvement behavior. Increased exploration of dynamic or process variables (e.g., parent attitudes, parental efficacy, parent–teacher relationships) may therefore provide clearer connections to models of parent involvement (Hoover-Dempsey & Sandler, 1995, 1997) and may also identify factors that are more readily amenable to change.

Parental psychological health, such as depressive symptoms, may be one process variable underlying demographic links to parent involvement patterns. There are several reasons for studying parental depression as a barrier to parent involvement. First, because two-generation programs typically target low-income families with young children, this population is at increased risk for experiencing depressive symptoms that tend to co-occur with life stressors (Pianta & Egeland, 1994). Second, efforts to increase parent involvement are often faced with the challenge of how to engage “difficult-to-reach” families (Snell-Johns, Mendez, & Smith, 2004), which may include families with a depressed mother. Finally, understanding how depression may compromise parents' ability to effectively contribute to their child's education may promote different approaches among school personnel for fostering engagement.

Furthermore, research suggests that compromised parenting resulting from maternal depression has the potential to impact parent involvement (see Goodman & Gotlib, 2002, for a review). Specifically, depressed mothers see themselves as less competent, more helpless (Webster-Stratton & Hammond, 1988), and less efficacious (Fox & Gelfand, 1994; Teti & Gelfand, 1991) and are more likely to report that children's developmental outcomes are determined by uncontrollable factors (Kochanska, Radke-Yarrow, Kuczynski, & Friedman, 1987). In addition, depressive symptoms (e.g., low energy, less motivation) may produce negative views of the parental role and reduce mothers' confidence in engaging their children in home learning activities or in interacting with school personnel (Downey & Coyne, 1990). Together, these findings suggest that decreased efficacy, reduced energy, and interpersonal difficulties among depressed mothers may help partially explain differential patterns of involvement, particularly among at-risk populations.

Studies examining associations between parental depression and involvement among families with young children have been limited but nonetheless suggest negative effects of parental depression on parent involvement. This small body of work is primarily restricted to school-based involvement and parent–teacher interactions, rather than employing a multifaceted approach spanning home and school contexts as well as parent–teacher interactions (e.g., Fantuzzo et al., 2000). Kohl et al. (2000) and Lamb-Parker et al. (2001) reported depressive symptoms to be negatively related to school involvement and parent–teacher interactions. Others have failed to link depression and these aspects of involvement (Arnold et al., 2008), yet these results may have been limited by low levels of depressive symptoms in the sample. Furthermore, only Kohl et al.'s (2000) study of kindergarten and first-grade students included a measure of parent involvement at home, and results showed negative relations with depression. Thus, there is initial evidence that depression among parents of young children is associated with decreased

involvement with school-based activities and communication with teachers; these activities may require more effort and interpersonal engagement and may be particularly compromised by depressive symptoms. Nevertheless, the question of whether depression influences involvement practices in the home setting, particularly during the preschool period, remains largely unexplored.

PARENTS' PROGRAM SATISFACTION

The study of parent involvement and family process variables such as parental depression may also help inform our understanding of parents' satisfaction with program services, a little-studied aspect of intervention engagement. There are two primary difficulties in conducting research on parental satisfaction with intervention services. First, ratings of parental satisfaction are often prone to positive response bias. Indeed, studies of parental satisfaction with early childhood intervention programs tend to yield high levels of satisfaction (McNaughton, 1994; Telekei & Buck-Gomez, 2002). Second, assessments of satisfaction tend to focus on global ratings of program services rather than facet-specific aspects (Guttek, 1978). Despite these challenges, there are several benefits to investigating parent satisfaction, including enhancing program services, preventing program rejection, and increasing parental engagement (Fantuzzo, Perry, & Childs, 2006; McNaughton, 1994). Examining potential predictors of parent satisfaction may help elucidate the contributions of this information.

Parent involvement has been hypothesized as potentially influencing parents' satisfaction ratings. Fantuzzo et al. (2006) found that parents of younger children reported increased program satisfaction regarding opportunities for parent involvement; these researchers suggested that this difference in satisfaction may be due to increased emphasis on parent involvement in these classrooms. We could only locate one study that directly examined parent involvement as a predictor of satisfaction with an early childhood program. Specifically, Jinnah and Walters (2008) found that increased parent involvement predicted program satisfaction among a high-income Caucasian sample. Still, these results should be interpreted with caution owing to low power in the study, and they warrant replication with larger and more economically and ethnically diverse samples. Furthermore, given that parental depression may interact with parent involvement, it may be worthwhile to examine whether depression or other family process variables predict satisfaction outcomes.

THE CURRENT STUDY

This study examined associations among parent involvement, parental depression, and program satisfaction among low-income African American families participating in Head Start. First, we aimed to expand the literature on barriers to parent involvement by focusing on a family process variable, parental depression, as a predictor. We took a longitudinal, albeit short-term, perspective to assessing depression by grouping parents according to their self-report of

depressive symptoms (i.e., chronically depressed, sometimes depressed, never depressed) at two time points across the school year.

By creating groups to designate variations in depression chronicity, we chose to take a dimensional rather than dichotomous view of depression. We believe this approach is consistent with the move toward more precise definitions of depression exposure that account for variations in the course of the illness (e.g., Brennan et al., 2000). Specifically, richer conceptualizations of children's exposure to maternal depression consider the manifestation and remission of the illness. In contrast, studies examining parents' current depression status cannot inform whether preschoolers' current functioning was influenced by previous exposure effects on earlier developmental competencies. Studies of depression chronicity should assess the impact of exposure duration and compare enduring and remitted depressive episodes to the absence of exposure to maternal depression. By including a "sometimes depressed" group, we hoped to identify parents who may be at increased risk for experiencing another depressive episode in the future. With this dimensional approach, we attempted to examine the continuity in children's experience of parental depressive symptomatology. Accounting for these elements is consistent with a developmental psychopathology approach, as these factors may differentially impact child functioning over time (e.g., Sameroff, 2000).

By creating three depression groups, we were able to assess depression prevalence and variations across the school year. We then tested whether there were measurable group differences in parent involvement at the end of the school year. Our examination of parent involvement was consistent with current conceptualizations of parent involvement as occurring across multiple contexts (e.g., home, school) and reflecting interpersonal communication between parents and school personnel (Fantuzzo et al., 2000). Thus, in order to inform our understanding of barriers, we hoped to capture differential impacts of parental depression on various types of parent involvement, particularly involvement in the home setting.

Our second goal was to examine whether parent involvement and depressive symptoms predicted parents' program satisfaction. We also tested whether satisfaction was moderated by parent involvement. In addition, our investigation expands the literature on parent satisfaction by including three different aspects of Head Start program services (i.e., child-focused services, family-focused services, and parents' perceptions of their child's teacher) rather than global ratings of program satisfaction. Furthermore, to our knowledge, this is the first study to examine associations among parent involvement, family process factors (i.e., parental depression), and satisfaction among low-income ethnic minority families with preschool children.

In sum, we examined the following research questions:

What is the prevalence of chronic depressive symptoms?

Does the prevalence of depressive symptoms impact parent involvement activities?

Does the prevalence of depressive symptoms predict the likelihood of parent satisfaction with Head Start services, and is this relation moderated by parent involvement?

METHOD

Participants

Families were recruited from three Head Start centers located in a mid-sized city in the southeastern United States. Data were collected from two cohorts of families ($N = 203$) participating in a larger study of parent involvement (Mendez, 2010). Respondents were typically the child's mother ($n = 190, 94\%$). The majority of the families were African American ($n = 194, 96\%$). Marital status of the participants was as follows: never married ($n = 121, 59\%$), married ($n = 41, 22\%$), separated ($n = 18, 8\%$), divorced ($n = 11, 5\%$), widowed ($n = 1, 1\%$), not reported ($n = 11, 5\%$). In addition, parents' reported employment status was employed full time ($n = 97, 47\%$), employed part time ($n = 30, 15\%$), looking for work ($n = 22, 10\%$), not employed outside the home ($n = 43, 22\%$), and not reported ($n = 11, 6\%$). Most parents had completed some college ($n = 85, 41\%$) or graduated from high school ($n = 78, 38\%$).

Procedure

Informed consent was obtained from all participants during parent orientation meetings, or forms were sent home with children attending the program. Consent forms described the larger parent involvement project and participants' rights and contained investigator contact information. Parents were interviewed by trained assessors at the beginning and end of the academic year. For this study, parents provided demographic information about themselves and their families and answered questions pertaining to their depressive symptoms, their involvement activities, and their satisfaction with various aspects of the Head Start program. Analyses were restricted to parents' end-of-year ratings of involvement and satisfaction.

Measures

Depression

Caregivers completed a version of the Center for Epidemiologic Studies–Depression scale (CES-D; Radloff, 1977). The CES-D has been shown to discriminate between in-patient and community samples and among severity levels within patient groups, and it correlates with other self-report measures (Radloff, 1977). The version used in this study was shortened from the original version (Ross, Mirovsky, & Huber, 1983) and consists of 12 indicators of depressive symptomatology, including mood, sleep and eating, and energy level over the past week. Responses are rated on a 4-point Likert scale, with higher summed scores indicating report of more severe depressive symptomatology (possible range = 0–36). Cut-scores for determining depression severity are as follows: 0–4 = not depressed, 5–9 = mildly depressed, 10–14 = moderately depressed, and > 15 = severely depressed (Administration on Children, Youth, and

Families, 2001). The internal consistency of the CES-D within this sample was .81 (fall) and .85 (spring).

Parent involvement

The Family Involvement Questionnaire (FIQ; Fantuzzo et al., 2000) was used to measure caregiver involvement in early childhood programs. The FIQ was normed on low-income families of preschool children and is intended to be used with this population. The FIQ assesses caregiver involvement across three domains: home, school, and home-school conferencing. The school-based involvement scale measures caregiver participation in activities in the classroom or organized by the school. The home-based involvement scale focuses on caregiver behaviors in the home that promote readiness to learn. The home-school conferencing scale assesses interactions between caregivers and school personnel concerning children's classroom accomplishments and difficulties, in addition to educational ideas that can be implemented at home. Responses are based on a 4-point Likert scale indicating the frequency of these behaviors, ranging from 1 (never) to 4 (always). The range of possible responses is from 13 to 52. Cronbach's alphas were as follows: home involvement = .84, school involvement = .86, and home-school conferencing = .85.

Satisfaction with Head Start services

At the end-of-year interview, parents were asked to rate their satisfaction with the Head Start program across three domains (ACYF, 2001): services directed to their child (e.g., helping the child to grow and develop), services directed toward the family (e.g., identifying and helping to provide services that benefit the family), and satisfaction with their child's teacher (e.g., the teacher is supportive of the respondent as a parent, the child is treated with respect by teachers). The child and family scales each comprise 4 items, and the teacher scale contains 13 items. Responses are provided on a 4-point Likert scale and are averaged for each of the three scales, with higher scores representing more positive ratings. Internal consistency for the three scales was adequate: child services = .81, family services = .76, and perception of teacher = .93. To account for negatively skewed distributions among the satisfaction outcomes, ratings were collapsed to reflect a binary outcome: optimally satisfied versus less satisfied.

Data Analysis Plan

The prevalence of depressive symptoms across the academic year was examined by assessing the frequency of symptoms at both fall and spring report. Frequencies at both time points were used to classify parents into three depression groups: chronically depressed, sometimes depressed, and never depressed. A series of one-way analyses of variance (ANOVA) with planned pairwise contrasts was conducted to examine differences among these depression groups on the three parent involvement indicators: home involvement, school involvement, and home-school conferencing. Separate logistic regression models were used to test for group differences on the three satisfaction indicators: child-related services, family-related services, and satisfaction with

the child's teacher. This analysis also examined whether parent involvement activities moderated this association. Predictor variables were entered in these steps: (1) depression, (2) parent involvement indicators (i.e., home involvement, school involvement, home–school conferencing), and (3) Depression \times Parent Involvement indicator. Preliminary analyses showed that using parent education as a covariate for models was necessary in examining family-related services but that this variable was not significantly correlated with the other two outcomes.

RESULTS

Research Question 1: What Is the Prevalence of Chronic Depressive Symptoms?

The frequency of depressive symptoms on the CES-D was reported for both fall and spring assessments. The frequency of depressive symptoms at each time point was used to create three groups reflecting the prevalence of moderate or severe depressive symptoms over the academic year. Parents reporting moderate or severe symptoms at both time points were classified as chronically depressed ($n = 24$, 12%). Twenty-seven percent ($n = 54$) of parents reporting moderate or severe symptoms at only one time point were considered sometimes depressed. Those parents who did not report moderate or severe depressive symptoms at either time point were classified as never depressed ($n = 125$, 61%). In all, approximately 39% ($n = 78$) of low-income African American parents reported moderate or severe depressive symptoms during a portion or all of the Head Start year.

Research Question 2: Does the Prevalence of Depressive Symptoms Impact Parent Involvement Activities?

A series of one-way analyses of variance (ANOVA) with planned pairwise contrasts was conducted to examine whether the frequency of parent involvement activities differed among the three depression groups (chronically depressed, sometimes depressed, and never depressed). For each separate ANOVA, one of the FIQ parent involvement scales (home involvement, school involvement, or home–school conferencing) was designated as the outcome. Table 1 lists the group means and standard deviations for the three involvement outcomes. Across the three outcomes, never depressed parents had higher home and school involvement scores compared to sometimes depressed parents, $t(200) = -2.058$, $p = .041$, $d = -.291$; and $t(200) = -2.081$, $p = .039$, $d = -.294$, respectively. Similarly, never depressed parents engaged in more conferencing compared to sometimes depressed parents, $t(200) = -2.557$, $p = .011$, $d = -.362$. Chronically depressed parents were not significantly different as a group from sometimes depressed or never depressed parents.

Table 1 is omitted from this formatted document.

Research Question 3: Does the Prevalence of Depressive Symptoms Predict the Likelihood of Parent Satisfaction With Head Start Services, and Is This Relation Moderated by Parent Involvement?

A series of logistic regression analyses was conducted to test whether depressive symptoms predicted parents' satisfaction with their child's early childhood program and whether parental engagement in involvement activities moderated associations between depression and parent satisfaction. For each separate logistic regression model, one of three satisfaction scales (child-related services, family-related services, and satisfaction with the child's teacher) was the designated outcome. Specifically, each test of moderation focused on one of the three FIQ scales as a moderator: home involvement, school involvement, or home–school conferencing. The unstandardized predictor beta weights and corresponding standard errors for each final model are shown in Table 2. Beta weights were not reported when the analysis terminated because of nonsignificant contributions of additional steps to the model.

Child-related services

Among the three interactions tested, only the interaction between home involvement and chronic depression was a significant predictor of satisfaction with child-related services, $B = -.077$, $SE_B = .034$, $p = .023$, $Exp(B) = .926$ (95% CI = 0.867–0.990). However, post hoc Bonferroni corrections as applied to the three interactions yielded this interaction as nonsignificant. Therefore, this finding was not considered to be robust and was not interpreted further. Likelihood of satisfaction was not moderated by home involvement for sometimes or chronically depressed parents. In addition, significant main effects indicated that higher levels of parent involvement at home and school predicted increased satisfaction with child-related services, $B = .102$, $SE_B = .032$, $p = .001$, $Exp(B) = 1.107$ (95% CI = 1.040–1.178) and $B = .066$, $SE_B = .023$, $p = .004$, $Exp(B) = 1.068$ (95% CI = 1.021–1.117), respectively, as did more frequent parent–teacher conferencing, $B = .054$, $SE_B = .023$, $p = .018$, $Exp(B) = 1.055$ (95% CI = 1.009–1.104).

Family-related services

Examination of parent education as a covariate revealed a significant association with family-related services, such that parents with lower levels of education were more likely to be dissatisfied with family-related services, $B = -.409$, $SE_B = .187$, $p = .028$, $Exp(B) = .664$ (95% CI = 0.461–0.664). Therefore, the subsequent tests accounted for the significant influence of parent education. There were no significant moderating effects for any of the parent involvement indicators. Significant main effects emerged for all three FIQ scales: home involvement, $B = .092$, $SE_B = .025$, $p < .001$, $Exp(B) = 1.096$ (95% CI = 1.044–1.151); school involvement, $B = .091$, $SE_B = .021$, $p < .001$, $Exp(B) = 1.095$ (95% CI = 1.051–1.141); and parent–teacher conferencing, $B = .069$, $SE_B = .022$, $p = .022$, $Exp(B) = 1.071$ (95% CI = 1.026–1.117). These findings indicate that parents with higher levels of home and school involvement as well as more frequent parent–teacher interactions were more satisfied with family-related services. No significant main effects of depression emerged.

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Satisfaction with the teacher

Finally, when parents' satisfaction with the teacher was the outcome of interest, all moderation tests were nonsignificant. All tests of main effects yielded significant results. A significant main effect of depression, $B = -.811, SE_B = .244, p = .001, Exp(B) = .445$ (95% CI = 0.276–0.717), revealed that never depressed parents were more likely than both sometimes and chronically depressed parents to be optimally satisfied with their child's teacher: $\chi^2 = 6.335, p = .013$, for sometimes depressed; $\chi^2 = 8.067, p = .005$, for chronically depressed. This means that based on the odds ratios, parents were 2.340 and 4.615 times more likely to be satisfied with the teacher if they were never depressed than if they were sometimes or chronically depressed, respectively. There were no significant differences between sometimes and chronically depressed parents in their degree of satisfaction with their child's teacher. As with the previously described satisfaction outcomes, higher levels of all three involvement indicators predicted increased satisfaction with the child's teacher: home involvement, $B = .128, SE_B = .027, p < .001, Exp(B) = 1.136$ (95% CI = 1.077–1.199); school involvement, $B = .096, SE_B = .021, p < .001, Exp(B) = 1.101$ (95% CI = 1.059–1.147); and parent–teacher conferencing, $B = .069, SE_B = .022, p = .002, Exp(B) = 1.072$ (95% CI = 1.027–1.119). Thus, each of the involvement indicators significantly predicted satisfaction with the child's teacher above and beyond the influence of parental depressive symptoms.

DISCUSSION

Intervention programs targeting low-income families are often faced with the challenge of understanding and overcoming barriers to families' participation, many of which are related to sociodemographic risks associated with living in poverty. The present study examined the role of parental depression in low-income families' involvement in and satisfaction with a two-generation early intervention program. Nearly 40% of low-income mothers participating in the study reported being sometimes or chronically depressed over the course of their child's participation in 1 year of the Head Start program. Compared with mothers who were never depressed, those who were sometimes depressed reported less involvement in home- and school-based activities as well as fewer interactions with their child's teacher. No other group differences emerged, suggesting that mothers experiencing labile emotional health may struggle to simultaneously manage depressive symptoms and parent involvement demands. In contrast, mothers in the chronically depressed and never depressed groups may experience relative predictability with regard to their psychological resources. This predictability may differentiate chronically depressed versus sometimes depressed mothers. Indeed, chronically depressed mothers may persevere in child-focused activities despite reduced psychological resources.

To our knowledge, this is the first study to simultaneously consider depression and parent involvement as predictors of satisfaction with an early childhood intervention program among low-income families. Not surprisingly, the strongest evidence supports the notion that higher levels of parent involvement were associated with an increased likelihood that parents were

satisfied with various aspects of the Head Start program. Specifically, higher levels of home- and school-based involvement, as well as increased parent–teacher interaction, predicted optimal satisfaction with Head Start services directed toward children as well as families. These results may indicate that more involvement allows for increased opportunities for parents to amplify their knowledge about and exposure to program services, which may bolster their perceptions about the program.

Together, these findings support previous research suggesting that parents' depressive symptoms are related to decreases in parent involvement activities (e.g., Kohl et al., 2000; Lamb-Parker et al., 2001). Our results indicate that important individual differences among depressed mothers, such as the severity or duration of depressive episodes, may be worth noting when considering depression as a barrier to parent involvement. Moreover, our data suggest that depressive symptoms may limit the potential for accessing benefits associated with parent involvement, such as the promotion of positive academic experiences for children and the enhancement of parents' self-development and parenting skills (Hill & Taylor, 2004). Indeed, it appears that increased parent involvement could be particularly beneficial for depressed parents who are at increased risk for parenting difficulties (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Furthermore, our results appear to be consistent with those of Jinnah and Walters (2008), who reported that parents with higher levels of involvement and who believed they shared ideas with their child's teacher tended to be more satisfied; our findings extend these results to a low-income, ethnic minority sample. The link between increased involvement and higher levels of satisfaction within our sample is particularly noteworthy, given suggestions in the literature that parent involvement may be more important for African American and/or low-income families given the increased likelihood of exposure to environments that detract from academic involvement (Hill et al., 2004; Pomerantz, Moorman, & Litwack, 2007).

The impact of parental depression on multiple measures of program satisfaction was limited to parents' perceptions of their child's teacher. Never depressed parents were more likely to be satisfied with their child's teacher compared with either group of depressed mothers, with never depressed parents being 2 and 4 times as likely to be satisfied with their child's teacher compared with sometimes and chronically depressed mothers, respectively. Of the three measures of program satisfaction examined, satisfaction with the child's teacher most directly taps interpersonal interactions, whereas child- or family-directed services may encompass a variety of experiences including but not limited to provision of school readiness activities, program safety, and identification of community programs (e.g., energy assistance). Ideally, we might hope that depressed parents would be more satisfied with family-related services, given the potential of these services to directly (e.g., referrals to mental health care) or indirectly (e.g., engaging families in programs to relieve financial stressors) alleviate depressive symptoms. Our study did not examine parents' access to and utilization of Head Start's family-related services, which would help address this question more directly. However, the finding that the parent–teacher relationship could be compromised by parental depression, perhaps because of parents'

perceptions of the relationship, is of great potential significance to practitioners who are seeking to promote home–school connections during preschool.

Among the strengths of this study is the longitudinal assessment of parental depression. Although limited to the academic year, measurement of parents' psychological functioning across the school year is an improvement over assessing depressive symptoms at one point in time given the episodic nature of depression. Additional strengths of the study include its multidimensional conceptualizations of parent involvement and program satisfaction. Nonetheless, this study is limited by several factors. We acknowledge the limitation of shared method variance given that all measures were obtained via parent report. The use of self-reported depressive symptoms should serve as a starting point for building toward a multimethod approach to the study of parental depression, particularly to explore whether depression-related impairments are seen by other professionals (e.g., the parent–teacher relationship) or can be seen in actual behavior at home and school. Furthermore, parents' own experiences of their ecology cannot be overlooked when studying psychological phenomena within the family. Although the study of parent satisfaction inherently relies on self-report, future studies examining the role of parent involvement and program satisfaction may be enhanced by including objective measures of parent involvement such as volunteer logs (e.g., Castro et al., 2004) or teacher ratings of the parent–teacher relationship (e.g., Waanders, Mendez, & Downer, 2007). Finally, this study relied on convenience sampling, which may have resulted in decreased participation among families with the lowest levels of parent involvement and/or more severe depressive symptoms, thereby limiting our conclusions. However, findings regarding the prevalence of depression in our sample exceed those of nationally representative studies of Head Start children and families (D'Elia, O'Brien, & Vaden-Kiernan, 2003).

Implications for Practice

The practices of school personnel have been identified as being particularly salient in promoting partnerships between teaching staff and parents (Fantuzzo et al., 2006). Among the suggestions in the literature, strategies are frequently characterized by efforts to provide parents with psychoeducation about the importance of parent involvement, conduct family needs assessments and inform families about available services, provide staff training in broadening conceptualizations of parent involvement opportunities, and enhance communication strategies between teachers and parents (Arnold et al., 2008; Duch, 2005; Knopf & Swick, 2008; Marcon, 1999). For example, Knopf and Swick provided a list of communication strategies for practitioners to encourage parent involvement. One strategy that may hold promise is the practice of sending home a daily or weekly note or journal (Cox, 2005; Rimm-Kaufman & Pianta, 2005), which may help address some of the challenges of connecting with low-income parents who may have variable work schedules that limit face-to-face contact with school personnel. Early childhood programs may also employ the strategy of using satisfaction ratings to increase parent involvement by recruiting parents to help interpret parents' ratings and make recommendations to the program (McNaughton, 1994).

Findings from the present study illustrate that early childhood programs may need to go beyond these strategies to help support the involvement of parents who are experiencing mental health difficulties. Although the strategy of using a needs assessment may be an important start to identifying families with mental health needs, such families will likely need intensive follow-up. Yet Duch (2005) suggested that because mental health providers for Head Start are overloaded, such programs may need to form partnerships with outside community agencies to support attempts to involve and provide services to families with mental health needs. Specifically, collaborative relationships with community mental health centers, university-based clinics, and mental health consultants may help early childhood programs connect families with needed services and provide program staff with strategies for engaging and supporting parents with mental health needs. Furthermore, as teachers attempt to build relationships with parents, they may need additional training to recognize possible signs of parental depression. Given that depressed parents may view teachers more negatively, teachers working with depressed parents may also benefit from training to buffer the potential for increased stress as well as mitigate the possibility of a compromised parent–teacher relationship. Strategies for enhancing parent involvement, particularly among vulnerable families, should be couched within a framework that empowers parents and enhances parents' belief in their child's potential (Pomerantz et al., 2007; White, Taylor, & Moss, 1992).

Conclusion

In conclusion, the inclusion of family process variables, such as parental depression, in studies of parent involvement is warranted in order to elucidate the proximal processes that underlie distal risk factors that have been identified as barriers to parent involvement. Furthermore, greater attention to these processes, in addition to parents' satisfaction with program offerings, may serve to identify individual families in need of interventions and support and to improve program services. This point is particularly salient for two-generation intervention programs aiming to foster positive outcomes at both the child and family levels. Increased consideration of proximal family processes and parents' experiences of satisfaction may be an important key to bolstering efforts to enhance parents' involvement in their children's early educational experiences.

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Notes

a Significant differences between never depressed and sometimes depressed groups across all parent involvement indicators, $p < .05$.

a $R^2 = .022$ (Hosmer & Lemeshow), $.058$ (Cox & Snell), $.082$ (Nagelkerke). Model $\chi^2(8) = 2.063$, $p = .979$.

b $R^2 = .038$ (Hosmer & Lemeshow), $.050$ (Cox & Snell), $.071$ (Nagelkerke). Model $\chi^2(8) = 7.627$, $p = .471$.

c $R^2 = .023$ (Hosmer & Lemeshow), $.034$ (Cox & Snell), $.047$ (Nagelkerke). Model $\chi^2(8) = 8.940$, $p = .347$.

d $R^2 = .090$ (Hosmer & Lemeshow), $.113$ (Cox & Snell), $.153$ (Nagelkerke). Model $\chi^2(8) = 10.914$, $p = .207$.

e $R^2 = .114$ (Hosmer & Lemeshow), $.141$ (Cox & Snell), $.191$ (Nagelkerke). Model $\chi^2(8) = 5.713$, $p = .679$.

f $R^2 = .073$ (Hosmer & Lemeshow), $.092$ (Cox & Snell), $.126$ (Nagelkerke). Model $\chi^2(8) = 12.867$, $p = .116$.

g $R^2 = .101$ (Hosmer & Lemeshow), $.174$ (Cox & Snell), $.236$ (Nagelkerke). Model $\chi^2(8) = 9.560$, $p = .297$.

h $R^2 = .091$ (Hosmer & Lemeshow), $.164$ (Cox & Snell), $.223$ (Nagelkerke). Model $\chi^2(8) = 6.741$, $p = .565$.

i $R^2 = .041$ (Hosmer & Lemeshow), $.108$ (Cox & Snell), $.147$ (Nagelkerke). Model $\chi^2(8) = 18.804$, $p = .016$.

* $p < .05$.

** $p < .01$.

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