

Participation in the Paid Labor Force by Caregivers of Children with Emotional and Behavioral Disorders

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We explored the relationship between school-age children's emotional and behavioral symptoms and workforce participation of their family caregivers using structural equation modeling. Secondary analysis of data from the national evaluation of the Comprehensive Community Mental Health Services for Children and their families Program was performed with a subsample of 2,585 caregivers. Findings from structural equation modeling indicated that higher levels of internalizing and externalizing symptoms were significant predictors of more frequent school absences, less adequate childcare, and greater caregiver strain related to missing work. In turn, more adequate childcare and greater caregiver strain from missed work were associated with lower likelihood of workforce participation. Further research on labor force participation and increased family support is necessary to improve work-life integration for caregivers of children with emotional and behavioral disorders. Future investigations should examine caregiver employment as a standard family outcome.

Family members face significant uncertainties as they attempt to integrate the responsibilities of employment with the parenting of their children with emotional or behavioral disorders. The degree to which a person is able to successfully combine paid work with other aspects of personal life has been termed *work-life integration* (Lewis, Rapoport, & Gambles, 2002). Work-life integration depends on the social ecology surrounding the employed parents, including societal and workplace policies and practices, and the service systems available for their children in the community.

The challenges of work-life integration are particularly acute in the United States due to the confluence between the growing incidence of mental health disorders in children (U.S. Public Health Service, 2000) and the increasing number of family members entering the workforce who are caring for minor children (Casper & Bianchi, 2002; Smolensky & Gootman, 2003). Indeed, in a recent study drawing a random sample of U.S. families, 20% of households included children with special health care needs requiring treatment, such as emotional or behavioral disorders (Child and Adolescent Health Care Initiative, 2004). Of families having children with special health care needs, 13.5% spent 11 or more hours per week coordinating health care for their children. Nearly one in three of these family members reported that they cut back work or stopped working due to the children's needs, a finding echoed in Powers' (2003) comprehensive analysis of national Survey of Income and Program Participation panels. When Rosenzweig and Huffstutter (2004) surveyed 349 parents of children with emotional or behavioral challenges regarding their workplace experiences, the respondents revealed an even more dramatic pattern. A surprising 48% had quit work at some time to care for their child with an emotional or behavioral disorder, 27% had employment terminated because of work disruptions due to care responsibilities, and 17% were currently unemployed.

Surprisingly, the challenges of, and strategies for, integrating employment and parenting of children with any form of disabilities remain understudied (Kagan, Lewis, & Heaton, 1998), despite the importance of work as a primary way in which adults participate in the life of the community (Kagan, Lewis, & Caton, 2000). The purpose of this article is to explore key factors affecting the employment of parents who are the principal caregivers of children who receive treatment for emotional or behavioral disorders.

Why Do Parents Become Unemployed or Underemployed?

To examine labor force participation by caregivers of children with mental health concerns, we must first uncover the sources of their employment decisions and patterns. Although the employment levels of men in the U.S. remain nearly uniformly high regardless of the ages or the numbers of children in their families (U.S. Bureau of Labor Statistics, 2004), maternal employment varies. Mothers in the general population have lower rates of full-time employment when their children are younger, or when there are multiple minor children in their care (O'Connell, 2002; Powers, 1999; Smolensky & Gootman, 2003). However, despite the low levels of assistance with childcare costs and meager policy supports for working parents in the United States (Briar & O'Brien, 2003), fully 59.3% of mothers of children younger than 5 are employed, and 67.4% of mothers with children under 18 are in the labor force (Casper & Bianchi, 2002). Women with higher levels of education are more likely to be employed, even when their children are younger, or there are multiple minor children in the family (Smolensky & Gootman, 2003).

Parents of children with emotional or behavioral disorders face additional factors when they are weighing employment decisions. In their struggles to fulfill both work and family responsibilities, family members of children with mental health disorders have identified the challenges of financial stress, lack of transportation alternatives, few supports for household tasks, mental health treatment that disrupts their work day, school systems and childcare providers unable to cope with their children's behavior, and high levels of strain (Angold et

al., 1998; Brannan & Heflinger, 2001; Brennan, Rosenzweig, & Ogilvie, 1999; Emlen, 1997; Rosenzweig, Brennan, & Ogilvie, 2002). We shall consider the latter three factors in some detail.

Child Functioning

Family caregivers experience a great deal of stress when they adapt their lives to the special care needs related to the emotional or behavioral disorders of their children (Kendall, 1998).

Analyzing data from surveys of 243 caregivers in North Carolina, Brennan and Poertner (1997) found that the stress parents attributed to children and family was significantly related to the levels of internalizing and externalizing behavior problems of their children. Others have also documented the strong relationship between child symptom severity and caregiver strain (e.g., Angold et al., 1998; Brannan & Heflinger, 2001).

The stressful experience of providing care for their children with mental health challenges may be at least partially responsible for employment decisions of parents. Due to the disruption produced by their children's disorders, parents may decide to forgo the level of employment that they might ordinarily undertake given their education, skills, and financial need. In a study involving five focus groups, a total of 41 employed parents of children who had received mental health treatment discussed their work and family concerns (Rosenzweig et al., 2002). Participants reported that they had to make serious work adjustments, take less demanding or more flexible jobs, or work fewer hours than they wished so that they could make sure their children had proper care or supervision and that they were available to take children to appointments for mental health treatment.

Disruptions in Child's Educational and Childcare Settings

Parents have expressed difficulty in remaining employed when schools were unable to handle their children's mental health crises and there were no alternative services available. Participants in the Rosenzweig et al. (2002) study stated concerns regarding the level of training that some educators had for dealing with children's disorders. School staffs' inability to manage children's behavior, and few alternative sources of assistance for the staff, meant that school personnel had to call parents for help in dealing with their children's behavior and disrupt the parents' workday. In interviews with 60 employed parents of children with mental health disorders, participants revealed frequent contact with principals, psychologists, and counselors at the schools of their children (Brennan, Rosenzweig, Bradley, & Huffstutter, 2003). Due to their children's difficulties at school, these parents estimated that during the prior month they missed an average of 1.4 days at work, left work early 1.2 times, and spent more than 5 hours on the telephone.

Although there were no data gathered in these studies regarding the disruption of parents' work when children were absent from school due to their mental health disorders, there is substantial documentation of the difficulty parents have in finding out-of-school care for children when they are sick (Fredriksen-Goldsen & Scharlach, 2001; Heymann, 2000), let alone having a mental health crisis. Employment may hinge on having a plan ready to deal with crises at school or substitute care available when a child cannot be maintained in school.

While parents are at work, they also must be sure that their children are in appropriate and stable out-of-school care. Emlen, Koren, and Schultze (1999, 2000) reported that parents of children with emotional or behavioral disorders had a more difficult time finding and maintaining childcare than parents of children without mental health problems. In fact, children with challenging or troubling behavior are frequently asked to leave childcare (Emlen, 1997; Gilliam & Shahar, in press), leaving their parents stranded. When parents are able to find childcare arrangements for their children with mental health challenges, they rate these settings to be of lower quality and less stable than parents of typically developing children rate their care arrangements (Emlen et al., 1999, 2000). Coping with unstable and unsatisfactory childcare arrangements can heighten the strain levels of employed parents.

Caregiver Strain

There is an emerging literature on caregiver strain among families of children with emotional and behavioral problems (Angold et al., 1998; Brannan, Heflinger, & Bickman, 1997). The term *caregiver strain* refers to the negative consequences and emotional impact on caregivers (e.g., parents, relatives, foster parents, guardians) and families related to the additional demands of caring for a relative with special needs. To date, the relationship between caregiver employment and caregiver strain has received little attention in the research literature. In a non-clinical sample of grandmothers caring for their grandchildren, no relationship was found between caregiver employment and psychological distress (Kelley, Whitley, Sipe, & Yorker, 2000). However, one study found that caregiver employment was positively related to parenting stress among caregivers of children with severe emotional disorders (McDonald, Poertner, & Pierpont, 1999). Rosenzweig and Huffstutter (2004) found that employed family members reported that some co-workers considered them less worthy or less reliable because they were raising a "difficult child," and that their supervisors misunderstood the long-term and

unpredictable nature of the care needs of their child with a mental health disorder, creating greater strain for them. Maintaining employment may be particularly stressful when children with mental health disorders repeatedly miss school, and employees lack flexibility in their workplace or alternative care arrangements. Additional research is needed to improve the field's understanding of the relationship between parental employment and caregiver strain, and the support services and other factors that reduce strain.

Research Focus

When children's mental health disorders disrupt school and childcare attendance, and when the workplace is inflexible, caregivers may simply decide to "pack it in" and forgo employment. Alternatively, struggling parents may be denied promotions or even be dismissed by their employers with an admonishment to "work your family problems out." In this study we explored the relationship between child emotional and behavioral symptoms and caregiver participation in the labor force. We hypothesized that, all other factors being equal, more severe child symptomatology would be related to more school absences, parental perception of less adequate childcare arrangements, and higher caregiver strain from missed work. We further hypothesized that more school absences, less adequate childcare, and greater caregiver strain related to missed work would be associated with reduced likelihood of caregiver participation in the paid labor force.

METHOD

To explore the relationship among employment patterns and other factors affecting families, we conducted a secondary analysis of data from the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program (CCMHS). Forty-five communities across the country were funded in 1997 and 1998 to develop systems of care for children and adolescents with emotional and behavioral disorders and their families. Data included in this study were collected between 1998 and 2004 as part of a longitudinal evaluation of the CCMHS (Holden et al., 2003). Of the 45 communities participating in the CCMHS program at that time, 39 sites had sufficient data to be included in this study.

Sample

The sample included caregivers of children ages 5 through 17 participating in an evaluation of mental health services in funded systems of care. The inclusion criteria were that the respondents had to be caregivers in the child's home (i.e., not staff in a treatment facility), the child had to be between the ages of 5 and 17 inclusive, and the child needed to have attended some form of school at some point in the past 6 months. Caregiver employment questions were asked for the first time at the second data collection period (i.e., approximately 6 months after child's entry into services). Therefore, only data from that wave of data collection were used in this study. Questions covered events over the last 6 months. All children had received mental health services in the previous 6-month period.

At the time these analyses were conducted, data were available on 3,353 caregivers who had completed the second wave of data collection, answered the caregiver employment question, and met the stated inclusion criteria. Of those, 768 (23%) were eliminated because of missing data. The included families were not statistically significantly different from the attrited families in terms of child gender, $\chi^2(1, N = 3,353) = .066, p = .80$; child age, $t(3,351, N = 3,353) = 1.29, p = .20$; caregiver respondent age, $t(2,505, N = 2,507) = 1.04, p = .30$; number of children in the household, $t(3,169, N = 3,171) = 1.29, p = .20$; child externalizing problem score, $t(3,019, N = 3,021) = -1.65, p = .10$; or child internalizing problem score, $t(3,018, N = 3,020) = -1.70, p = .09$. The included sample, however, were slightly more likely than the attrited sample to be White, $\chi^2(1, N = 2,911) = 7.00, p < .01$; to have higher household incomes, $t(3,126, N = 3,128) = -2.601, p = .01$; and for the caregiver to have completed high school, $\chi^2(1, N = 3,203) = 5.90, p < .05$.

Instruments and Data Collection Procedures

Families were recruited as the child entered into mental health services. Informed consent procedures were followed in keeping with established ethical guidelines and approved by the appropriate institutional review boards. Data were collected from the primary caregiver in face-to-face or telephone interviews. See Table 1 for the sample's descriptive statistics.

Caregiver and Family Variables. Starting with the second data collection point, caregiver respondents were asked if they were currently employed outside of the home. This is a single dichotomous variable (i.e., 1 = *no*, 2 = *yes*). Fifty-three percent of caregiver respondents in this sample worked outside the home at the time of the interview (see Table 1). This is lower than employment rates for mothers in the general

TABLE ISummary of Sample Characteristics ($N = 2,585$)

Variable	n	%
Child gender (male)	1,773	68.6
Child age		
5-9 years	658	25.5
10-14 years	1,373	53.1
15-17 years	554	21.4
Child race		
African American (non-Hispanic)	478	18.5
Hispanic	284	11.0
White (non-Hispanic)	1283	49.6
Other (non-Hispanic)	153	6.0
Missing	387	15.0
Caregiver education		
Less than high school/GED	564	21.8
High school diploma/GED	895	34.6
More than high school/GED	1,126	43.6
Number of children in family		
One	670	25.9
Two	832	32.2
Three	582	22.5
Four	279	10.8
More than four	222	8.5
Days absent from school In past 6 months		
Less than 1 day per month	1,242	48.0
About 1 day per month	446	17.3
About 1 day every 2 weeks	326	12.6
About 1 day per week	230	8.9
2 or more days per week	200	7.7
Three or more days per week	141	5.5
Caregiver works outside the home	1,374	53.2
	<i>M</i>	<i>SD</i>
Child internalizing symptom score ^a	63.01	11.68
Child externalizing symptom score ^a	67.53	10.99
Caregiver strain from missed work ^b	2.6	1.38
Caregiver perception of adequacy of chlldcare ^c	3.95	1.52

^a*Child Behavior Checklist* (Achenbach, 1991) borderline clinical cutoff = 64. ^b*Caregiver Strain Questionnaire* (Brannan, Heflinger, & Bickman, 1997) item ranges from 1 = not at all a problem to 5 = very much a problem. ^c*Family Resource Scale* (Dunst & Leet, 1987) Items range from 1 = *not at all adequate* to 5 = *almost always adequate*.

population (Casper & Bianchi, 2002). Two family variables expected to mediate the relationship between child symptom severity and caregiver employment were also included. Caregivers reported the strain associated with missing work or neglecting other duties because of the child's emotional and behavioral problems. This variable was assessed with one item from the Caregiver Strain Questionnaire (CGSQ; Brannan et al., 1997) that ranged from 1 = *not at all a problem* to 5 = *very much a problem*. The CGSQ has demonstrated good validity and reliability with multiple samples (Brannan & Heflinger, 2001; Brannan et al., 1997; Kang, Brannan, & Heflinger, 2005). Caregiver perception of the adequacy of the availability of childcare was assessed using two items from the Family Resource Scale (FRS; Dunst & Leet, 1987) that specifically addressed babysitting and childcare on a scale from 1 = *not at all adequate* to 5 = *almost always adequate*. The FRS has demonstrated good reliability and validity with families of children with emotional and behavioral disorders (Brannan, Manteuffel, Holden, & Heflinger, in press).

Three caregiver and family variables expected to influence caregiver employment independent of child emotional and behavioral problems were included as control variables. We included level of education attained by the caregiver because it is positively related to whether the caregiver works outside the home (Smolensky & Gootman, 2003). In this study caregiver education was a continuous variable ranging from 0 (i.e., no formal education) to 18 (i.e., completed doctoral degree). The majority of caregivers in the sample had received high school (35%) or postsecondary (44%) educations. Because other investigators have found that the number of children in a family is negatively related to the probability of working outside the home (O'Connell, 2002), that variable was included here as a control variable. Caregivers reported the number of children in the household at the time of the interview, and it was recorded as a continuous variable. In this sample the number ranged from 1 to 11 with a mean of 2.51 ($SD = 1.44$).

Child Variables. Child psychiatric symptomatology over the previous 6 months was assessed with the externalizing and internalizing symptom T scores of the *Child Behavior Checklist* (CBCL; Achenbach, 1991). The CBCL is a widely used symptom checklist completed by the caregiver and has been found to be reliable and valid in a variety of samples (Achenbach, 1991). The T scores are standardized for child age and gender. The borderline clinical cutoff for the T scores is 64. The mean total externalizing symptom T score for the sample was 67.53 ($SD = 10.99$) and the total internalizing T score was 63.01 ($SD = 11.68$).

Caregivers reported the frequency of the child's school absences for the previous 6 months that school was in session (i.e., if it was summertime, absences in the last 6 months of the previous school year were reported). This variable has six levels categorized as follows: 0 = *no absences*, 1 = *less than 1 day per month*, 2 = *about 1 day per month*, 3 = *about 1 day every 2 weeks*, 4 = *about 1 day per week*, 5 = *2 days per week*, and 6 = *3 or more days per week*. Nearly half the children in the sample missed less than 1 day of school per month, but 22% missed at least 1 day per week, absence rates somewhat higher than general national samples (Institute for Social Research, 2000). Child age is also positively related to parental employment (O'Connell, 2002; U.S. Bureau of Labor Statistics, 2004) and school absences (Institute for Social Research, 2000; McCluskey, Bynum, & Patchin, 2004) and was included as a control variable. The mean age of the children in this study was 11.8 years old ($SE = 3.03$), with the majority being between the ages of 10 and 14.

Analysis Plan

Structural equation modeling was used to examine the relationships among child symptomatology, school absences, caregiver strain related to missing work, adequacy of childcare, and caregiver participation in the labor force. Because the dependent variable, caregiver employment, was dichotomous, the estimator used was weighted least square with mean- and variance-adjusted χ^2 and robust standard errors (WLSM; Muthén & Muthén, 2001). The model follows directly from the hypothesis and depicts severity of child symptoms as influencing perceived adequacy of childcare, frequency of school absences, and greater caregiver strain due to missing work. The latent construct, child symptom severity, was assessed with the internalizing and externalizing behavior observed variables (i.e., CBCL T scores). Childcare adequacy, school absences, and missed work strain were, in turn, depicted as influencing caregiver employment. To account for the relationships among these influences, the model allowed childcare adequacy, school absences, and missed work strain to correlate freely. These relationships were estimated as part of the overall model that simultaneously controlled for all relationships among the variables in the model.

We controlled for the influence of child age on childcare adequacy, frequency of absences, and missed work strain. We also controlled for the influence of other variables on caregiver employment including child age, caregiver education, and number of children in the household. We examined the fit of the overall model to the data using the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). Good fitting models should have CFIs over .95 and RMSEAs of less than .06 (Muthén & Muthén, 2001). We also examined the strength of relationships between variables; these parameter estimates can be interpreted as standard regression coefficients (Bollen, 1989).

RESULTS

Fit indices indicated that the tested model fit the data well (i.e., CFI = .983, RMSEA = .047). Examination of individual parameter estimates indicated that the variables in the model were, for the most part, related in the expected ways (see Figure 1).

The observed child internalizing, $\lambda = .73, p < .0001$, and externalizing, $\lambda = .84, p < .0001$, variables showed strong relationships with the latent construct, severity of child symptomatology. Symptom severity significantly predicted perceived adequacy of childcare, $\gamma = -.20, p < .001$, frequency of absences, $\gamma = .29, p < .001$, and caregiver strain from missed work, $\gamma = .51, p < .001$. As expected, having more severe symptomatology was associated with less adequate childcare, more frequent absences, and greater strain from missed work.

Adequacy of childcare and frequency of school absences were both related to caregiver strain from missed work, but were not related to each other. The more adequate caregivers perceived childcare to be, the less missed work strain they reported. Similarly, more frequent absences from school were associated with more caregiver strain resulting from missing work. Child age was significantly related to adequacy of childcare, $\gamma = .20, p < .001$, and frequency of school absences, $\gamma = .22, p < .001$, but not to missed work strain.

Perceived adequacy of childcare, $\beta = .17, p < .001$, and missed work strain, $\beta = -.05, p < .025$, were both related in the expected directions to the likelihood that the caregiver worked outside the home. The more adequate the childcare was perceived, the greater the probability that the caregiver worked outside the home. Greater missed work strain reduced the likelihood of caregiver employment. Contrary to expectations, frequency of school absences was not related to working outside the home when adequacy of childcare and strain from missed work were included in the model.

Child age, $\gamma = .08, p < .001$, caregiver education, $\gamma = .28, p < .001$, and the number of children in the household, $\gamma = -.06, p < .001$, also had significant relationships with caregiver employment in the expected directions. Having an older child and higher level of education were associated with greater likelihood that the caregiver was employed, while having more children in the home reduced that likelihood.

The model accounted for a significant proportion of the variance, $R^2 = .13, \chi^2(11, N = 2,585) = 73.48, p < .0001$, in caregiver employment. However, it is clear that the variables in the model do not fully explain whether caregivers will be employed outside the home. Nonetheless, these findings support the hypothesis that caregiver participation in the paid labor force was negatively affected by childcare problems and missed work strain, and that these variables are both related to the severity of child emotional and behavioral disorders.

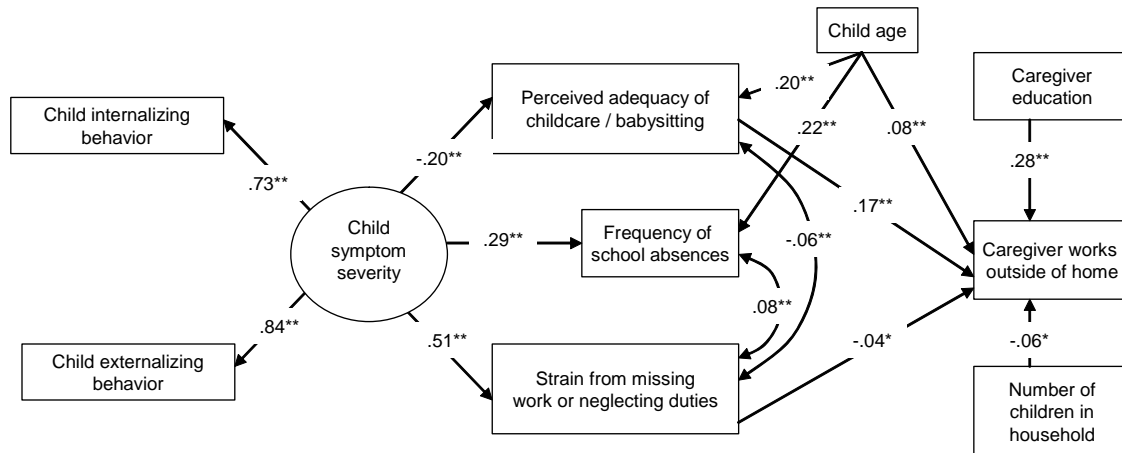


FIGURE 1. Structural equations model solution for caregiver participation in the paid labor force.

Note. Overall model $\chi^2 = (11, N = 2,585) = 73.48, P = .000$. Caregiver employment $R^2 = .13$.

* $p < .025$. ** $p < .001$.

DISCUSSION

The tension between caring for children with problems and fulfilling employment obligations is only now beginning to be explored as an additional stressor experienced by families caring for children with emotional and behavioral disorders (Rosenzweig et al., 2002). This study suggests that there is a relationship between the

severity of child psychiatric symptoms and caregiver participation in the paid labor force.

These findings demonstrated that when children have more severe symptomatology, they have less frequent school attendance, and their caregivers report having less adequate access to childcare and more strain attributed to missing work or neglecting duties. These data further indicated that with greater strain from missing work, and less adequate childcare, caregivers were less likely to participate in the paid workforce. These variables significantly predicted workforce participation even when controlling for caregiver education, child's age, and number of children in the household, which are three determinants of employment for parents of minor children in general (O'Connell, 2002; Powers, 1999; Smolensky & Gootman, 2003).

Past research has well established the psychological impact of caring for a child with emotional and behavioral disorders (Angold et al., 1998; Brannan et al., 1997). Investigations have also demonstrated that caregiver employment can place an additional strain on caregivers (McDonald et al., 1999). The findings of our study illuminate some of the sources of strains in these caregivers' lives.

Our results underscore the link between children's emotional and behavioral symptomatology, their school and childcare difficulties, and parental work strain. These findings are consistent with the findings of Brennan, Rosenzweig, Bradley, and Huffstutter (2003), who reported that for employed caregivers of children who had been treated for mental health disorders, contact with school personnel predicted work absences and interruptions, which in turn were related to the parents' reported stress levels. A second major source of parental stress comes from inadequate access to childcare, which has been reported by working parents as problematic for families caring for children with disabilities (Heymann, 2000; Warfield & Hauser-Cram, 1996), including emotional or behavioral challenges (Rosenzweig, Brennan, Huffstutter, & Bradley 2005; Rosenzweig et al., 2002). Emlen and colleagues (1999, 2000) have established that parents of children with emotional or behavioral disorders had less adequate and less stable childcare arrangements than parents of children developing typically. Additionally, Rosenzweig and colleagues (2005) found that childcare was less satisfactory for children being treated for mental health disorders than for their siblings. Our study revealed that, even in this sample of children receiving mental health services, parents of children with more severe psychiatric symptomatology reported having less adequate childcare arrangements.

Finally, the results of this study give some important clues to the lower workforce participation of caregivers who have children with disabilities documented by the National Survey of Children with Special Health Care Needs and others (Child and Adolescent Health Care Initiative, 2004; Powers, 2003). For those parents whose children experience mental health disorders, we have shown that childcare adequacy and strain due to missed work are significantly related to workforce participation. We surmise from these findings that when child symptoms have a pronounced effect on their ability to engage in school and in childcare, and parents feel strain from missing work, some decide to withdraw from workforce participation altogether.

Limitations

It is important to note that these findings do not imply causality. We cannot demonstrate conclusively with these data that the child psychiatric problems and related childcare and work difficulties lead caregivers to opt out of the paid labor force. It could be that the same factors that put children at risk for emotional and behavioral problems and school absences, and contribute to poor childcare access, also reduce the caregivers' likelihood of working outside the home. In this study we hedged against this risk by controlling for other factors that also affect caregiver employment, such as caregiver education, child age, and number of children in the household. Moreover, demonstrating that inadequate childcare coverage and school absences contributed to caregiver strain related to missing work helps explain why caregivers of children with more severe symptomatology might have to leave the workforce; the strain of the work disruptions may become intolerable. That this was a sample of caregivers of children in treatment for emotional and behavioral problems further strengthens these findings. We suspect that if we compared caregivers of children without emotional and behavioral problems to those in this sample, the findings would be considerably stronger. Even if the competing hypothesis is indeed true, these data nonetheless indicate that there is a relationship between child problems, missed school, caregiver strain, and caregiver employment.

Another limitation to these results is the large proportion of attrited caregivers. In particular, that the included sample had a slightly larger proportion of White caregivers with more education and higher family incomes suggests that these findings may not generalize as well to minority or more economically disadvantaged families. Still, the final sample included a large proportion of minority families, which somewhat mitigates this risk.

Finally, although the model explained a significant proportion of the variance in caregiver employment, the small R^2 indicates that much remains to be learned. A variety of individual (e.g., psychosocial functioning), family (e.g., economic need, access to reliable transportation, perspectives on child rearing), and community (e.g., employment opportunities) factors that likely contribute to caregiver employment outcomes were not available for this study and should be considered in a more comprehensive examination of this question. It is also worth noting

that these analyses did not address whether another adult in the family did work outside home; only the primary caregiver was considered in this study.

Future Research

Findings from this study suggest that much remains to be learned about the complex factors that affect employment for caregivers of children with emotional and behavioral disorders. The movement toward family-centered care in children's mental health services and research takes an ecological perspective that views the child as inextricably connected to and affected by the family (Friesen, Pullmann, Koroloff, & Rea, 2005; Koroloff & Friesen, 1997). The family, in turn, responds to the needs of its members while simultaneously being affected by community and social conditions and factors outside the family (Friesen & Brennan, 2005). Examining influences on employment for caregivers of children with emotional and behavioral disorders should be included in this ecological approach. In addition, more research is needed to examine the ways in which communities can bolster caregivers as they struggle to meet their families' needs.

In the current study, it was not possible to know whether caregivers were forced to leave paying jobs because of disruptions related to their children's problems, school absences, or unsatisfactory childcare. Nor can we know from these data whether the caregiver even wished to work. Nonetheless, our results support findings from previous investigations indicating that further research in this area is needed (Rosenzweig et al., 2002; Rosenzweig & Huffstutter, 2004). A comprehensive examination of this phenomenon would be longitudinal, tracking changes in employment over time. Of particular interest would be whether caregivers who have worked outside the home found it too difficult to continue because of work disruptions related to their child's emotional and behavioral challenges. Future research should also carefully consider the family decision-making processes that shape caregiver participation in the labor force, and should include comparison groups of caregivers of children developing typically. Economic studies should consider the financial impact of caregiver reduction in employment for the family and for society. Those studies should consider not only if caregivers are unemployed because of child problems, but also whether they are *underemployed*. Some children can be maintained in school or alternative settings within special classrooms or with supports designed to manage problem behavior in an academic setting, but after-school programs that address these needs are rare. In those cases, caregivers may be able to work part-time but not full-time. In general, we recommend that labor force participation should become a standard caregiver and family outcome routinely included in children's mental health services research.

Implications

When caregivers who wish to and can work leave the paid labor force, the family's economic status is negatively affected. Given that economic disadvantage is a key risk factor for many negative outcomes (e.g., poor health, unhealthy neighborhoods, deprived schools, violence, parenting difficulties) for children and families (e.g., Brody & Flor, 1998; Costello, Compton, Keeler, & Angold, 2003; Luthar, 1994), loss of an earner in the family can exacerbate the challenges the family already faces.

To achieve better outcomes for children with mental disorders and their families, working parents should have access to supports that prevent them from being strained beyond their capacity. Resources that help lower work-related strain may assist parents to stay employed and consequently maintain the financial resources (e.g., earnings, insurance benefits) that can help pay for mental health services and meet other family needs.

Clearly, for parents to be able to engage in the levels of employment that they wish, schools and out-of-school care programs must have additional supports to help staff successfully nurture children with mental health challenges. Additionally, there should be growth in alternative programs that can provide appropriate services to these children during the school day. School-based mental health services have proved to be a promising approach to improving child functioning in school settings, even in high-poverty urban communities (Atkins et al., in press; Atkins, Graczyk, Frazier, & Abdul-Adil, 2003). When parents and teachers become engaged in culturally appropriate services to support children with challenges, these children have been found to experience greater school success and to exhibit less disruptive behavior (Atkins et al., in press). For parents wishing to be employed full-time, making successful out-of-school care arrangements is challenging; successful care arrangements should be studied and replicated (Brennan, Bradley, Ama, & Cawood, 2003; Rosenzweig et al., 2005).

Preliminary research suggests that service systems can aid in work-life integration. Krivelyova and Stephens (2004) found that for the children and families receiving services through systems of care, the proportion of caregivers who reported they were engaged in employment increased over time, possibly due to improved child functioning. Caregivers of children with emotional and behavioral problems in the clinical range were more likely to report that services helped them miss fewer days or hours of work than did caregivers of children whose scores were below the clinical range. Additionally, Holden et al. (2002) reported that caregivers of children who took medication for emotional and behavioral disorders reported missing fewer days or hours of work than parents of children not taking medication.

Finally, there are also important societal implications of our results. A variety of fields now acknowledge the economic costs of informal caregiving in terms of lost wages (Kingson & O'Grady-LeShane, 1993; White-Means & Chollet, 1996) and substitution of workers in the paid labor market with unpaid caregivers (Arno, Levine, & Memmott, 1999). Indeed, informal caregiving has been called the "invisible health sector" (Arno et al., 1999). Policies are needed that will enhance the current mental health supports for children with emotional or behavioral disorders available in schools and out-of-school care. When parents of children who have mental health disorders can work with fewer interruptions and less strain, their optimal workforce participation can be achieved.

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References

- Achenbach, T. M. (1991). *Manual/or the Child Behavior Checklist and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Angold, A., Messer, S. C., Stangl, D., Farmer, E. M. Z., Costello, J., & Burns, B. J. (1998). Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health, 88*, 75-80.
- Arno, P. S., Levine, C., & Memmott, M. (1999). The economic value of informal caregiving. *Health Affairs, 18*, 182-188.
- Atkins, M. S., Frazier, S. L., Birman, D., Abdul-Adil, J., Jackson, M., Graczyk, P.A., et al. (in press). School-based mental health services for children living in high poverty urban communities. *Mental Health Services Research*.
- Atkins, M. S., Graczyk, P. A., Frazier, S. L., & Abdul-Adil, J. (2003). Toward a new model for promoting urban children's mental health: Accessible, effective, and sustainable school-based mental health services. *School Psychology Review, 32*(4), 503-514.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Brannan, A. M., & Heflinger, C. A. (2001). Distinguishing caregiver strain from psychological distress: Modeling the relationship between child, family, and caregiver variables. *Journal of Child and Family Studies, 10*, 405-418.
- Brannan, A. M., Heflinger, C. A., & Bickman, L. (1991). The Caregiver Strain Questionnaire: Measuring the impact on the family of living with a child with serious emotional disturbance. *Journal of Emotional and Behavioral Disorders, 5*, 212-222.
- Brannan, A. M., Manteuffel, B. A., Holden, E. W., & Heflinger, C. A. (in press). Use of the Family Resource Scale in

- children's mental health: Reliability and validity among economically diverse samples. *Mental Health Services Research*.
- Brennan, B. M., Bradley, J. R., Ama, S. M., & Cawood, N. (2003). *Setting the pace: Model inclusive childcare centers serving families of children with emotional or behavioral challenges*. Portland, OR: Portland State University, Research and Training Center on Family Support and Children's Mental Health.
- Brennan, E. M., & Poertner, J. (1997). Balancing the responsibilities of work and family life: Results of the family caregiver survey. *Journal of Emotional and Behavioral Disorders*, 5(4), 239-249.
- Brennan, E. M., Rosenzweig, J. M., Bradley, J. R., & Huffstutter, K. (2003, May). *Integrating employment with parenting of children having mental health challenges*. Paper presented at the annual meeting of the Western Psychological Association, Vancouver, Canada.
- Brennan, E. M., Rosenzweig, J. M., & Ogilvie, A. M. (1999). Finding a fit between work and family life: Support for working caregivers. *Focal Point: A National Bulletin on Family Support and Children's Mental Health*, 13, 1, 3-5.
- Briar, C., & O'Brien, M. (2003). Comparative family policy research. In R. Munford & J. Sanders (Eds.), *Making a difference in families: Research that creates change* (pp. 193-210). Crows Nest, Australia: Allen & Unwin.
- Brody, G. H., & Flor, D. L. (1998). Maternal resources, parenting practices and child competence in rural single-parent African American families. *Child Development*, 69, 803-816.
- Casper, L. M., & Bianchi, S. M. (2002). *Continuity and change in the American family* (pp. 67-94). Thousand Oaks, CA: Russell Sage.
- Child and Adolescent Health Care Initiative. (2004). National survey of children with special health care needs: Unweighted and weighted estimate of the frequency and prevalence of households with CSHCN. Retrieved March 23, 2005, from http://www.kpcbr.org/cshendrc/anonymous/documents/Data_house.pdf
- Costello, E. J., Compton, S. N., Keeler, G., & Angold, A. (2003). Relationships between poverty and psychopathology: A natural experiment *Journal of the American Medical Association*, 290, 2023-2029.
- Dunst, C. J., & Leet, H. E. (1987). Measuring the adequacy of resources in households with young children. *Child: Care, Health and Development*, 13, 111-125.
- Emlen, A. C. (1997). *Quality of childcare and special needs of children who have emotional or behavioral problems. Survey conducted for the Oregon Childcare Research Partnership*. Portland, OR: Portland State University, Regional Research Institute for Human Services.
- Emlen, A. C., Koren, P. E., & Schultze, K. (1999). *From a parent's point of view: Measuring the quality of child care*. Portland, OR: Portland State University: Regional Research Institute.
- Emlen, A. C., Koren, P. E., & Schultze, K. (2000). *A packet of scales for measuring quality of childcare from a parent's point of view: With summary of method and findings*. Portland, OR: Portland State University: Regional Research Institute.
- Fredriksen-Goldsen, K. I., & Scharlach, A. E. (2001). *Families and work: New directions in the twenty-first century*. New York: Oxford University Press.
- Friesen, B. J., & Brennan, E. M. (2005). Strengthening families and communities: System-building for resilience. In M. Ungar (Ed). *A handbook for working with children and youth: Pathways to resilience across cultures and contexts* (pp. 295-312). Thousand Oaks, CA: Sage.
- Friesen, B. J., Pullmann, M., Koroloff, N. M., & Rea, T. (2005). Multiple perspectives on family outcomes in children's mental health. In M. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families: Programs and evaluation best practices* (2nd ed, pp. 101-123). Austin, TX: PRO-ED.
- Gilliam, W., & Shahar, G. (in press). Prekindergarten expulsion and suspension: Rates and predictors in one state. *Infants and Young Children*.
- Heymann, J. (2000). *The widening gap: Why working families are in jeopardy and what can be done about it*. New York: Basic Books.
- Holden, E. W., Santiago, R. L., Manteuffel, B. A., Stephens, R., Brannan, A. M., Soler, R., et al. (2003). Systems of care Demonstration projects: Innovation, evaluation and sustainability. In A. Pumariega. & N. Winters (Eds.), *Handbook of community systems of care: The new child and adolescent community psychiatry* (pp. 432-458). San Francisco: Jossey Bass.
- Holden, E. W., Stephens, R. L., Connor, T., Pope, A., Franco, E., & Liao, Q. (2002, May). *Medication use for children in systems of care*. Paper presented at the 154th annual meeting of the American Psychiatric Association, Philadelphia.
- Institute for Social Research. (2000). *Monitoring the future: Eighth, 10th, and 12th grade studies*. Ann Arbor: University of Michigan, Institute for Social Research.
- Kagan, C., Lewis, S., & Caton, S. (2000). Editorial: Community, work and family in the 21st century. *Community Work and Family*. 3(1), 5-14.
- Kagan, C., Lewis, S., & Heaton, P. (1998). *Caring to work: Accounts of working parents with disabled children*.

London: Family Policy Studies Center/ Joseph Rowntree Foundation.

- Kang, E. J., Brannan, AM., & Heflinger, C. A. (2005). Racial differences in reports of caregiver strain among caregivers of children with emotional and behavioral problems. *Journal of Child and Family Studies*, 14,43-56.
- Kelley, S. J., Whitley, D., Sipe, T. A., & Yorker, B. C. (2000). Psychological distress in grandmother kinship care providers: The role of resources, social support, and physical health. *Child Abuse and Neglect*, 24,311-321.
- Kendall, J. (1998). Outlasting disruption: The process of reinvestment in families with ADHD children. *Qualitative Health Research*, 8(6), 839-857.
- Kingson, E. R., & O'Grady-LeShane, R. (1993). The effects of caregiving on women's social security benefits. *The Gerontologist*, 33, 230-239. .
- Koroloff, N., & Friesen, B. (1997). Challenges in conducting family-centered mental health services research. *Journal of Emotional and Behavioral Disorders*, 5(3), 130-137.
- Krivelyova, A., & Stephens, R. (2004). Caregivers of children in systems of care: Economic outcomes. In C. Newman, C. Liberton, K. Kutash, & R. Friedman (Eds.), *Seventeenth annual research conference proceedings. A system of care for children's mental health: Expanding the base* (pp. 271-276). Tampa: University of South Florida, Research and Training Center for Children 's Mental Health.
- Lewis, S., Rapoport, R., & Gambles, R. (2002). Reflections on the integration of paid work and the rest of life. *Journal of Managerial Psychology*, 18(8), 824-841.
- Luthar, S. S. (1994). *Poverty and children's adjustment*. Thousand Oaks, CA: Sage.
- McCluskey, C. P., Bynum, T. S., & Patchin, J. W. (2004). Reducing chronic absenteeism: An assessment of an early truancy initiative. *Crime and Delinquency*, 50(2), 214-234.
- McDonald, T. P., Poertner, J., & Pierpont, J. (1999). Predicting caregiver stress: An ecological perspective. *The American Journal of Orthopsychiatry*, 69, 100-109.
- Muthén, L., & Muthén, B. (2001). *Mplus User's Guide, Version 2.12*. Los Angeles: Muthén & Muthén.
- O'Connell, M. (2002). Child bearing. In L. M. Casper, & S. M. Bianchi (Eds.), *Continuity and change in the American family* (pp. 67-94). Thousand Oaks, CA: Sage.
- Powers, E. T. (1999). *Child disability and maternal labor force participation: Evidence from the 1992 School Enrollment Supplement to the Current Population Survey*. Urbana: University of Illinois at Urbana-Champaign, Institute of Government and Public Affairs.
- Powers, E. T. (2003). Children's health and maternal work activity: Estimates under alternative disability definitions. *The Journal of Human Resources*, 38(3), 523-556.
- Rosenzweig, J. M., Brennan, E. M., Huffstutter, K., & Bradley, J. R. (2005). *Child care and employed parents of children with emotional or behavioral disorders*. Manuscript submitted for publication.
- Rosenzweig, J. M., Brennan, E. M., & Ogilvie, A. M. (2002). Work-family fit: Voices of parents of children with emotional and behavioral disorders. *Social Work*, 47(4), 415-424.
- Rosenzweig, J. M., & Huffstutter, K. 1. (2004). Disclosure and reciprocity: On the job strategies for taking care of business and family. *Focal Point: A National Bulletin on Family Support and Children's Mental Health*, 18, 4-7.
- Smolensky, E., & Gootman, J. A. (Eds.). (2003). *Working families and growing kids: Caring for children and adolescents*. Washington, DC: The National Academies Press.
- U. S. Bureau of Labor Statistics. (2004). *Employment characteristics of families with own children*. Retrieved March 22, 2005, from <http://www.bls.gov/lCPS>.
- U. S. Public Health Service. (2000). *Report of the Surgeon General's conference on children's mental health: A national action agenda*. Washington, DC: Author.
- Warfield, M. E., & Hauser-Cram, P. (1996). Childcare needs, arrangements, and satisfaction of mothers of children with developmental disabilities. *Mental Retardation*, 34, 294-302.
- White-Means, S., & Chollet, D. (1996). Opportunity wages and workforce adjustments: Understanding the cost of in-home elder care. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 51, S82-S90.

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