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Family Transitions in Cohabiting Families: A Longitudinal Investigation of the Role of Parent Depressive Symptoms in Youth Problem Behaviors

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Abstract

Cohabiting family structures are becoming increasingly prevalent in the United States but are less stable than married family unions. In this longitudinal study we examine the change in psychosocial adjustment of adolescents when a non-biologically related male cohabiting partner (MCP) transitions out of the family home. Of particular interest, the role of maternal and MCP depressive symptoms was examined as a moderator. At wave 1, the sample was comprised of 111 low-income urban Black families, consisting of an adolescent (42.3% male; Mage= 13), a biological mother, and a non-biologically-related male cohabiting partner (MCP). Wave 2 and 3 assessments occurred over the course of the subsequent 29 months, with 38% of MCPs transitioning out of the home. We used latent growth curve modeling to characterize trajectories of youth internalizing and externalizing symptom change across the 3 waves. Both maternal and MCP depressive symptoms interacted with whether a transition occurred, consistent with the notion that adolescent problem behaviors are shaped by the dynamic interplay of individual- and family-characteristics.

Keywords

cohabitation; family transitions; parental depressive symptoms; youth problem behaviors

Compliance with Ethical Standards

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

Conflicts of interest: The authors declare that they have no conflicts of interest.

As Brody, Neubaum, and Forehand (1988) noted almost 30 years ago, transitions in adult relationships (e.g., divorce) are often associated with psychosocial adjustment difficulties in affected children. Of perhaps greater importance, Brody and colleagues called for the nuanced study of family variables that may influence children's adjustment before, during, and after a transition. The overarching goal of this study was to examine the effects of an increasingly prevalent family form—cohabitation—and determine whether a transition in the adult relationship is moderated by one family variable: Depressive symptoms of the mother and the social father (i.e., the male cohabiting partner [MCP]) prior to the transition. We utilized a prospective study design to assess the impact of family transitions, parental depressive symptoms, and their interaction on change in two measures of youth adjustment: Internalizing and externalizing problems.

Cohabiting Family Structures and Youth

Cohabiting relationships can be defined as unions in which two romantically involved but unmarried individuals live together (McDonald, Jouriles, Ramisetty-Mikler, Caetano, & Green, 2006). Nonmarital cohabitation has become considerably more prevalent over the past decades (e.g., Rinelli & Brown, 2010; Skinner, Bahr, Crane, & Call, 2002), particularly amongst low-income Black couples (Dunlap, Golub, & Benoit, 2010; Lichter, Turner, & Sassler, 2010). Estimates suggest that nearly 50% of U.S. children will live in a cohabiting family constellation before reaching adulthood (Bumpass & Lu, 2000; Kennedy & Bumpass, 2008). The magnitude of these numbers is more pronounced for African American youth: Nearly 70% of Black adolescents will experience a cohabiting family constellation at some point during their upbringing (U.S. Census Bureau, 2009). Statistics suggest that the majority of these Black youth were at birth living with a single non-cohabiting mother, and approximately one-half of these mothers entered into one or more cohabiting relationships before the child was 16 years of age (Bumpass & Lu, 2000). Although cohabiting family structures are increasing in prevalence, surprisingly little is known about such constellations and the experiences of youth living with a “social parent” (i.e., a MCP; Booth, Crouter, & Landale, 2002; Sassler, 2004; Sassler & Miller, 2011).

Review of extant work suggests that children residing in cohabiting families are at elevated risk for a wide range of problem behaviors relative to their peers from married households—an effect that is particularly pronounced for adolescents (Brown, 2004; Cavanagh, 2008; Hofferth, 2006; Manning & Lamb, 2003). In light of such findings, scholars have subsequently asked what it is about cohabiting family forms that can account for their apparent deleterious effect (e.g., Manning, 2002). It is possible that cohabiting unions serve as a proxy for other aspects of family life that ultimately shape child development. The literature suggests that two of these aspects of family life in a cohabiting household are family instability and caregiver depressive symptoms (e.g., Brown, 2000, 2002; Bumpass & Lu, 2000). Before turning to a consideration of these two variables, we will review family systems theory as a framework for how transitions and caregiver depressive symptoms may impact youth adjustment.

Theoretical Perspective: Family Systems Theory

From a family systems theoretical perspective (Cox & Paley, 1997; Minuchin, 1985), the family is conceptualized as a “complex, integrated whole” (Minuchin, 1988, p.8); individuals within the system are viewed to be fundamentally dependent on one another. By extension, family systems theory stipulates that any examination of child functioning should consider both individual (e.g., parent psychopathology) and family-level (e.g., divorce) contributors (Minuchin, 1985). Family transitions, that is, movement of caregive figures into or out of the family system, represent a salient mechanism that is relevant to family systems theory (Cox & Paley, 1997). Focusing specifically on child outcomes, any discontinuity at the level of the family, such as a dissolved union, is viewed as a potential source of stress for the child (Cox & Paley). Although scholars highlight that transitions can shape a child in a myriad of ways, they emphasize that they can place affected children at risk for ensuing maladjustment (Cox & Paley). Also of importance, family systems theory acknowledges the role of individual characteristics of family members in a child’s adjustment. Parental depressive symptoms, particularly of the mother, have received substantial support as a factor for both child internalizing and externalizing problems (Beardslee, Gladstone, & O’Connor, 2011; England & Sim, 2009).

Taken together, family systems theory highlights that any attempt to account for child adjustment or maladjustment needs to consider both family-level variables and individual characteristics of family members. The present examination applies a family systems framework to the study of youth development in cohabiting family structures. The ensuing sections review associations of youth psychosocial adjustment with (1) impermanence of family structures and (2) parental well-being.

Family Transitions

A discussion of family transitions is particularly germane in the context of cohabiting family structures as these living constellations experience more frequent caregiver transitions relative to any other family structure (Bumpass, & Lu, 2000; Golub, Reid, Strickler, & Dunlap, 2013; Raley & Wildsmith, 2004). In fact, the average length of a cohabiting union is approximately 2 years (Bumpass, 1998), which suggests considerable familial instability. Perhaps contrary to popular belief, MCPs, or “social fathers,” do appear to play a substantial role in family life as indexed by their active involvement in daily child-rearing activities (Forehand, Parent, Golub, & Reid, 2014), comparable to biological fathers (Berger, Carlson, Bzostek, & Osborne, 2008). This directly aligns with the finding that individuals in married and cohabiting family structures have similar views of fatherhood (Waller, 1999).

Although rarely studied (Phares & Compas, 1992; Phares, Fields, Kamboukos, & Lopez, 2005; Pomerantz, Parent, Forehand, & Seehuus, 2015), paternal engagement is associated with positive child outcomes in families with either a biological or social father (Bzostek, 2008, Forehand, Parent, Golub, Reid, & Lafko, 2015; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). Given that MCPs are involved in cohabiting family life (Forehand et al., 2014) and that father engagement promotes child development (e.g., Sarkadi et al.), it is important to examine how a MCP transition affects youth well-being. Although this topic

has not been examined to date, Magnuson and Berger (2009) have called for the examination of family transitions while taking into consideration marital status (i.e., married versus cohabitation).

In accordance with family systems theory, empirical reports document that changes in family structure present a source of stress to affected family members (Amato, 2001; Amato & Keith, 1991; Brody et al., 1988). Most, but certainly not all (e.g., Amato, 2001; Cavanagh, 2008; Fomby & Cherlin, 2007; Krohn, Hall, & Lizotte, 2009; Magnuson & Berger, 2009; Waldfogel, Craigie, & Brooks-Gunn, 2010), of the research focuses on divorced families and highlights that union dissolution places children, particularly adolescents (Amato, 2001; Cavanagh, 2008), at elevated risk for ensuing maladjustment. From his meta-analysis of marital divorce studies, Amato concluded that children who experience parental divorce “score significantly lower on measures of academic achievement, conduct, psychological adjustment, self-concept, and social relations” (p. 355). However, although divorce is associated with youth adjustment difficulties, the results of multiple meta-analytic reviews suggest these effects are relatively small in magnitude (Amato & Keith, 1999; Amato, 2001) and that other variables, such as marital conflict (e.g., Amato, Loomis, & Booth 1995; Kelly, 2000) and parental depressive symptoms (Averdijk, Malti, Eisner, & Ribeaud, 2012) contribute to the severity and length of child behavior. This has led scholars to conclude that the effects of divorce “do not operate in the same way for all children” (Lansford, 2009, p. 142). This conclusion highlights the need to examine moderators of family transitions and ensuing child adjustment. We posit that parental depressive symptoms deserve attention as main effects and, more importantly, as a moderator.

Parental Depressive Symptoms

A parallel line of work has focused on another domain of family functioning, parental depression (or depressive symptoms), and youth mental health. Consideration of caregiver mental health is important as parent depression is not uncommon during a child’s developmental years and is associated with both internalizing and externalizing problems (Goodman, 2007). Multiple mechanisms (e.g., heredity, parenting, stress) have been theorized and shown to partially account for the relation between parental depression and child problem behavior (Goodman, 2007).

Parent depression or depressive symptoms gains particular salience in the context of nonmarital unions. Relative to married individuals with children, rates of depression are elevated in cohabitators with children (Brown, 2000, 2002; DeKlyen, Brooks-Gunn, McLanahan, & Knab, 2006). The higher rates of depression have been attributed to greater relationship instability in cohabiting than married families (Brown, 2000, 2002). Research consistently highlights the potential deleterious impact of caregiver depression on youth psychosocial adjustment (for review, see Beardslee et al., 2011; England & Sim, 2009). For example, Halligan, Murray, Martins, and Cooper (2007) used a 13-year prospective longitudinal design to document that maternal depression, measured at baseline, significantly predicted affective disorders in adolescents.

Research on the role of parental depression in youth adjustment has focused primarily on the mental health of mothers. This is partially attributable to the fact that mothers are typically the primary caregivers and that higher rates of depression are documented in mothers relative to fathers (e.g., 19% for mother; 12% for fathers; Meadows et al., 2007). Although some studies suggest that child well-being is more closely associated with maternal, rather than paternal, depression (Connell & Goodman, 2002), other work suggests similar effects for both caregiver figures (e.g., Kane & Garber, 2009; Weitzman, Rosenthal, & Liu, 2011). In a cross-sectional study, which included cohabiting families, Meadows and colleagues found that maternal depression was associated with both internalizing (i.e., anxiety, depression) and externalizing (i.e., oppositional behavior) problems of young children whereas some evidence emerged for a link between father (married or social) depression and child externalizing problems. In sum, this emerging literature highlights that depression of both mothers and fathers, including social fathers, deserve consideration in cohabiting families.

The Current Study

Cohabitation is an increasingly prevalent family form that is associated with more frequent caregiver transitions relative to marriage (Bumpass, & Lu, 2000; Rinelli & Brown, 2010). While the relation of cohabitation to child adjustment has been examined (e.g., Brown, 2004; Hofferth, 2006), the impact of a union dissolution (e.g., MCP moving out) in these families on child problem behavior has not received scholarly attention. Further, congruent with family systems theory (Cox & Paley, 1997; Minuchin, 1985), a family transition may exert differential effects on affected youth depending on the family context. Maternal and, to some extent paternal depressive symptoms, is one such contextual variable that has been shown to influence youth psychosocial adjustment (England & Sim, 2009).

In the current study we examine the independent contributions of a cohabiting family transition and both maternal and paternal depressive symptoms in shaping an adolescent's future development. However, building on the divorce literature (e.g., Lansford, 2009), we are primarily interested in examining whether depressive symptoms of each caregiver prior to the transition qualify the association between the transition and subsequent change in adolescent internalizing and externalizing problems. Based on the cohabitation, divorce, and parent depression literatures and informed by family systems theory, we hypothesized that pre-existing parental depressive symptoms would moderate the effects of a MCP transition on youth problem behaviors. Specifically, we conceptualized both a transition and depressive symptoms (i.e., either maternal or MCP) as stressors, such that the latter would exacerbate the negative effects of a transition on youth outcomes. Not surprisingly, we expected these effects to be more pronounced with maternal, than MCP depressive symptoms, as the mother is the biological parent, has been involved in rearing the child longer than the MCP, and will continue parenting the child if a transition occurs. Regarding the MCP, based on Meadows et al.'s (2007) findings, we expected his depressive symptoms to play a role primarily with externalizing problems.

Method

Participants

Participants were 111 single-mother Black families with a MCP and a young adolescent (ages 10 to 17) living in New York City. The MCP was not married to the mother and was not biologically related to the adolescent. At wave 1, the mean ages of participating youth, mothers, and MCPs were 13 years ($SD = 3.71$; 57.7% girls), 38.6 years ($SD = 7.61$), and 41.39 ($SD = 10.54$), respectively. Of the mothers, 37% did not complete high school, 33% completed high school/GED, and 30% had some college/vocational school after high school. Of the MCPs, 29% did not complete high school, 56% completed high school/GED, and 16% had some college/vocational school after high school. Household incomes averaged \$26,664 per year ($SD = \$29,724$). In all families at least one member identified as Black, with 98% of the single mothers being Black. The mean number of children per family was 2.14 ($SD = 1.3$). If there were multiple children in the family in the targeted age range, the target child was chosen based on mothers' selection of the youth to participate.

Mothers' average age at the birth of the target child was 25 ($SD = 7.5$). Sixty percent of the mother-MCP relationships were "established" (i.e., lived together 13 months to 5 years at wave 1) and 40 % were "new" (i.e., lived together 12 months or less at wave 1). Mothers reported an average of 2.66 total cohabiting partnerships ($SD = 1.2$) and 1.0 marriages ($SD = .4$).

Procedure

The National Development and Research Institute (NDRI) Institutional Review Board reviewed and approved the study. Participants initially signed consent (mother and MCP) and assent (adolescent) forms. Study participants were recruited September, 2011 to September, 2012 by field staff members who were experienced in working with low-income Black residents of New York City. Field staff used existing networks of research study participants, field informants, street recruiting, and social services agency contacts to recruit potential participants. Both the mother and adolescent had to agree to participate in the wave 1 assessment. MCPs were encouraged but not required to participate (83% participated). Families completed the assessment either at a community site or in their home, according to the preferences of each family. Family members completed the assessments separately and privately with interviewers, who entered the responses into a computer database. Each interview took approximately 60 minutes to complete; mothers and MCPs were each compensated \$40 and adolescents were compensated \$20 for their participation. Mothers were re-contacted at waves 2 and 3 about the family continuing to participate. Waves 2 and 3 occurred on average at 13 months and 30 months, respectively, after wave 1.

Measures

Demographic Information—At wave 1, mothers responded to demographic questions about themselves (e.g., age, race, education) and the MCP, as well as the length of their cohabitation with the MCP (established = greater than 12 months; new = 12 months or less). Youth reported on their gender and age.

MCP Transitions—At waves 2 and 3, mothers were asked whether their former MCP had transitioned out of the home since the last assessment.

Caregiver Depressive Symptoms—Caregiver depressive symptom severity was assessed by the 9-item Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001), which is a self-report version of the Primary Care Evaluation of Mental Disorders (Spitzer, Kroenke, & Williams, 1999) diagnostic instrument for psychiatric disorders. The PHQ-9 was completed at waves 1 and 3 by the mother and wave 1 by the MCP. Each item is scored from 0 (not at all) to 3 (nearly every day) (scale range: 0 to 27). Scores are summed and scores of 5, 10, 15, and 20 represented mild, moderate, moderately severe, and severe depression, respectively (Kroenke et al., 2001). The PHQ-9 has demonstrated strong psychometric properties in a recent meta-analysis (Gilbody, Richards, Brealey, & Hewitt, 2007). In the current sample, the alpha coefficient was .86 and .87 for mother report and MCP report, respectively.

Adolescent Problem Behavior—At waves 1–3, youth internalizing and externalizing problems were assessed by mother completion of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). The broadband internalizing problems scale is comprised of the Anxious/Depressed, Withdrawn, and Somatic Complaints narrowband subscales. The broadband externalizing problems scale is comprised of the Aggression and Rule Breaking narrowband subscales. Reliability and validity of the CBCL is well-established for the internalizing and externalizing dimensions (Achenbach & Rescorla, 2001). In the current study, the alpha coefficients for the CBCL ranged from .85 to .89 for broadband internalizing problems and from .91 to .95 for broadband externalizing problems across data collected in waves 1–3.

Data Analytic Plan

Our analytic approach utilized latent curve modeling (LCM; see Bollen & Curran, 2006, for a review) to examine if depressive symptoms (either maternal or MCP) moderated the effects of a MCP transition on youth problem behavior (see Figure 1 for the primary model). LCM draws on the strength of structural equation modeling (SEM) to estimate individual variability in stability and change over time. In the current study, LCM incorporates the repeated measures of internalizing and externalizing problems as multiple indicators on underlying latent curve (or growth) factors. The latent factors capture interindividual differences in intraindividual stability and change over time. Due to sample size limitations, only models with linear slope were tested, and internalizing and externalizing problems were modeled in separate equations.

In an attempt to model the individual variability in the psychopathology trajectories, we regressed the latent intercept and slope factors on MCP transition (coded as 0 = no transition; 1 = for MCP transition out of the home), caregiver depressive symptoms (mother and MCP depressive symptoms in separate models), and the interaction between MCP transition and caregiver depressive symptoms. When significant interactions emerged, figures were created that illustrated the form of the interaction by depicting the regression lines of the relation between MCP transitions (0 or 1) and youth problem behaviors at low (a

score of zero - no depression) and high (a score of 10 moderate depression) levels of caregiver depressive symptoms (Hayes, 2013).

All LCM analyses were conducted using Mplus Version 7 (Muthén & Muthén, 1998–2012). To account for non-normality, maximum likelihood estimation with robust standard errors (MLR) was used. The following fit statistics were employed to evaluate model fit: Chi-square (χ^2 : $p > .05$ excellent), Comparative Fit Index (CFI; $> .90$ acceptable, $> .95$ excellent), Root Mean Square Error of Approximation (RMSEA; $< .08$ acceptable, $< .05$ excellent) and the Standardized Root Mean Square Residual (SRMR; $< .08$ acceptable, $< .05$ excellent) (Hu & Bentler, 1999). Missing data on internalizing and externalizing problems was .9%, 11.7%, and 40.5% at waves 1, 2, and 3, respectively. The mechanism of missingness was treated as ignorable (missing completely at random; Little's MCAR $p > .10$ for wave 1, wave 2, and wave 3) and full information maximum likelihood estimation techniques were used for inclusion of all available data.

As we did not theorize that the proposed associations would vary based on demographics of the family, these variables were not included in the primary model or study hypotheses. To confirm the appropriateness of this approach, however, the effects of these variables on the model were examined by running a multiple-indicator/multiple-cause (MIMIC; Muthén, 1989) model in which the intercept and slope of the final LCMs were regressed on the covariates separately (i.e., mother-MCP relationship length at baseline, mother's education, family income, youth age, and youth gender). If paths in the structural model remained significant with the inclusion of these covariates, it was concluded that the control variables did not influence the relationships among variables in the model. Finally, based on our findings, we conducted two sets of secondary analyses.

Results

Preliminary Analyses

Thirty-eight percent of the MCPs transitioned out of the family between the wave 1 and wave 3 assessments. Two mothers reported that a new MCP transitioned into the family between wave 1 and wave 3. The means for mother and MCP depressive symptoms at wave 1 were 4.97 and 3.12, respectively. The means for adolescent internalizing problems were 8.30 ($T = 48$), 7.30 ($T = 46$), and 6.99 ($T = 48$) at waves 1, 2, and 3, respectively. The means for adolescent externalizing problems were 10.18 ($T = 54$), 9.03 ($T = 49$), and 7.80 ($T = 50$) at waves 1, 2, and 3, respectively. The T scores suggest that on average youth problem behavior was in the normal range with a minority scoring in the borderline ($T = 65$) or clinical ranges ($T = 70$) (15.3% and 21.6% for internalizing and externalizing problems, respectively).

Primary Analyses

The unconditional linear internalizing and externalizing problem models' fit statistics were on average excellent and supportive of continuing to conditional models. Table 1 presents model fit for unconditional followed by the conditional LCM fit indices. All models demonstrated acceptable to excellent fit (12% of the fit indices were acceptable and 88%

were excellent). Table 2 presents the results of analyses testing effects of MCP transitions, caregiver depressive symptoms, and their interaction. Results are presented first for internalizing problems and then for externalizing problems.

For internalizing problems, an MCP transitioning out of the home and higher levels of maternal depressive symptoms at baseline were associated increases in youth internalizing problems over time. However, these main effects were qualified by a significant interaction. Figure 2a illustrates the form of the interaction with high and low maternal depressive symptoms representing moderate depression (a score of 10) and no depression (a score of 0), which are roughly ± 1 SD of the mean. The form of the interaction indicates that, among families where the mother was not depressed at baseline, a MCP transitioning out of the home is associated with an increase in youth internalizing problems across the three waves. Testing simple slopes further supports this interpretation with the conditional effect of MCP transitions on youth internalizing problems being significant at low, $b = 2.37$, $p < .01$, but not high, $b = -1.58$, $p > .10$, levels of maternal depressive symptoms. Significant effects did not emerge in the MCP model for internalizing problems.

For externalizing problems, significant effects did not emerge for the mother model. For the MCP model, a significant interaction emerged between MCP transitions and MCP depressive symptoms. Figure 2b illustrates the form of the interaction: Among families where the MCP was moderately depressed at baseline, his transitioning out of the home is associated with an increase in youth externalizing problems across the three waves. Testing simple slopes further supports this interpretation with the conditional effect of MCP transitions on youth externalizing problems being significant at high, $b = 7.34$, $p < .05$, but not low, $b = -1.57$, $p > .10$, levels of MCP depressive symptoms.

MIMIC models tested the demographic effects of mother-MCP relationship length at baseline, mother's education, family income, youth age, and youth gender on the associations in the two models with significant interactions. The slope factors in the final models were regressed on the control variables in separate models. All paths in the structural model were largely unaffected by the inclusion of these control variables (i.e., no change in significance or direction, and only minor changes in effect size); thus, it was concluded that the control variables did not influence the original relationships among variables in the model.

Secondary Analyses

Two sets of secondary analyses were conducted. First, as two mothers reported that a new MCP transitioned into the home from wave 1 to wave 3, analyses were repeated excluding these two families. The patterns of results did not change. Second, based on the unexpected form of the interaction in the mother model, we conducted secondary analyses to examine the following question: Do differential increases in depressive symptoms of mothers with low levels at wave 1 occur based on MCP transitioning out of the family? If differential findings emerged for families with and without a MCP transition, this could help explain the findings (e.g., when a transition occurs, mother with low depressive symptoms become more depressed relative to families without a transition). A path model was estimated with the subsample of mothers scoring below a six on the PHQ9 ($n = 71$). Maternal depressive

symptoms at wave 3 were regressed on wave 1 depressive symptoms and MCP transitions. For families where the mother had low levels of depressive symptoms at baseline, MCP transitions did not significantly predict maternal depressive symptoms at wave 3, $b = -0.19$, $p > .10$.

Discussion

The present study examined the main effects and complex interplay of two contextual variables—family transitions and caregiver depressive symptoms—on change in youth adjustment across three years. Based on the cohabitation, divorce, and parent depression literatures and informed by family systems theory, we conceptualized that both family instability and caregiver depressive symptoms (i.e., either maternal or MCP depressive symptoms) would act as sources of stress for affected adolescents. Further, we expected these effects to be more pronounced with maternal, than MCP, depressive symptoms and, based on Meadows et al.'s (2007) findings, that MCP depressive symptoms would play a role with externalizing problems. Of particular importance, we predicted that pre-existing parental depressive symptoms would interact with a MCP transitioning out of the family to increase youth problem behaviors.

Both higher levels of maternal depressive symptoms at wave 1 and a MCP subsequently transitioning out of the family were associated with increases in youth internalizing, but not externalizing, problems. Although research supports a relationship between maternal depressive symptoms and both youth internalizing and externalizing problems (see Goodman et al., 2011), the association has been stronger for the former than the latter type of problem behavior in longitudinal designs examining community samples (e.g., Hammen & Brennan, 2003). Based on the existing literature, our findings are not completely surprising. Both genetic and environmental (e.g., modeling) factors may account for a relation between maternal depressive symptoms and internalizing, but not externalizing, problems.

Our findings for MCPs support the interaction model that we proposed with externalizing problems. The combination of higher levels of depressive symptoms of the MCP at wave 1 and a subsequent MCP transition out of the family between waves 1 and 3 was associated with elevated levels of adolescent externalizing problems. Substantial research indicates that parental, including paternal, depressive symptoms serve to elevate problem behaviors through a variety of mechanisms (for review, see Beardslee et al., 2011; England & Sim, 2009). However, regardless of MCP depressive symptoms, our prior research with this sample indicates that the great majority of MCPs (75%) were perceived by the adolescent as an active coparent (Forehand et al., 2014). As a consequence, an MCP's depressive symptoms at wave 1 in combination with his subsequent transition out of the family could be particularly disruptive for an adolescent. Interestingly, it is the combination of these two family variables that is important as neither MCP depressive symptoms alone nor a transition alone was associated with increases in problem behaviors. Also, consistent with Meadows et al.'s (2007) findings, the effect was manifested by an increase in externalizing problems. These types of problems could stem from the absence of a father figure, resulting

in less monitoring of the adolescent, which is associated with externalizing problems (see Dishion & McMahon, 1998).

Counter to our hypotheses and our findings with MCPs, higher levels of maternal depressive symptoms did not amplify the negative effects of an MCP transition out of the family on youth internalizing or externalizing problem behaviors. Although a significant interaction between maternal depressive symptoms and a subsequent MCP transition emerged for internalizing problems, explication of the interaction suggested that the transition was associated with an increase in these problem behaviors when a mother had lower, not higher, levels of depressive symptoms at wave 1. We also conducted a secondary analysis to try and understand the interaction. Specifically, for mothers with initial lower levels of depressive symptoms, we examined if an increase in these symptoms occurred between waves 1 and 3 if an MCP transitioned out of the family. For these mothers, depressive symptoms at wave 3 were not predicted by the occurrence of an MCP transition, suggesting that an increase in these symptoms does not appear to account for our unexpected findings.

One potential explanation for the unexpected finding involves proximal family environment predictability. Lower levels of mothers' depressive symptoms at baseline may have been a marker for consistency in the family context as compared to higher levels of these symptoms. Given the recurrent nature of depression (Solomon et al., 2000) and the well-established finding that depressed mothers vacillate between positive and negative affect (Lovejoy, Graczyk, O'Hare, & Neuman, 2000), youth with mothers with higher levels of depressive symptoms at baseline may have been more accustomed to inconsistency in the family environment and, as a consequence, have had more opportunities to develop adaptive coping behaviors. While counter to the model we proposed, this explanation is congruent with the stress inoculation hypothesis, which proposes that stressors "that can be successfully managed or mastered are likely to cause stress inoculation and stress resilience to subsequent stressors" (Southwick, Vythilingam, & Charney, 2005, p. 280; also see Rutter, 2013). Thus, for youth not accustomed to an inconsistent family environment, a MCP transition out of the family may have represented an unfamiliar, unexpected, and unmanageable family stressor causing affected adolescents to develop a negative inference about themselves and their views of the world (including environment predictability), which in turn promoted the development of internalizing problems. Future research is needed to test this hypothesis and examine the process by which an MCP transition out of the home confers risk for internalizing problems among families when a mother has lower levels of depressive symptoms.

Taken together, our data suggest that mother and MCP depressive symptoms served as moderators of different types of adolescent problem behaviors: Internalizing and externalizing problems. The finding that MCP depressive symptoms were important only for externalizing problems is congruent with findings reported by Meadows et al. (2007). Counter to our hypotheses, maternal depressive symptoms were important for internalizing, but not externalizing, problems. Although unexpected, our results highlight that both mothers and social fathers are important in shaping an adolescent's development and that they may influence different types of problem behaviors.

The present study had both strengths and limitations. In terms of limitations, the sample size was relatively small, which prevented us from examining maternal and MCP depressive symptoms in three-way interaction with MCP transitions. From a family systems perspective, consideration of the joint influence of mothers' and social fathers' depressive symptoms is important. Second, inclusion of adolescent report also would have increased our confidence in the findings. With mothers reporting both their own depressive symptoms and adolescent problem behaviors, common reporter variance has to be considered. Unfortunately, adolescent attrition was so high that we could not examine their report of problem behaviors over time. Third, although the CBCL and PHQ-9 each have strong reliability and validity data, other methods of assessing depression and youth problem behaviors (e.g., semi-structured clinical interviews) may have yielded different results. Fourth, our data collection methodology and sample size did not allow for a precise assessment of adolescent outcomes immediately following an MCP exit from the family home. As a consequence, families that had a cohabitating relationship dissolution between the first and second waves and between second and third waves were not distinguished in analyses. Following from this, short-term versus long-term effects of an MCP exit were not distinguished. A larger sample size and additional assessment points at shorter intervals would have increased confidence in the findings and ability to examine dynamic processes following relationship dissolution, both short and long-term. In addition, intermittent transitions (i.e., when the MCP moves in and out of the home) could be captured by more assessments at shorter intervals. Similarly, more precise measurement of variables like length of cohabitation will lead to a better understanding of these families.

Fifth, our assessment did not include data collected on history of maternal or MCP depressive symptoms, history of family constellation during the child's lifetime, or age of siblings. As such, we were unable to discern whether (and to what degree) these variables were stressors and/or promoted resilience. Sixth, we examined only one individual (depressive symptoms) and one dyadic (MCP transition) variable within the home. Other variables should be considered in future research. For example, recent research suggests when a social father transitions out of the home in a cohabiting family that the biological father becomes re-involved (Martin, Ryan, Riina, & Brooks-Gunn, 2015). Therefore, future research could expand to examine other caregivers who may play a role in an adolescents' life during a cohabiting family transition. These may include not only the biological father but aunts, grandparents and others. In addition, other family variables (e.g., length of cohabitation, number of prior cohabitations, relationships within the family) and child characteristics (e.g., gender and age) could have influenced the findings and should be considered in future research with larger samples. We did control for some of these variables (e.g., youth age) but did not have the sample size to examine more nuanced questions (e.g., youth age as a moderator). Finally, findings should not be generalized beyond Black families as Caucasian (both Hispanic and non-Hispanic) differ in terms of percent of children born to a cohabiting relationship and percent of childhood spent in this family constellation (Bumpass & Lu, 2000). In addition, although most youth were not in the borderline or clinical range on problem behaviors, a significant minority were. Our findings should not be generalized beyond youth with similar problem levels living in economically challenging conditions.

It is also important to note the strengths of the present investigation. First, we studied a family form that is increasingly prevalent but has received limited attention, thereby beginning to fill a noteworthy gap in the current literature. Second, we collected prospective data to document a transition of MCPs out of the home. This longitudinal approach is not common; even in the divorce literature, few prospective studies have examined links between changes in family structure and youth outcomes. Third, although we did not have youth reports of psychosocial adjustment because of a high rate of attrition, we did have multi-informants: Mother and MCP each reported their depressive symptoms. Fourth, we focused on the developmental period of adolescence, which appears to represent a particularly difficult developmental stage for children in cohabiting families (Amato, 2001; Brown, 2004; Cavanagh, 2008) and for children in single-parent households (Amato, 2005). Finally, inclusion of fathers (albeit social, rather than biological, fathers) in this study has been rare in prior research (Phares & Compas, 1992; Phares et al., 2005; Pomerantz et al., 2015).

Finally, it is important to consider the implication of our study results for clinical practice and public policy formation. Our findings highlight that, in cohabiting families, a youth's problem behavior is shaped by the complex interplay of parental well-being and family instability. Any efforts to decrease these behaviors and support the well-being of the adolescent should consider the role of the parents (both biological and social), as well as the broader family system (i.e., family stability). Clinical interventions as well as policy formation that focus solely on the youth in cohabiting families, without including the adolescent's family network, may fall short of achieving the desired change.

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Figure 1.
 Primary analyses model tested.
 Note: MCP = Male Cohabiting Partner; W = Wave.

a. **b.** **Figure 2.**

a. Transitions by maternal depressive symptoms at baseline predicting the slope of youth internalizing problems.

b. Transitions by MCP depressive symptoms at baseline predicting the slope of youth externalizing problems.

Table 1

Model fit statistics for unconditional and conditional latent curve models.

Model	χ^2	df	p	RMSEA	CFI	SRMR
Unconditional Internalizing	1.13	1	.29	.032	.996	.027
Unconditional Externalizing	2.02	1	.16	.096	.987	.027
Mother Depression – Internalizing	8.50	4	.07	.10	.945	.036
MCP Depression – Internalizing	1.36	4	.85	.00	1.0	.017
Mother Depression – Externalizing	3.09	4	.54	.00	1.0	.017
MCP Depression – Externalizing	2.29	4	.68	.00	1.0	.019

Note: MCP = Male Cohabiting Partner.

Table 2

Results for all four primary models

	Internalizing Slope			Externalizing Slope		
	<i>b</i>	95% CI	<i>p</i>	<i>b</i>	95% CI	<i>p</i>
Mother Model						
Mother Depression	.23	.02 to .44	.036	.02	-.25 to .28	.913
MCP Transition	2.4	.93 to 3.8	.001	.98	-1.4 to 3.4	.428
Interaction	-.40	-.66 to -.13	.004	-.09	-.49 to .30	.648
MCP Model						
MCP Depression	-.06	-.20 to .09	.427	-.21	-.48 to .02	.128
MCP Transition	-.23	-2.0 to 1.5	.801	-1.6	-3.6 to .48	.134
Interaction	.29	-.23 to .82	.276	.89	.07 to 1.7	.033

Note: Not shown but included in the model is the intercept for each outcome regressed on all three predictors in each model. *b* is unstandardized. MCP = Male Cohabiting Partner.