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Caregiver Commitment to Foster Children:

The Role of Child Behavior

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Abstract

Objective: This study aimed to examine the association between child behavior problems and caregiver commitment to their child in a group of young foster children.

Method: The sample consisted of 102 caregiver-child dyads from the greater Baltimore area. Child behavior was assessed using the Child Behavior Checklist (CBCL; Achenbach, 1991,1992), and caregiver commitment was assessed using a semi-structured interview known as the "This is My Baby" Interview (Bates & Dozier, 1998). For a sub-sample of the dyads (N = 76), we examined caregiver commitment and parent-reported child behavior at two time points in order to examine the stability of a caregiver's commitment over time and to examine the direction of the association between the two variables.

Results: Overall, caregiver reported child behavior was significantly associated with caregiver commitment. Both caregiver reported child behavior and caregiver commitment were highly stable over an 11-month period. When we examined the data over time, the effect of caregiver reported child behavior at time 1 on caregiver commitment at time 2 was not significantly larger than the effect of caregiver commitment at time 1 on caregiver reported child behavior at time 2. As a result, we were not able to determine the direction of the association between caregiver reported child behavior and caregiver commitment.

Conclusions: Our results indicate that caregiver reported child behavior is significantly associated with caregiver commitment to their foster children, even after controlling for factors including age of entry into foster care and time in placement.

Keywords

Foster care; placement disruptions; behavior problems; commitment

Introduction

Whether or not a caregiver becomes committed to a foster child has important implications for the child. Most importantly, caregiver commitment has been found to predict placement stability for foster parent-child dyads (Dozier & Lindhiem, 2006). This finding is important because placement stability has consistently been found to predict a host of positive outcomes for foster children (e.g., Aldgate, Colton, Ghate, & Heath, 1992;Fisher, Burraston, & Pears, 2005;Newton, Litrownik, & Landsverk, 2000). For example, foster children in stable placements are likely to have higher academic achievement (Aldgate et al., 1992) and fewer

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behavior problems (Newton et al., 2000) than foster children who experience multiple placements. Therefore, understanding the determinants and correlates of caregiver commitment might have important implications for the lives of foster children. In this study, we were interested in whether child characteristics are associated with caregiver commitment. Specifically, we examined whether parents' reports of children's behaviors predict caregivers' commitment.

The reciprocal effects of family characteristics and child adaptation

Several studies have examined the effects of foster family characteristics on foster children's behavioral and emotional functioning (see Orme & Buehler, 2001 for a review). Characteristics that have been investigated include parenting variables, the home environment, demographic variables, caregiver mental health, and social support. Less is known about the effects of child adaptation on caregiver variables. We are particularly interested in the effects of foster children's characteristics on caregivers' commitment to an enduring relationship. Although this has not been studied directly, several studies have documented the association between child behavior problems and placement stability (e.g., James, Landsverk, & Slymen, 2004;Newton et al., 2000;Pardeck, 1983). In a large sample of over 4,000 foster children, mostly between the ages of 6 and 17, children who entered foster care with behavior problems at home, behavior problems at schools, or emotional problems were all more likely be experience multiple foster care placements than children without such problems (Pardeck, 1983). It should be noted, however, that this study did not control for many potential third variables. Externalizing behavior has been found to be a particularly reliable predictor of placement disruptions (e.g., James et al., 2004;Newton et al., 2000). In a recent study, externalizing behavior was found to predict several aspects of placement stability including delays in achieving a stable placement, disruptions late during placement, and multiple short placements in a group of out-of-home care children between the ages of 1 and 16 (James et al., 2004). The methodology of this study, however, did not allow for the inference of causality from these findings. Landsverk and colleagues also examined the direction of the association between problem behaviors and number of placements in a group of children between 0−17 in foster care (Newton et al., 2000). They found evidence for a bi-directional effect. Foster children with externalizing behavior early in placement were more likely to experience multiple placements than those children without externalizing behavior problems. For a group of children who did not have behavior problems early in placement, multiple placements led to increases in externalizing behaviors, internalizing behaviors, and overall problem behaviors.

Based on our conceptualization of commitment (i.e., motivation to be in a long-term relationship with the child), these studies suggest that child behavior may be an important determinant of caregiver commitment. Even when placed as early as 12 months of age, foster infants bring with them behaviors that are independent of the caregiver with whom they are placed (Stovall & Dozier, 2000;Stovall-McClough & Dozier, 2004). Stovall-McClough and Dozier have also found that foster mothers tend to provide more or less nurturance to foster infants, depending on the infants' behaviors. Infants who are placed at an earlier age tend to display behaviors that elicit more nurturance from caregivers than infants who are placed at a later age.

A definition of commitment

We have defined commitment narrowly as the degree to which a caregiver is motivated to be in an enduring relationship with his or her child (Bates & Dozier, 1998;Dozier & Lindhiem, 2006). Such a narrow definition has particular significance for foster parent-child dyads, in which an enduring relationship cannot be assumed. Several constructs are similar to commitment, but differ in critical ways. One such construct is that of *socioemotional investment*, proposed by Bradley and colleagues (Bradley, Whiteside-Mansell, Brisby, &

Caldwell, 1997;Corwyn & Bradley, 1999). Bradley et al. (1997) have defined the term socioemotional investment broadly as a composite of parental delight in the child, sensitivity to the child's needs and cues, acceptance of the parenting role, and distress at being separated from the child. Socioemotional investment in both biological mothers and fathers is associated with social support, quality of the marital relationship, parental stress, child temperament, and parent personality traits (Bradley et al., 1997;Corwyn & Bradley, 1999).

This construct of socioemotional investment was developed in relation to biologically intact dyads (Bradley et al., 1997). We suggest that commitment is a much narrower construct with particular relevance for caregiver-child dyads who lack biological relatedness. The unique aspect of commitment, relative to socioemotional investment, is the emphasis on the extent to which the parent cares about the relationship enduring. We assume that there would be little variability in commitment among biologically intact dyads, except under aberrant conditions.

We acknowledge that foster care is often temporary, almost by definition. Thus, it might seem unreasonable for foster parents to "commit" to a child, especially when the placement is expected to be temporary. However, we argue that "expecting" that the relationship will endue, and acting accordingly, is advantageous for the infant or child in care (Dozier & Lindhiem, 2006). Although this might be emotionally challenging for the caregiver, especially when the infant or child is returned to his or her birthparents, having a committed caregiver is in the best interest of the child.

Commitment and its correlates

A number of caregiver and placement characteristics have already been examined as predictors of caregiver commitment (Dozier & Lindhiem, 2006). Caregivers were found to exhibit higher levels of commitment to infants who were placed in their care at a younger age than to infants and children who were placed at an older age. Caregivers who had cared for many foster children in the past exhibited lower levels of commitment than caregivers who had cared for fewer foster children. Most importantly, caregiver commitment was found to predict placement stability. Specifically, for every unit increase in commitment, as assessed using the "This is My Baby" Interview (Bates & Dozier, 1998), caregivers where almost twice as likely to keep their infant or child in placement for 2 years or longer (odds ratio of 1.8).

The present study

In this study, we investigated whether caregiver reported child behavior is related to caregiver commitment. This is the first study we are aware of that examines the association between characteristics of the child and caregiver commitment. Specifically, we examined the associations between child behavior assessed using the Child Behavior Checklist (CBCL; Achenbach, 1991,1992) and caregiver commitment assessed using the "This is My Baby" Interview (TIMB; Bates & Dozier, 1998). First, we expected that caregiver reported child behavior would predict caregiver commitment, both concurrently and predictively. Second, we expected that caregiver commitment would be moderately stable over time, affected by factors including parent-reported child behavior. Third, we expected the association between parent-reported child behavior and caregiver commitment to be partially bi-directional. Specifically, we expected that parent-reported problem behaviors would lead to lower caregiver commitment, and that lower caregiver commitment would contribute to increased parent-reported problem behaviors. Finally, we expected that previously obtained findings linking commitment with the number of children fostered by the caregiver and the child's age of entry into care would hold when controlling for parent-reported child behavior.

Method

Participants and procedure

The sample consisted of 102 caregiver-child dyads from the greater Baltimore area. These dyads were recruited as part of an ongoing longitudinal study examining how young children cope with early foster care placements. The study was approved by the IRB at the University of Delaware. Written consent was obtained from both the legal guardian and foster parent of each child. Recruitment took place between the years 1995 and 2000 in two phases. The first phase of recruitment took place at the time of referral, for infants placed in care between the ages of birth and 20 months. The second phase of recruitment involved foster children who were already in placements and were older than 20 months of age, but had entered the foster care system as infants or toddlers. An initial home visit took place at the time of recruitment ($N = 102$). Annual home visits then took place as long as the child remained in foster care or until the child turned 5 years of age. As a result, data from more than one time point were available for a subset in children who were in placement for a year or longer ($N = 76$). Participation in the study was voluntary, and families were paid $25 per research visit. Data in this study are from the same sample reported on in a previous article (Dozier & Lindhiem, 2006). Although there is overlap in the commitment data and the control variables, the primary variable of interest in this article (i.e., caregiver reported child behavior) is only discussed in this article. Further, the present study involves two time points and the analysis of change over time, whereas only one time point was available for the Dozier and Lindhiem (2006) study.

The child's age of entry into the foster care system ranged from birth to 38 months ($M = 6.9$, $SD = 7.7$). When caregiver commitment was assessed, children ranged from 3 to 60 months ($M = 22.2$, $SD = 10.8$) and had been in placement with their current caregiver between 0.6 and 59 months ($M = 12.4$, $SD = 9.9$). Of the sample, 53.9% were male; 71.6% were African American, 17.6% were European American, 2.9% were Hispanic, and 7.8% were biracial. Reasons for initial entry into the foster care system included substantiated cases of abuse and neglect and inability of the caregiver to care for the child. Most (79.5%) of the children had been neglected.

All of the primary caregivers were female: 65.7% were African American, 33.3% were European American, and 1.0% were Hispanic. Seventy-five dyads (73.5%) were matched for ethnicity; 55.9% of caregivers were married or living with a partner whereas the remaining 44.1% were single, divorced, separated, or widowed. Four of the foster mothers were relative caregivers, and the rest were certified foster parents. Annual family incomes ranged from less that $10,000 to more than $100,000 ($M = \$38,800$). The caregivers' age at the time of the TIMB interview ranged from 26 to 80 years ($M = 46.9$, $SD = 11.7$). Three caregivers preferred not to disclose their age. Caregiver education ranged from 7 to 17 years ($M = 12.6$, $SD = 2.0$). The number of foster children cared for by the caregiver ranged from 1 to 500 ($M = 25.2$, $SD = 65.4$). Because of the skewed distribution, the number of foster children cared for was log transformed. This transformed variable was used in all subsequent analyses and ranged from 0 to 2.7 ($M = 0.9$, $SD = 0.6$).

Many foster infants have histories of maltreatment prior to placement (e.g., Garwood & Close, 2001;Schneidermann, Connors, Fribourg, Gries, & Gonzales, 1998) and family histories of psychopathology, placing them at risk of negative outcomes (e.g., Chernoff, Combs-Orme, Risley-Curtis, & Heisler, 1994;Halfon, Berkowitz, & Klee, 1992). Therefore, we included risk factor data in our analyses. Risk factor data were obtained from official records that were provided by social service agencies. Data on pre-placement risk factors were not available for families who were recruited during the second recruitment phase. As a result, risk factor data were only available for 73.5% of the sample. Risk factors included history of physical abuse, history of neglect, prenatal drug exposure, premature birth (pregnancy lasting less than 32

weeks or birth weight under 2,500 grams), and maternal psychopathology. Documented cases of any of the above risk factors were coded as present, while undocumented and merely suspected cases were coded as absent. These scores were summed for a total possible score of "5." Risk factor scores ranged from "0" to "4" ($M = 1.4$, $SD = 0.9$). Scores of "0" were possible because of birth parents who gave up their child at birth due to an inability to care for the child.

Measures

Caregiver commitment.—The "This is My Baby" interview (TIMB; Bates & Dozier, 1998) was used to measure caregiver commitment. The TIMB is a semi-structured interview developed to assess caregiver "commitment," "acceptance," and "belief in influence." These are three related and overlapping constructs. Correlations between these constructs range between $r = .43$ and $r = .69$ in this sample. Based on previous research (Dozier & Lindhiem, 2006), "commitment" has been found to have particular relevance for the foster care context. "Acceptance" and "belief in influence" have not been found to have the same importance. The interview consists of 10 standardized questions. During the interview, the caregiver was asked to describe the child and answer some more specific questions regarding the child, such as how much she would miss the child if the child were to leave her care. The recorded interviews were transcribed and coded from the transcripts. Commitment was rated on a Likert scale from 1 to 5, including mid-points (e.g., 1.5, 3.5). Each interview was coded by two independent raters, and the ratings were averaged. The Spearman-Brown correlation for inter-rater agreement was .90. Because ratings were averaged, the result was a 17-point scale. (Scores ranged from 1 to 5 in increments of 0.25.) All 17 possible scores were represented ($M = 3.3$, $SD = 1.1$). Although the data is ordinal, the 17-point scale resulted in a fairly even distribution of scores. The data analyses assumed a normal distribution of the data.

The results presented below provide evidence for the test-retest reliability of the measure. Caregiver commitment in this study ranged from 1 to 5. A previous study finding that length of placement is predicted by caregiver commitment assessed using the TIMB interview provides evidence for the predictive validity of the measure (Dozier & Lindhiem, 2006).

Caregiver reported child behavior problems.—The parent form of the Child Behavior Checklist (CBCL; Achenbach, 1991,1992) was used as an assessment of child behavior problems. The form was completed by the caregiver. The CBCL is a well validated and reliable measure (Achenbach, 1991,1992). Caregivers rated each item as 0 (*not true*), 1 (*somewhat true*), or 2 (*very true*) for their child. When this study began, the CBCL was only available for children 24 months of age and older. Therefore, CBCL data were only available for the 82 children in the sample who were 24 months of age and older. T-scores were used for all analyses because two different versions of the CBCL were used during data collection. Total T-scores ranged from 31 to 73 ($M = 53.2$, $SD = 9.4$). Twenty-one children (20.6%) had total T-scores of 60 or above and 11 (10.8%) had total T-scores of 65 of above. Internalizing scores ranged from 34 to 77 ($M = 52.3$, $SD = 10.1$). Twenty-two children (21.6%) had internalizing T-scores of 60 or above and 12 (11.8%) had internalizing T-scores of 65 of above. Externalizing scores ranged from 30 to 79 ($M = 53.6$, $SD = 10.0$). Twenty-nine children (28.4%) had externalizing T-scores of 60 or above and 10 (9.8%) had externalizing T-scores of 65 of above. Because of the high correlations between the total, internalizing, and externalizing scores, we used the total T-score as the measure of child behavior in the primary analyses. Correlations with the total T-score were $r = .812$ for internalizing behavior and $r = .914$ for externalizing behavior. Internalizing behavior and externalizing behavior correlated $r = .601$. Child age at the time of the CBCL ranged from 24 to 68 months ($M = 30.5$, $SD = 7.7$).

Data analysis

The primary analyses were conducted using multiple regression. To examine changes over time and to explore the direction of the association between caregivers' commitment and children's behavior, a cross-lag path analysis was conducted for a sub-sample of 76 dyads for whom data were available at two time points. The average time between time 1 and time 2 commitment data was 10.8 months ($SD = 4.4$) and the average time between time 1 and time 2 child behavior data was 10.8 months ($SD = 3.6$).

For many subjects, data were missing for one or more variables across the two time points. We conducted analyses to examine patterns of missing data. Data at each time point were coded as "missing" (0) or "not missing" (1). Caregiver commitment at time 1 predicted missing data for caregiver reported child behavior at time 2, $F(1,55) = 12.2$, $p = .01$. This was the only significant pattern that emerged.

Results

Preliminary analyses

Descriptive statistics for the variables in the overall sample are presented in Table 1. Correlations among the variables are presented in Table 2. Caregiver commitment was predicted by the caregiver's age ($r = -.25$, $p < .05$), the child's time with the caregiver ($r = .30$, $p < .01$), age of entry into foster care ($r = -.37$, $p < .01$), parent-reported child behavior ($r = -.27$, $p < .05$), and the number of children previously fostered ($r = -.36$, $p < .01$). Using a partial correlation, age of entry into foster care predicted caregiver commitment after controlling for the child's time with the caregiver ($r = -.31$, $p < .01$). The reverse, however, was also true. The child's time with the caregiver predicted the caregiver's commitment after controlling for the child's age of entry into foster care ($r = .23$, $p < .05$). Also using a partial correlation, the number of children previously fostered predicted the caregiver's commitment after controlling for caregiver age ($r = -.26$, $p < .01$). The reverse was not true; the caregiver's age did not significantly predict the caregiver's commitment after controlling for the number of children previously fostered ($r = -.17$, $p > .05$). Caregiver commitment was not predicted by the caregiver's education, age of child, the child's gender, or pre-placement risk factors. Variables which were not associated with caregiver commitment in the zero-order correlations were excluded from subsequent analyses.

Primary regression analyses

Next, caregiver reported child behavior and the four other variables that were significant predictors of caregiver commitment were analyzed simultaneously using multiple regression. The full sample of $N = 102$ was used for this analysis. Pairwise deletion was used for cases of missing data. The results are presented in Table 3. The overall model was statistically significant, $F(4, 74) = 7.485$, $p < .001$, and accounted for 29% of the variance in caregiver commitment (adjusted $R^2 = .291$). The number of previous foster children cared for by the caregiver, caregiver reported child behavior, and age of entry into foster care remained significant predictors of caregiver commitment, when controlling for the other variables in the model. Caregiver age and length of time in placement were no longer significant predictors of caregiver commitment, when controlling for the other variables in the model. When the same regression model was run separately for caregiver reported externalizing behavior and internalizing behavior, externalizing behavior ($\beta = -.24$; $p = .02$), but not internalizing behavior ($\beta = -.17$; $p = .08$), was significantly associated with caregiver commitment. A post hoc power analysis was conducted for $R^2 = .291$. Power was found to be above .99 with five predictor variables in the model, for $N = 102$, $p = .05$. Power was calculated at between .95 and .99 for $R^2 = .20$ and between .70 and .75 for $R^2 = .10$. Actual power for these analyses will be slightly lower due to missing data.

Cross-lag path model

Although the association between caregiver reported child behavior and caregiver commitment was statistically significant, this result does not indicate the direction of the association. It is possible that caregiver reported child behavior influences caregiver commitment or that caregiver commitment influences caregiver reported child behavior or that the effect is bi-directional. To test the direction of the association we conducted a cross-lag path analysis using the Amos 5.0 statistical software (Arbuckle & Wothke, 2003). Because we did not have data on all dyads from two time points, the model consisted of a sub-sample of 76 dyads. A one-way ANOVA revealed that dyads who were included in the sub-sample did not differ significantly from dyads who were excluded from the sub-sample on either caregiver commitment, $F(1, 100) = 2.01$, $p =$ ns, or child behavior, $F(1, 80) = 1.03$, $p =$ ns. Statistical power was reduced in these analyses due to the reduced sample size. For $N = 76$ and $p = .05$, power was calculated at above .99 for $R^2 = .30$, between .95 and .99 for $R^2 = .20$, and between .60 and .70 for $R^2 = .10$. Actual power will be lower due to missing data.

Correlations among the variables in the cross-lag path model are presented in Table 4. Caregiver commitment was found to be stable across time ($N = 22$, $r = .61$, $p < .01$). Caregiver reported child behavior was also stable across time ($N = 34$, $r = .60$, $p < .01$). Caregiver commitment was associated with caregiver reported child behavior at time 1 ($N = 42$, $r = -.45$, $p < .01$), but not at time 2 ($N = 32$, $r = -.12$, $p > .05$). Caregiver reported child behavior at time 1 predicted caregiver commitment at time 2 ($N = 27$, $r = -.43$, $p < .05$), but caregiver commitment at time 1 did not predict caregiver reported child behavior at time 2 ($N = 42$, $r = -.25$, $p > .05$).

Overall, the fit for the cross-lag path model was $\chi^2 (1, N = 76) = 2.29$, $p = .13$, root mean square error of approximation (RMSEA) = .13, comparative fit index (CFI) = .96. Table 5 summarizes the unstandardized regression estimates for the paths in the model. Standardized regression estimates are presented in Figure 1. Caregiver commitment remained stable across time, when controlling for the other variables in the model ($\beta = .53$, $p < .001$). Caregiver reported child behavior also remained stable across time, when controlling for the other variables in the model ($\beta = .59$, $p < .001$). Caregiver commitment and caregiver reported child behavior continued to be significantly associated at time 1. Caregiver reported child behavior at time 1 no longer predicted caregiver commitment at time 2, when controlling for caregiver commitment at time 1 ($\beta = -.26$, $p > .05$). Caregiver commitment at time 1 did not predict caregiver reported child behavior at time 2, when controlling for caregiver reported child behavior at time 1 ($\beta = .00$, $p > .05$).

Full path model

Figure 2 presents a full path model for the entire sample. The fit for the full path model was $\chi^2 (5, N = 102) = 10.09$, $p = .07$, root mean square error of approximation (RMSEA) = .10, comparative fit index (CFI) = .91. Table 5 summarizes the unstandardized regression estimates for the paths in the model. Standardized regression estimates are presented in Figure 2. In this model, caregiver commitment was predicted by age of entry into foster care ($\beta = -.35$, $p < .001$), caregiver reported child behavior ($\beta = -.25$, $p < .01$), and the number of foster children previously cared for by the caregiver ($\beta = -.26$, $p < .01$).

Discussion

Child behavior and caregiver commitment

Overall, caregiver reported child behavior was found to be associated with caregiver commitment. Caregivers were more committed to children who had low levels of caregiver reported behavior problems than to children who had high levels of caregiver reported behavior

problems. When examined separately, the effect was statistically significant for externalizing behavior but not for internalizing behavior. This finding is consistent with research that behavior problems predict placement disruptions in foster children (e.g., James et al., 2004;Newton et al., 2000;Pardeck, 1983).

Stability of commitment

Both caregiver commitment and caregiver reported child behavior were very stable across an 11-month period, with correlations of .61 for caregiver commitment and .60 for caregiver reported child behavior. Although we expected caregiver commitment to be moderately stable, we were surprised at such a high stability. This finding provides evidence for both the stability of the construct of commitment, and for the test-retest reliability of the TIMB interview. When the data were examined at two time points, caregiver commitment and caregiver reported child behavior were associated at the first assessment but not at the second assessment. This is seemingly inconsistent given that both caregiver reported child behavior and caregiver commitment were stable from time 1 to time 2. However, these findings can be reconciled given that neither variable was perfectly stable between the two time points. It is possible that the association between caregiver commitment and caregiver reported child behavior might be a function of the length of time the child has been in placement. Child behavior might have a greater effect on caregiver commitment early in placement than later in placement, even with the relative stability of both variables.

Direction of association

In the cross-lag model, time 1 commitment did not predict time 2 caregiver reported child behavior, when controlling for time 1 caregiver reported child behavior. Similarly, time 1 caregiver reported child behavior did not predict time 2 commitment, when controlling for time 1 commitment. This finding cannot be interpreted to mean that there is no association between caregiver commitment and caregiver reported child behavior because commitment and caregiver reported child behavior were already significantly correlated at time 1, and the children had been in placement for an average of 16 months. In other words, we were unable to detect the *direction of the association* between caregiver commitment and caregiver reported child behavior. Evidence for a bi-directional effect between caregiver commitment and child behavior comes from research demonstrating a bi-directional effect between child behavior problems and placement stability in foster children (James et al., 2004). We might have been more likely to detect the directionality of the association if the time 1 data were obtained shortly after placement, rather than 16 months into the placement. Unfortunately, we did not have enough data from early in placement to analyze the data in this way.

Further contributions of the study

This study also gives evidence of the robustness of previous research findings regarding caregiver commitment. In previous research, caregiver commitment was found to be negatively associated with the number of foster children previously cared for by the caregiver and the age at which the infant or child enters placement (Dozier & Lindhiem, 2006). The present study finds that these effects continue to be significant even when statistically controlling for caregiver reported child behavior.

Finally, we proposed an integrated path model for predicting caregiver commitment. From the model, we see that caregiver commitment is likely determined by numerous factors including caregiver characteristics (i.e., the number of previous foster children cared for by the caregiver), child characteristics (i.e., the behavior of the child), and placement characteristics (i.e., the age at which the child is placed). In this model, we are assuming the directionality of the association between caregiver commitment and caregiver reported child behavior because we were not

able to detect the directionality of the association in the cross-lag path model. Overall, we were able to account for a large proportion of the variance in caregiver commitment (29%).

Limitations of the study

This study has several limitations that are important to note. First, the assessment of child behavior relied on parents' reports. Foster parents who were rated as highly committed to their child might have tended to under-report behavior problems, whereas parents who were rated as not highly committed to their child might have tended to over-report behavior problems. Although the reliance on parents' reports of child behavior might have inflated the association between child behavior and caregiver commitment, it cannot account for all of the results because caregiver commitment and child behavior were not significantly related at 26 months after placement (time 2). A second limitation of the study is the heterogeneous sample. At the time of the TIMB interview, children ranged in age from 3 to 60 months. Although the age of the child did not have a direct association with caregiver commitment, increased variance due to the heterogeneous sample might have masked weak effects and contributed to the likelihood of Type II errors. Children also differed greatly in the age at which they first entered foster care and the length of time they had been in placement. However, these two variables were statistically controlled by entering them into our regression analyses. A third limitation is the lack of a comparison group of non-foster care dyads. It is possible that child behavior is also related to caregiver commitment for biologically intact dyads. However, it is also likely that there is much less variability in commitment among biologically intact dyads, which might result in weaker effects. A fourth limitation is the lack of data on convergent validity for our only measure of caregiver commitment, the TIMB interview. This is partly because there is no "gold standard" assessment of commitment with which to compare our data. However, evidence for the predictive validity of the TIMB interview has been demonstrated in previous research (Dozier & Lindhiem, 2006). A fifth limitation is the lack of statistical power to detect weak effects, especially in the cross-lag path analysis involving a reduced sample size and missing data.

Future directions

In future research, it will be important to examine commitment over a longer period of time. Although we were able to examine commitment and child behavior at two time points, we were unable to determine the direction of the association between caregiver commitment and caregiver reported child behavior. With multiple time points beginning soon after placement, we might detect the direction of the effect and begin to examine possible bi-directional effects.

Finally, it will be informative to examine situational factors that might affect caregiver commitment. For example, it is likely that the opportunity to adopt a foster child might have an effect on caregiver commitment. Specifically, caregivers might be more committed to infants and children when parental rights of the birth parents have been terminated than when reunification is the goal. Differences in commitment might also exist between relative caregivers and non-relative caregivers.

References

Achenbach, TM. Manual for the Child Behavior Checklist/4 – 8 and 1991 profile. University of Vermont, Department of Psychiatry; Burlington, VT: 1991.

Achenbach, TM. Manual for the Child Behavior Checklist/2 – 3 and 1992 profile. University of Vermont, Department of Psychiatry; Burlington, VT: 1992.

Aldgate J, Colton M, Ghate D, Heath A. Educational attainment and stability in long-term foster care. Children & Society 1992;6:91–103.

Arbuckle, JL.; Wothke, W. Amos 5.0 user's guide. Smallwaters; Chicago: 2003.

Bates, B.; Dozier, M. "This Is My Baby" coding manual. University of Delaware; Newark: 1998. Unpublished manuscript

Bradley RH, Whiteside-Mansell L, Brisby JA, Caldwell BM. Parent's socioemotional investment in children. Journal of Marriage and the Family 1997;59:77–90.

Chernoff R, Combs-Orme T, Risley-Curtis C, Heisler A. Assessing the health status of children entering foster care. Pediatrics 1994;93:594–601. [PubMed: 8134214]

Corwyn RF, Bradley RH. Determinants of paternal and maternal investment in children. Infant Mental Health Journal 1999;20:238–256.

Dozier M, Lindhiem O. This is my child: Differences among foster parents in commitment to their young children. Child Maltreatment 2006;11:338–345. [PubMed: 17043318]

Fisher PA, Burraston B, Pears K. The Early Intervention Foster Care Program: Permanent placement outcomes from a randomized trial. Child Maltreatment 2005;10:61–71. [PubMed: 15611327]

Garwood MM, Close W. Identifying the psychological needs of foster children. Child Psychiatry and Human Development 2001;32:125–135. [PubMed: 11758878]

Halfon N, Berkowitz G, Klee L. Mental health utilization by children in foster care in California. Pediatrics 1992;89:1238–1244. [PubMed: 1594382]

James S, Landsverk J, Slymen DJ. Placement movement in out-of-home care: Patterns and predictors. Children and Youth Services Review 2004;26:185–206.

Newton RR, Litrownik AJ, Landsverk JA. Children and youth in foster care: Disentangling the relationship between problem behaviors and number of placements. Child Abuse & Neglect 2000;24:1363–1374. [PubMed: 11075702]

Orme JG, Buehler C. Foster family characteristics and behavioral and emotional problems of foster children: A narrative review. Family Relations 2001;50(1):3–15.

Pardeck JT. An empirical analysis of behavioral and emotional problems of foster children as related to re-placement in care. Child Abuse & Neglect 1983;7:75–78. [PubMed: 6684978]

Schneidermann M, Connors MM, Fribourg A, Gries L, Gonzales M. Mental health services for children in out of home care. Child Welfare League of America 1998;127:29–40.

Stovall KC, Dozier M. The development of attachment in new relationships: Single subject analyses for 10 foster infants. Development and Psychopathology 2000;12:133–156. [PubMed: 10847621]

Stovall-McClough KC, Dozier M. Forming attachments in foster care: Infant attachment behaviors in the first 2 months of placement. Development and Psychopathology 2004;16:253–271. [PubMed: 15487595]

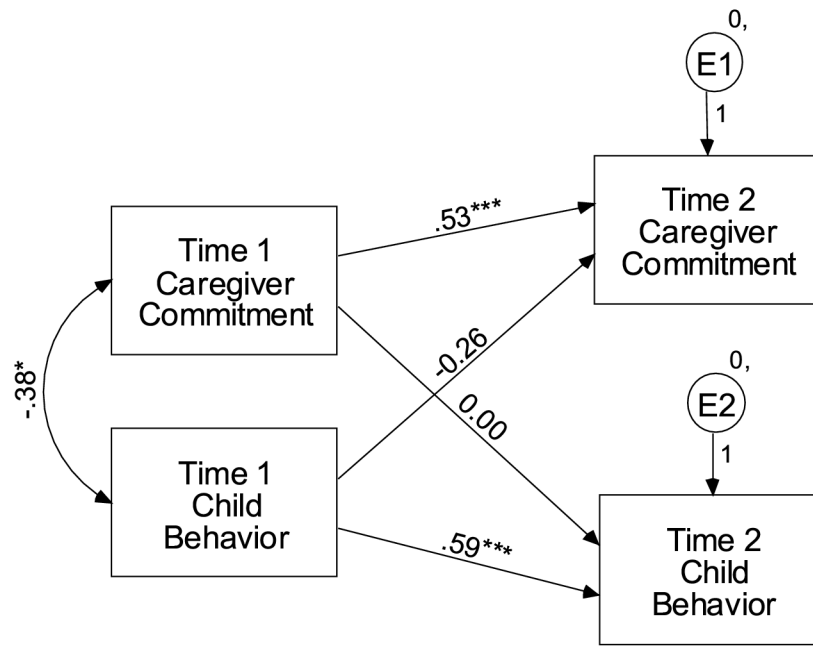**Figure 1.**
Model 1: Cross-lag path model of child behavior and caregiver commitment. * *p* < .05. ***
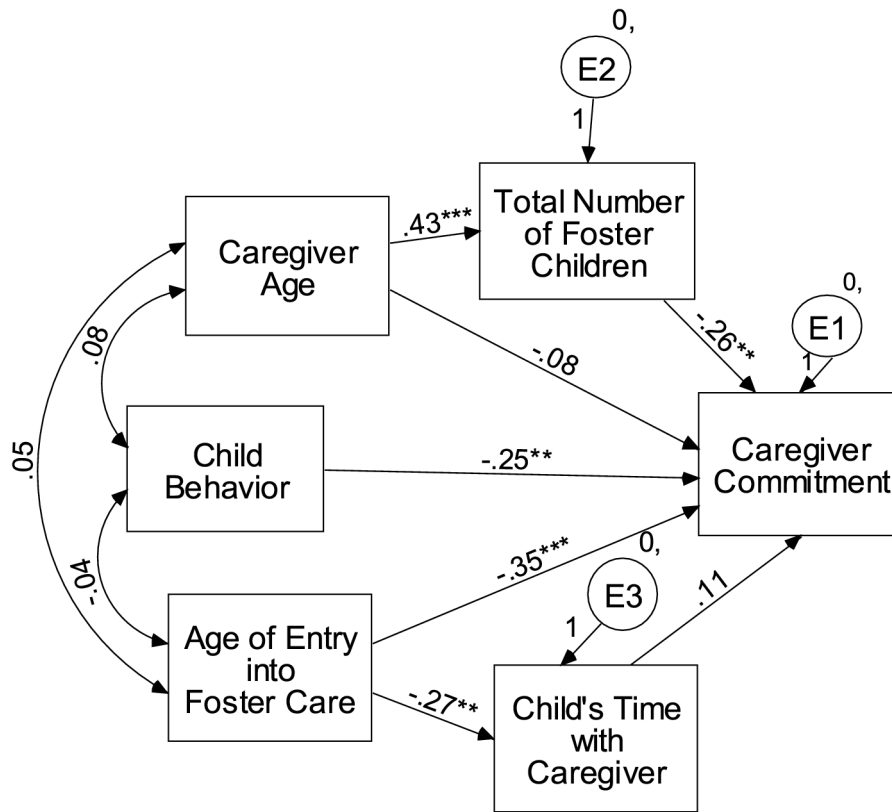*p* < .001. (*N* = 76).

Figure 2.
Model 2: Full path model of predictors of caregiver commitment. ** *p* < .01. *** *p* < .001.
(*N* = 102)

Table 1

Ranges, Means, and Standard Deviations

Variable	Min.	Max.	*M*	*SD*
Caregiver Commitment (*N* = 102)	1.0	5.0	3.3	1.1
CBCL Total T-score (*N* = 82)	31	73	53.2	9.4
-Internalizing Behavior	34	77	52.3	10.1
-Externalizing Behavior	30	79	53.6	10.0
Caregiver Age in Years (*N* = 99)	26	80	46.9	11.7
Child Age in Months (*N* = 102)	3	60	22.2	10.8
Caregiver Education in Years (*N* = 102)	7	17	12.6	2.0
Child's Time with Caregiver in Months (*N* = 102)	.6	59	12.4	9.9
Age of Entry into Foster Care in Months (*N* = 101)	0	38	6.9	7.7
Risk Factor Score (*N* = 75)	0	4	1.4	.9
Number of Foster Children (*N* = 101)	1	500	25.2	65.4
-Log Transformed Variable	0	2.7	.9	.6

Table 2

Correlations Between Variables

	1	2	3	4	5	6	7	8	9
1. Caregiver Commitment									
2. Age of Caregiver	-.25*								
3. Years of Education	.15	-.39**							
4. Caregiver Time with Child	.30**	-.17	.09						
5. Child Age	.05	-.17	.07	.64**					
6. Child Gender	.19	-.15	-.13	.06	.11				
7. Child Risk Factors	.10	.03	.06	-.05	-.25*	-.07			
8. Age of Entry into Foster Care	-.37**	.06	-.11	-.27**	.38**	-.04	-.31**		
9. Child Behavior	-.27*	.11	-.09	-.06	-.01	-.11	.13	-.03	
10. Number of Foster Children (Log)	-.36**	.43**	-.11	-.28**	-.34**	-.12	-.06	-.00	.10

*$p < .05$. **$p < .01$.

Table 3

Linear Regression Model for Caregiver Commitment

Variable	β	SE	p
Total Number of Foster Children	−.536	.209	.012
Age of Caregiver	−.006	.010	.548
Child Behavior	−.027	.011	.016
Age of Entry into Fostercare	−.050	−.014	.001
Child's Time with Caregiver	.012	.012	.293
(Constant)	5.707	.747	.000

Note. Adjusted R^2 = .291.

Table 4

Correlations Between Variables in Cross-Lag Path Model (Model 1)

	1	2	3
1. Time 1 Caregiver Commitment			
2. Time 2 Caregiver Commitment	.61**		
3. Time 1 Child Behavior Problems	−.45**	−.43*	
4. Time 2 Child Behavior Problems	−.25	−.12	.60**

$* p < .05. ** p < .01.$

Table 5

Unstandardized Regression Estimates for All Paths

Path	Model 1		Model 2	
	B	*SE*	*B*	*SE*
CG Age to CG Commitment	-	-	−.01	.01
Ch Time with CG to CC	-	-	.01	.01
Age of Entry into FC to CC	-	-	−.05	.01
ChB to CC	-	-	−.03**	.01
Total Number of Foster Ch to CC	-	-	−.50	.18
CG Age to Total Number of Foster Ch	-	-	−.02***	.01
Age of Entry into FC to Ch Time with CG	-	-	−.35**	.12
Time 1 CC to Time 2 CC	.56***	.17	-	-
Time 1 CC to Time 2 ChB	−.03	1.31	-	-
Time 1 ChB to Time 2 ChB	.63***	.15	-	-
Time 1 ChB to Time 2 CC	−.03	.02	-	-

Note. CG = Caregiver; Ch = Child/Children; FC = Foster Care; CC = Caregiver Commitment; ChB = Child Behavior Problems.

** *p* < .01. *** *p* < .001.