

Adolescent and Young Adult Mothers' Relationship Quality During the Transition to Parenthood: Associations with Father Involvement in Fragile Families

Christina B. Gee · Christopher M. McNERney ·
Michael J. Reiter · Suzanne C. Leaman

Received: 6 June 2006 / Accepted: 11 August 2006 / Published online: 13 September 2006
© Springer Science+Business Media, Inc. 2006

Abstract Data from the Fragile Families and Child-Well-being Study were used to examine predictors of involvement among fathers of young children ($N = 2,215$) born to ado-

Christina B. Gee, Ph.D., Department of Psychology, The George Washington University, Christina Gee's research interests include coparenting and father involvement during transition to parenthood among adolescent mothers and fathers, adolescent mothers' psychological adjustment, and romantic relationships among at-risk couples.

Christopher M. McNERney, B.A., Department of Psychology, George Washington University, Christopher McNERney's research interests include marginalized couples, couples interventions, and family treatments to improve parenting outcomes.

Michael J. Reiter, B.A., Department of Psychology, George Washington University, Michael Reiter's research interests include romantic partner communication, racial and religious differences in couples, and effective family treatments.

Suzanne C. Leaman, B.A., Department of Psychology, George Washington University, Suzanne Leaman's research interests include adolescents and young families, minority mental health, low-income communities, and the implications of dating violence for mental health.

C. B. Gee (✉)
Department of Psychology, The George Washington University,
2125 G St., NW., Washington, DC 20052, USA
e-mail: cgee@gwu.edu

C. M. McNERney
Department of Psychology, George Washington University
e-mail: cmaedr@gwu.edu

M. J. Reiter
Department of Psychology, George Washington University
e-mail: mreiter@gwu.edu

S. C. Leaman
Department of Psychology, George Washington University
e-mail: sleaman@gwu.edu

lescent and young adult mothers (ages 14–25; $N = 2,850$). Participants were interviewed immediately following their baby's birth and at 3-years postpartum regarding co-parental relationship quality, fathers' caretaking behavior ("father involvement"), and fathers' provision of material support for the child ("in-kind" support). Early postnatal and 3-year postpartum parental relationship quality and father-child cohabitation predicted 3-year father involvement while early father involvement did not. The race of fathers, specifically African American, was associated with lower levels of father involvement. For in-kind support, 3-year father-child cohabitation and 3-year relationship quality were both positively associated with provision of in-kind support. Father's income was not a significant predictor but mother's involvement with a new partner at the 3-year follow-up was marginally significant. Lastly, the race of fathers, specifically African American and Latino, was associated with provision of less in-kind support.

Keywords Adolescent mothers · Young mothers · Fathers · Relationship quality · Father involvement · Diversity

Although the number of births to adolescents has declined over the last decade, only 18% will marry before their child is born (Child Trends, 2006). Further, according to the National Center for Health Statistics, the likelihood that an unmarried young woman (age 15–24) who gets pregnant will get married before the baby is born has decreased from 22% in 1992 to 11% in 2002 (Child Trends, 2006). Statistics such as these have resulted in increased attention on the fathers of children born to young unmarried mothers, particularly among policy makers. Yet, despite media representations of these young fathers as absent, research indicates that 80% of children born to adolescent mothers receive child support during

the first year after delivery (Furstenberg and Harris, 1993). Further, research has worked to dispel myths that fathers are not as “biologically fit” to be as responsive and nurturing to their children as mothers (Parke and Brott, 1999).

Reflecting increased interest in fathers, the 1996 Personal Responsibility and Work Opportunity Reconciliation Act placed an increased emphasis on establishment of paternity and strengthening child support efforts, effectively increasing fathers’ involvement in the lives of young mothers and their children (Coley and Chase-Lansdale, 1998). As a result, many states have initiated policies pertaining to the establishment of paternity and enforcement of child support. Given this recent increased attention to paternity, research that attempts to understand the factors that hinder and facilitate fathers’ involvement in the lives of young mothers and their children is necessary to develop appropriate policies and interventions.

Transition to parenthood

The transition to parenthood represents a major developmental milestone for most new parents, but may be particularly stressful for young parents who are simultaneously struggling to cope with the normative developmental changes (e.g., identity formation) associated with adolescence and emerging adulthood. Indeed, the 1988 National Maternal and Infant Health Survey data indicate that 53% to 67% of adolescent mothers experience significant depressive symptoms (Deal and Holt, 1988) compared to a 13% prevalence rate of postpartum depression in adult women (O’Hara and Swain, 1996). Further, research has found that the depressive symptoms experienced by adolescent mothers can endure chronically or intermittently over the first three years postpartum (Leadbeater and Linares, 1992).

Social support from a romantic partner/spouse may mitigate the stress associated with the transition to parenthood. For adolescent mothers, support from a romantic partner has been associated with greater overall life satisfaction (Unger and Wandersman, 1988), lower psychological distress, higher self-esteem (Thompson and Peebles-Wilkins, 1992), and better parenting (Crockerberg, 1987). However, father support may also be associated with diminished parenting skills (Shapiro and Mangelsdorf, 1994) and reduced academic achievement for adolescent mothers (Unger and Cooley, 1992). Further, young mothers often experience disappointment over unmet expectations for childcare assistance, serious conflicts, and physical and sexual assault in their relationships with the fathers of their children (e.g., Leadbeater *et al.*, 1996; Leadbeater and Way, 2001).

Although male partners (including fathers) are a primary social resource to young mothers during the postpartum adjustment period (e.g., Gee and Rhodes, 1999), most of the research on fathers is based solely on interviews with moth-

ers. Further, most studies of fathers have focused on characteristics or predictors of early fatherhood and problems such as delinquency and substance abuse (e.g., Guagliardo *et al.*, 1999). The literature on young fathers needs to be balanced with the examination of the factors that facilitate their adjustment to their parenting roles, including information obtained from fathers themselves.

Father involvement

Much of the research on father involvement is limited by the emphasis on fathers’ financial contributions, relying largely on maternal reports or on census reports of child support payments. This approach is incomplete, however, in light of the findings reported by qualitative studies indicating fathers often make irregular, unreported, or “in-kind” (e.g., buying toys or clothes for the child) contributions to their child’s mother (Coley and Chase-Lansdale, 1998; Stier and Tienda, 1993). As a result, a broader definition of father involvement is warranted. Lamb *et al.* (1985, 1987) and Palkovitz (1997) have recommended assessing three dimensions of father involvement: accessibility (present or available to their child, regardless of the nature of the interaction), engagement (one-on-one contact and interactions with their child such as caretaking, playing), and responsibility (meeting his child’s needs economically, including in-kind support).

Although father involvement may be high initially, the majority of research in this area suggests that their involvement wanes over time (e.g., Cutrona *et al.*, 1998; Fagot *et al.*, 1998). Furstenberg and Harris (1993) found that the proportion of fathers who were providing support to their children dropped to one-third after three years and to one-sixth after six years. In addition, adolescent mothers report that support from their male partners/biological fathers declines over the first postpartum year (Gee and Rhodes, 1999; Wasserman *et al.*, 1990). Leadbeater and Way’s (2001) study of low-income, inner city, ethnic minority adolescent mothers further indicated that while 26% reported frequent and emotionally positive contact with their child’s father at three years postpartum, this percentage declined to 12% at six years postpartum.

Predictors of father involvement

Given the evidence that father involvement wanes over time but can have positive implications for children’s adjustment (Black *et al.*, 1999; Furstenberg and Harris, 1993), researchers have begun to study factors that predict fathers’ involvement with their children over time. Existing research suggest that several factors may influence involvement, including dyadic-level factors such as the overall relationship quality between parents and individual-level factors such as fathers’ financial means.

Relationship quality

Parental relationship quality appears to be an important determinant of continuity of father involvement. Gavin and colleagues (Gavin *et al.*, 2002) found that, among low-income, urban, African American mothers, the strongest predictor of father involvement during the postpartum period was the quality of the romantic relationship between the baby's mother and father. Further, regardless of romantic involvement, fathers are more likely to be involved with their children when they have a positive and harmonious relationship with their baby's mother (e.g., Carlson and McLanahan, 2002; Coley and Chase-Lansdale, 1999). Similarly, Cutrona and colleagues (1998) found that fathers were more involved if the relationship with the mother was intimate and supportive during the weeks immediately following the baby's birth. As mothers tend to have primary custody of their children, it is likely that a positive relationship with the mother increases the likelihood that she will allow the father to have access to his child. Likewise, a positive relationship may increase the likelihood that the father contacts the mother to arrange visitation. However, what remains unclear is whether the relationship in the immediate postpartum period is critical or whether current relationship quality has a greater influence. Further, it is also unclear whether relationship quality is associated with both the qualitative aspects of fathering and fathers' provision of material support for his child. The current study assesses parental relationship quality (among both romantically and non-romantically involved parents) during both the postpartum period and three year postpartum to shed light on these issues.

Extra-dyadic relationships

During the first few years following the baby's birth, a large percentage of young, unmarried parents terminate their romantic relationship (Gee and Rhodes, 2003). Unger and Wandersman (1988) reported that 50% of African American adolescent mothers in their study were no longer involved with their child's father and 40% had a new boyfriend at eight months postpartum. New partners may become father figures to the mothers' children and mothers may have children with their new partners. Indeed, involvement with a new partner has been found to be negatively associated with continued father involvement with the baby's mother (Gee and Rhodes, 2003). Mothers may also want the new partner to take on the role of a father-figure and therefore discourage biological father involvement; this may be particularly true if the mother has a child with that new partner. Likewise, if fathers have children with other women, they might either divide their resources (monetary, emotional, and otherwise) or devote their resources to the children of their current romantic partner. It is possible that that these extra-dyadic relationships have

a greater influence on provision of in-kind support (than father involvement) because of the limited financial means of the majority of young parents. The current study examines the influence of extra-dyadic relationships on both fathers' involvement in caretaking behaviors with their child and provision of in-kind support for their child.

Father finances

One individual-level factor that may affect a fathers' ability to be involved with his child is his financial situation. Qualitative research suggests that men who live in impoverished neighborhoods often have less secure employment in either minimum-wage, temporary, or part-time jobs (Jarrett, 1994) and that job instability can lead to disengagement in the parenting process (e.g., Newman, 1999). Although it appears likely that lack of financial means primarily affect fathers' provision of economic or material support for their children, some research does indicate that lack of financial means also is associated with less involvement in other domains of parenting (Rangarajan and Gleason, 1998). One explanation for this finding may be that if the father is not contributing financially he or the baby's mother may believe he no longer has the right to be involved. The current study examines whether fathers' income differentially predicts the more qualitative aspects of father involvement versus in-kind support.

Race/ethnicity

Another potentially important individual-level factor affecting father involvement is the fathers' race or ethnicity. Despite researchers' discussion of the need to study variability among ethnic minority fathers and the effects of cultural context (e.g., Burton and Jayakody, 2001), few studies have explored postpartum relationship quality and the predictors of father involvement among adolescent and young parents of different ethnic groups. The majority of research on adolescent parents focuses on African American mothers and to a lesser extent on young Latina mothers. Previous research suggests the quality of social support in postpartum differs among ethnic groups (Miller-Loncar *et al.*, 1998) and that Latina adolescent mothers are more likely to remain romantically involved with (and married to) their children's fathers (West *et al.*, 1998). The current study explores whether differences in parental relationship quality exist across race/ethnicity and whether race/ethnicity predicts father involvement or in-kind support.

Early postnatal support

Finally, previous research suggests that the timing of support may be important in predicting future father involvement.

Studies with young African American parents have found associations between early father support and later father involvement with the mother and/or the child (Gavin *et al.*, 2000; Gee and Rhodes, 2003). The prenatal and early postnatal period may be a critical time when fathers may form bonds with their children that lead them to continue their involvement. In addition, a positive relationship with the child's mother may facilitate continued father involvement in the face of romantic relationship dissolution, a relatively common occurrence among young, unmarried parents. As such, the current study examines whether early postnatal support predicts later father involvement and in-kind support.

Summary and purpose of the present study

The existing research suggests that fathers are at least initially involved in the lives of young mothers and their children. Unfortunately, despite some notable exceptions (e.g., Furstenberg and Harris, 1993; Leadbeater and Way, 2001), the majority of the research specifically examining father involvement is cross-sectional, thus, it is unclear what discrete factors predict father involvement over time. The primary goal of this study was to examine the predictors of father involvement and in-kind support at 3-years postpartum among fathers of children born to adolescent and young adult mothers. A secondary goal of this study was to explore ethnic differences between young African American, Latino, and Caucasian parents. In addition, much of the previous research literature has relied exclusively on a mother's report of her behavior as well as her baby's fathers' behavior. The current study includes a large sample of both parents which allows for an examination of whether differential predictors exist when using both parents as informants. Further, in light of the varying definitions across cultures regarding the parameters of adolescence, and contemporary researchers' conceptualization of "emerging adulthood" as the time between ages 18 and 25 (Arnett and Taber, 1994), this study includes both adolescent and young adult mothers (and their children's fathers).

The goals of the present study were as follows. First, exploratory analyses were conducted on African American, Latino, and Caucasian participants. Because there are few studies that have included sufficient sample sizes of African Americans, Latinos, and Caucasians, no specific hypotheses were made regarding associations regarding race and father involvement or in-kind support. Next, based on previous literature, the following were hypothesized: (1) Early postnatal father involvement and dyadic factors (i.e., relationship quality between mothers and fathers) would predict father involvement above and beyond the fathers' income. (2) Relationship quality and fathers' income would be positively associated with in-kind support, whereas extra-dyadic

factors (e.g., having a child with another partner) would be negatively associated with in-kind support.

Method

Participants and procedure

Data were obtained from the Fragile Families and Child Wellbeing Study (Reichman *et al.*, 1998). Mothers were recruited from hospitals that had the highest number of non-marital births in the 20 selected U.S. cities. Unmarried parents were oversampled. Mothers gave their first interview within 48 hours of the birth of their child; fathers completed interviews when possible. Mothers were asked to provide assistance in locating the baby's father by providing information on when he would visit the mother at the hospital. If the father could not be interviewed at the hospital, he was contacted by phone and given the option of interviewing in person or over the phone. The majority of father interviews at baseline were conducted in person (76.2% in person; 23.8% phone). A follow-up interview occurred approximately three years after their child's birth. The vast majority of interviews were conducted over the phone at the 3-year follow-up (97.5% mothers; 94.6% fathers). A very small percentage of interviews took place either in person or over the phone with incarcerated fathers (2.6% at baseline; 4.4% at 3-year). Each participant was compensated with \$20 at the end of their separate interviews. For additional details regarding the methodology of the Fragile Families study, please see Reichman *et al.* (1998) or <http://www.fragilefamilies.princeton.edu/>.

This study included data from 2,850 adolescent and young adult mothers and 2,215 fathers of their children at the baseline interview. Eighty-seven percent ($N = 2,470$) of the mothers and 81% ($N = 1,785$) fathers were interviewed at the 3-year follow-up. Mothers who did not complete the 3-year follow-up were less educated, $t(2845) = -4.22$, $p < .01$, older, $t(2848) = 2.02$, $p < .05$, and reported less social engagement with the father at baseline, $t(2371) = -2.8$, $p < .01$, than those who were re-interviewed. Fathers who did not complete the 3-year follow-up had a lower household income at baseline, $t(1450) = -2.96$, $p < .01$, and reported less social engagement with the mother at baseline $t(1798) = -2.4$, $p < .01$ than those who were re-interviewed at follow-up. Fathers who did not complete the 3-year follow-up were also less likely to be cohabiting with the mother at baseline, $\chi^2(1, N = 1709) = 11.34$, $p > .01$, or be married to the mother at baseline, $\chi^2(1, N = 1979) = 13.01$, $p > .01$. There were no significant differences on cohabitation or marital status for mothers who were re-interviewed and those who were not.

The mean age of the mothers was 21.0 years (Range = 14 to 25 years old; $SD = 2.38$), with 30% under 19 years

old. Approximately half (53.3%) of the mothers were Black/African American, 21.1% were Hispanic/Latina, and 16.1% were Caucasian. The mean age of the fathers was 24.1 (Range = 15–61 years old; $SD = 4.96$), with majority (69.3%) under 25 years old. Nearly half of the fathers were Black/African American (42%), 17.6% were Hispanic/Latino (22.3%), and 10.8% were Caucasian. At baseline, more than half (52.9%) of the fathers reported an annual household income of less than \$25,000 (before taxes). Approximately one-quarter (27.4%) of the fathers had some high school education, 28.3% had a H.S. diploma/GED, and 15.5% had completed some college/2-year degree or technical/trade school. Over one-third (39.1%) of mothers reported some high school education, 32.6% had a H.S. diploma/GED, and 21.1% had completed some college/2-year degree, or technical/trade school.

At baseline, 84.1% of the mothers (71.2% of fathers) reported that they were romantically involved with their babies' other parent; 11% of the mothers (10.2% of fathers) reported being married to him/her. At the 3-year follow-up, 42.1% of the mothers (40% of fathers) were still romantically involved with the baby's other parent; 17.3% of mothers (16.6% of the fathers) reported being married to him/her.

Measures

Relationship quality

Relationship quality at baseline was assessed with two measures. First, parents completed a four-item measure of *social engagement* that included questions regarding joint participation in activities together (e.g., gone out to a movie, sporting event, or some other entertainment) as well as engagement in problem-solving together. Items were dichotomous (0 = No, 1 = Yes) and a mean score was derived with higher scores indicating more social engagement. The internal consistencies for this measure were adequate ($KR20 = .67$ for fathers; $KR20 = .74$ for mothers).

A second relationship quality indicator was administered at baseline in which parents rated the frequency of *disagreements* with the baby's other partner (e.g., money, spending time together) during the past week. Six items were rated on a three-point likert scale (1 = never, 2 = sometimes, 3 = often) and a mean score was derived with higher scores indicating more relationship disagreement. Alpha levels were adequate for both mothers (.64) and fathers (.62).

At the 3-year interview, parents were administered a five-item relationship quality measure that asked about supportive behaviors in their relationship with the child's other parent (e.g., "listens to you when you need someone to talk to," "really understands your hurts and joys") on a three-point likert scale (1 = never, 2 = sometimes, 3 = often). A mean score was derived, with higher scores indicating better

relationship quality. The measure demonstrated good alpha levels for those "still together" with the babies other parent (fathers = .72; mothers = .74) and those who were "no longer together" (fathers = .80; mothers = .87).

Participants who were in a romantic relationship with the baby's other parent responded about the relationship at the present time, whereas participants who were no longer in a romantic relationship with the baby's other parent responded about the relationship during the last month that they were together.

Father involvement

Early postnatal father involvement was assessed at the baseline interview through three dichotomous (0 = No, 1 = Yes) items which reflect the dimension of involvement that has been referred to as "accessibility" (e.g., Pleck *et al.*, 1987). Mothers were asked whether the father had visited her in the hospital and fathers were asked whether he had been present at the birth and whether he had held the baby. Responses to these three items were averaged to create a composite indicator of early postnatal father involvement. The internal consistency for this scale was adequate ($KR20 = .67$).

At the 3-year follow-up interview, parents responded to a 13-item scale which assessed father involvement. The questions on this scale reflect the "engagement" dimension of involvement (e.g., Pleck *et al.*, 1987) and assessed a variety of parenting activities, including participation in childcare activities (e.g., assist child with eating, put child to bed), playing (e.g., play imaginary games with him/her), and affection (e.g., tell child he loves him/her, hug or show physical affection to him/her). Participants rated the number of days per week that the father engaged in each activity. The internal consistencies on this scale for both mothers (alpha = .95) and fathers (alpha = .93) were excellent. Because mothers' and fathers' scores on this scale demonstrated a relatively strong correlation ($r = .50$), respondents' scores were averaged to create a composite indicator of 3-year father involvement. Higher scores indicate greater levels of father involvement.

In-kind support at 3-year

At the 3-year follow-up interview, mothers who were not cohabiting with the father responded to a five-item scale that reflected the dimension of father involvement referred to as "responsibility" (Pleck *et al.*, 1987). Fathers were not asked this series of questions. Questions were asked regarding how often the baby's father buys necessary items for him/her (e.g., clothes, food, medicine). Items were rated on a four-point likert scale (1 = never, 2 = rarely, 3 = often, 4 = always) with higher scores demonstrating more in-kind support. This scale demonstrated strong internal consistency (alpha = .90).

Results

Ethnic differences

In order to explore ethnic differences, one-way Analysis of Variance (ANOVA) with post-hoc comparisons were conducted to examine whether African American, Latino, and Caucasian parents differed on any of the primary variables of interest in the study (see Table 1). At baseline, Caucasian and Latino mothers and fathers reported more early postnatal father involvement than African Americans. In addition, Caucasian mothers and fathers reported more social engagement than their Latino counterparts and Latino mothers and fathers reported more social engagement than their African American counterparts. African American mothers and fathers reported more frequent disagreements with each other than both their Caucasian and Latino peers. At the 3-year follow-up, Latina mothers reported better relationship quality than African American and Caucasian mothers but there were no significant group differences for father-reported relationship quality.

Given these differences on some of the primary variables of interest in this study, we included dummy variables for race of the baby’s mother and father (African Americans, Latinos, and Caucasians) to explore the influence of race on the prediction of father involvement and in-kind support.

Father involvement at 3-years postpartum

The first analysis used father involvement at the 3-year follow-up as the dependent variable (see Table 2). Control and predictor variables were entered as follows in separate steps: (1) mothers’ and fathers’ age (2) African American, Latino, or Caucasian race, (3) mothers’ highest educational level achieved, income, and welfare receipt (all at baseline),

(4) fathers’ highest educational level achieved, income, and welfare receipt (all at baseline), (5) romantic involvement with each other (at baseline), (6) relationship quality at baseline (social engagement and disagreements), (7) early postnatal father involvement, (8) mothers’ and fathers’ incomes (at 3-year), (9) romantic involvement with each other (at 3-year), father-mother cohabitation (at 3-year), and father-child cohabitation (at 3-year) (10) mother has a child with another partner; father has a child with another partner (both at 3-year), mother has a new partner at 3-year, and (11) relationship quality reported at 3-year.

Results indicated that some demographic characteristics were significantly associated with father involvement at 3-year follow-up. Specifically, fathers who were African American were less involved. Counter intuitively, however, fathers who had lower income at baseline were more involved at 3-year. In addition, both baseline and 3-year relationship quality variables were significantly associated with involvement. Specifically, higher levels of mother- and father-reported baseline social engagement and mother-reported (but not father-reported) 3-year relationship quality were positively associated with 3-year father involvement. The strongest predictor of father-involvement at the 3-year follow-up was father-child cohabitation. The overall model was significant, $F = 24.29 (32, 673) p < .001$, and accounted for 51.4% of the variance.

Fathers’ in-kind support for child

Next, in order to investigate whether different factors would predict fathers’ material support for their children, another analysis was conducted with fathers’ in-kind support (mother-report) at the 3-year follow-up as the dependent variable (see Table 3). These analyses only included parents who were not cohabiting (mothers who were cohabiting

Table 1 Summary of ANOVA results for ethnic differences

Variable	African-American M (SD)	Latino/a M (SD)	Caucasian M (SD)	df	F
Social engagement (baseline)					
Mother	.72 (.32) ^a	.79 (.29) ^b	.83 (.25) ^c	(2, 2144)	25.29***
Father	.75 (.29) ^a	.81 (.25) ^b	.87 (.19) ^c	(2, 1818)	28.11***
Disagreements (baseline)					
Mother	1.46 (.39) ^a	1.38 (.36) ^b	1.41 (.33) ^b	(2, 2145)	9.51***
Father	1.48 (.38) ^a	1.36 (.34) ^b	1.40 (.32) ^b	(2, 1814)	21.61***
Relationship quality (3yr.)					
Mother	2.27 (.59) ^a	2.36 (.60) ^b	2.27 (.63) ^{ab}	(2, 2110)	3.97***
Father	2.52 (.46) ^a	2.56 (.44) ^a	2.53 (.49) ^a	(2, 1420)	1.08
Early postnatal involvement					
Mother	.80 (.30) ^a	.90 (.23) ^b	.91 (.22) ^b	(2, 1997)	30.97***
Father	.80 (.30) ^a	.90 (.22) ^b	.92 (.20) ^b	(2, 2003)	8.07***

Notes: Means in the same row that do not share superscripts differ at $p < .05$.

*** $p < .001$.

Table 2 Summary of hierarchical regression analysis for variables predicting father involvement

Variable	<i>B</i>	<i>SE B</i>	<i>β</i>
Step 1			
Mother’s age (baseline)	−.01	.02	−.01
Father’s age (baseline)	.01	.01	.03
Step 2			
Mother African American	−.07	.18	−.03
Father African American	−.44	.19	−.16*
Mother Latino	.01	.15	.00
Father Latino	−.23	.20	−.07
Mother Caucasian	−.20	.13	−.07
Father Caucasian	−.32	.21	−.09
Step 3			
Mother’s education (baseline)	.05	.05	.34
Mother’s income (baseline)	.05	.03	.06 ⁺
Mother’s welfare receipt (baseline)	.03	.09	.01
Step 4			
Father’s education (baseline)	.05	.05	.03
Father’s income (baseline)	−.08	.03	−.10**
Father’s welfare receipt (baseline)	−.18	.11	−.04 ⁺
Step 5			
Mother-reported romantic involvement with baby’s father (baseline)	−.36	.31	−.04
Father-reported romantic involvement with baby’s mother (baseline)	.31	.26	.04
Step 6			
Mother-reported social engagement (baseline)	.34	.17	.06*
Mother-reported disagreements (baseline)	.05	.12	.01
Father-reported social engagement (baseline)	.41	.18	.07
Father-reported disagreements (baseline)	.05	.11	.01
Step 7			
Father’s early postnatal involvement (baseline)	−.07	.20	−.01
Step 8			
Mother’s income (3-year)	−.01	.022	−.02
Father’s income (3-year)	−.01	.02	−.02
Step 9			
Mother-reported romantic relationship with baby’s father (3-year)	.31	.19	.10 ⁺
Father-reported romantic relationship with baby’s mother (3-year)	−.06	.16	−.02
Mother and father cohabitating (3 year)	−.02	.17	−.01
Father and child cohabitating (3 year)	1.28	.09	.56***
Step 10			
Mother has child with another man (3-year)	.06	.10	.02
Father has child with another woman (3-year)	−.08	.09	−.02
Mother has a new romantic partner (3-year)	−.05	.15	−.01
Step 11			
Mother-reported relationship quality (3-year)	.58	.09	.22***
Father-reported relationship quality (3-year)	−.06	.09	−.02
Adjusted <i>R</i> ² (after final step)	.51		

Notes: African American = 1; Latino/a = 1; Caucasian = 1; Welfare (1 = yes); Romantic relationship with baby’s other parent (1 = yes); Mother has a new romantic partner (1 = yes). All coefficients are presented after the final step; ⁺*p* < .10; **p* < .05; ***p* < .01; ****p* < .001; ^a0 = no; 1 = yes.

with the father did not respond to the in-kind support items). For this regression, variables were entered in the same order as in the regression predicting father involvement with the exception of the removal of the mother-father cohabitation variable which was a constant for this subsample.

Results indicated that race was significantly associated with fathers’ in-kind support at 3-year follow-up: African American and Latino fathers provided less in-kind support. No other demographic variables were significant. Similar to the results for father involvement, mothers’ (but not fathers’) reported 3-year relationship quality was positively associated

Table 3 Summary of hierarchical regression analyses for variables predicting father in-kind support for child

Variable	<i>B</i>	<i>SE B</i>	β
Step 1			
Mother's age (baseline)	-.01	.02	-.01
Father's age (baseline)	.01	.01	.04
Step 2			
Mother African American	-.05	.18	-.02
Father African American	-.62	.19	-.30**
Mother Latino	.03	.16	.01
Father Latino	-.46	.22	-.19*
Mother Caucasian	.02	.15	.01
Father Caucasian	-.33	.22	-.11
Step 3			
Mother's education (baseline)	-.04	.06	-.03
Mother's income (baseline)	-.05	.04	-.07
Mother's welfare receipt (baseline)	-.07	.09	-.03
Step 4			
Father's education (baseline)	.02	.06	.02
Father's income (baseline)	-.04	.03	-.06
Father's welfare receipt (baseline)	.02	.11	.01
Step 5			
Mother-reported romantic involvement with baby's father (baseline)	.17	.22	.04
Father-reported romantic involvement with baby's mother (baseline)	.20	.20	.04
Step 6			
Mother-reported social engagement (baseline)	.09	.16	.03
Mother-reported disagreements (baseline)	-.10	.11	-.04
Father-reported social engagement (baseline)	-.02	.17	-.01
Father-reported disagreements (baseline)	.08	.11	.03
Step 7			
Father's early postnatal involvement (baseline)	.04	.18	.01
Step 8			
Mother's income (3-year)	.00	.02	.01
Father's income (3-year)	.02	.02	.06
Step 9			
Mother-reported romantic relationship with baby's father (3-year)	.41	.11	.20***
Father-reported romantic relationship with baby's mother (3-year)	-.06	.13	-.03
Father and child cohabitating (3 year)	.34	.07	.25***
Step 10			
Mother has child with another man (3-year)	-.01	.09	-.00
Father has child with another woman (3-year)	-.13	.09	-.06
Mother has a new romantic partner (3-year)	-.18	.11	-.08 ⁺
Step 11			
Mother-reported relationship quality (3-year)	.68	.08	.40***
Father-reported relationship quality (3-year)	.05	.09	.03
Adjusted <i>R</i> ² (after final step)	.53		

Notes: African American = 1; Latino/a = 1; Caucasian = 1; Welfare (1 = yes); Romantic relationship with baby's other parent (1 = yes); Mother has a new romantic partner (1 = yes). All coefficients are presented after the final step; ⁺*p* < .10; **p* < .05; ***p* < .01; ****p* < .001; ^o0 = no; 1 = yes.

with in-kind support; however, no baseline relationship quality variables were significant. In addition, mothers' report (but not fathers' report) of romantic relationship with the baby's other parent (significant) and mothers' report of being involved with a new romantic partner (marginal) were associated with in-kind support in the expected directions. The overall model was significant, $F = 12.86$ (31,300), $p < .001$, and accounted for 52.6% of the variance.

Discussion

Existing research indicates that fathers are initially involved in the lives of their children. However, due to the large amount of cross-sectional research examining father involvement, it remains unclear what factors predict father involvement over time. The current study examined the predictors of father involvement and in-kind support at 3-years

postpartum among fathers of children born to young mothers, while also exploring ethnic differences between African American, Latino, and Caucasian parents. Also, in an attempt to gather a more complete picture of father behavior, the current study utilized a large national sample of fathers and mothers, allowing the researchers to determine if differential predictors exist when reports from both parents are available.

Father involvement

Not surprisingly, father cohabitation with his child was the strongest predictor of father involvement. This finding highlights that when fathers have access to their children they are more likely to be involved in behaviors that reflect the qualitative aspects of parenting (e.g., caretaking, playing, affection). Our study also suggests that the quality of relationship between the mother and fathers plays a unique role in the prediction of father involvement. Partially supporting our hypothesis, early postnatal and 3-year postpartum relationship quality between the parents were significant predictors of father involvement. In addition, the finding that baseline social engagement was significant after current relationship quality was entered in the model suggests that, consistent with previous research (e.g., Gavin *et al.*, 2002), when the relationship between the parents is positive during the time surrounding the baby's birth, then fathers are more likely to remain involved. Interestingly, positive, rather than negative (i.e., disagreements), aspects of relationships predicted father involvement; perhaps the positive aspects of young parents' relationships with one another may be more salient to them during the transition to parenthood.

Contrary to our hypothesis, however, early postnatal involvement was not associated with later father involvement. These findings contradict findings of previous studies which found associations between early father involvement and later father involvement (e.g., Gavin *et al.*, 2000). If our finding can be replicated, it may mean that fathers' early involvement is not as important as the relationship that he and the baby's mother develop during the pregnancy and early postpartum. However, it is possible that additional questions examining different types of early involvement would have yielded different results. Unfortunately, prenatal father involvement was not the focus of the Fragile Families study and therefore was not assessed in detail. Future studies should thoroughly assess both prenatal and postnatal father involvement across a variety of domains.

Although fathers' income at baseline was significantly associated with 3-year father involvement, this association was not in the anticipated direction. Instead, we found that fathers who had less personal income from regular employment at baseline were more involved with their children at 3-year (while fathers' income at 3-year follow-up was not significant). It is unclear what might explain this association.

Perhaps the addition of more information regarding income from other sources such as friends and family, public assistance, off-the-books work, and illegal means would provide a more stable indicator of personal income and elucidate the role of fathers' finances in involvement.

In-kind support

For in-kind support, father-child cohabitation was again the strongest predictor of fathers' provision on non-monetary material goods for child. In contrast to the results for father involvement, baseline relationship quality was not associated with in-kind support at 3-year follow-up. However, similar to the results for father involvement, mother-reported (but not father-reported) 3-year relationship quality was significantly associated with in-kind support. In addition, mothers' (but not fathers') report of romantic involvement with the baby's other parent at the three-year follow-up was significantly associated with fathers' provision of in-kind support. These findings suggest that a mother's perception of the nature of her relationship with the baby's father has an association with the likelihood that the father will provide material support for their child. However, it is not possible to know the direction of causality.

Contrary to our hypothesis, fathers' income was not associated with in-kind child support. However, partially supporting our hypothesis, mothers' relationship with a new romantic partner was marginally significantly associated with less in-kind support from fathers. Perhaps when the mother has a new romantic partner, the father believes that the new partner will assist the mother in buying things for the household and child. However, it is not possible to know from these data whether mothers desire additional in-kind support from their children's fathers. Nonetheless, interventions that assist parents in negotiating the roles of biological father and father-figures may be beneficial.

Race/ethnicity

A number of differences were found between African American, Latino, and Caucasian young mothers and fathers at baseline and 3-year follow-up. Consistent with previous research (West *et al.*, 1998), African American mothers and fathers were less likely than Caucasian and Latino parents to be married. In addition, African American parents reported lower baseline relationship quality than their Caucasian and Latino counterparts, but there were no significant differences in relationship quality at 3-year follow-up. Further, African American mothers and fathers both reported less father involvement at baseline. The results of the regression analyses indicated that African American fathers were less likely to be involved with their children than those who were not African American. In addition, both African American and

Latino fathers were less likely to provide in-kind support to their children than those who were not African American or Latino. These results highlight the importance of examining cultural influences on father involvement. Unfortunately, this study was not able to unpack the meaning of these racial differences. It is possible that the current measure of father involvement did not capture all of the aspects of support provided by African American fathers (e.g., spiritual support) or that African American fathers' involvement tends to be more cyclical in nature (being more active and involved at some times than at other times). Future research should examine whether the meaning and experience of fatherhood differs among fathers of different ethnic groups.

Conclusions

The findings of the present study should be tempered by attention to some of its limitations. Although we had access to both mother and father reports, fathers who were never interviewed at all were excluded from the present study. Thus, our sample may represent a bias towards fathers who had some positive relationship with the baby's mother at baseline and may have been more inclined to remain involved over time. Future studies should attempt to track non-involved fathers in order to understand the barriers to their involvement. Fathers' involvement may be also cyclical in that fathers may come in and out of their children's lives and that fatherhood is a dynamic process (Jarrett *et al.*, 2002). If this is the case, some fathers may not have been interviewed at the 3-year follow-up, however, but may have been involved sporadically between interviews and may become more involved in the child's life at various times in his/her life. The current data in this study should be acknowledged to be simply a snapshot of parents' relationships. It would be useful to have more frequent assessment intervals to track the cyclical nature of these relationships (or ask parents to rate involvement across a longer period of time). In addition, three years is clearly not enough time to fully understand paternal support. Leadbeater and Way's (2001) study suggest that mothers' contact with the father may decrease significantly over from the third through sixth year of the child's life. Longitudinal studies that follow parents throughout the child's development would better elucidate the changing nature of fatherhood and assist researchers in better understanding the changing nature of the coparenting relationship.

The availability of a large-scale public dataset such as that from the Fragile Families and Child Well-being Study affords several advantages to researchers who are interested in studying urban parents during the transition to parenthood. First, the Fragile Families dataset includes a large sample of participants who are generally difficult to recruit for studies whereby allowing the researcher to test hypotheses of interest

to the field without waiting for years to collect longitudinal data. Specifically, the large sample of urban and low-income ethnic minority fathers in the Fragile Families dataset is a rare find. Second, the larger sample sizes of most public datasets provide increased statistical power necessary for many analyses, particularly when examining ethnic minority subgroups or low base rate phenomena. Third, the researcher can devote all of his/her time to data analysis because those who originally designed the study have spent innumerable time and resources on recruiting and retaining participants, collecting data, and managing data. Fourth, most researchers do not have the funding to collect data from participants across the country. The Fragile Families data were collected using a national sample of mothers and fathers recruited from hospitals across 20 U.S. cities, whereby increasing the generalizability of these findings to other young urban parents. Finally, large public datasets often continue to grow over time allowing the researcher to revisit the data and conduct additional analyses. For example, the Fragile Families researchers have recently provided public access to in-home data on parenting and the home environment at the 3-year follow-up and plan on releasing 5-year longitudinal data and medical records from the child's birth in 2007.

Conversely, the benefits of using large public datasets (including the Fragile Families data) should be considered in light of drawbacks. First, because the researcher analyzing the data was not involved during data collection, he/she is not intimately aware of the data collection procedures. For example, interviews in the Fragile Families study were conducted by numerous individuals across the country thereby potentially introducing differences in interviewing techniques. Second, the researcher using existing data was not able to add items to the questionnaire which could rule out alternative explanations for findings (e.g., fathers' spiritual involvement with their children). Thus, the researcher may not be able to adequately answer some research questions or may have to adjust the research questions to fit the data. Third, whenever a researcher utilizes data that has been collected by others, he/she is also challenged to ascertain why data are missing and which interview items correspond to which variables. To the credit of the Fragile Families' researchers, an annual summer workshop has been available for interested researchers to attend as a way of gaining additional understanding of the dataset. Further, relevant updates are provided through a data users' listserve. Finally, when using large, complex datasets such as the Fragile Families dataset, considerable time must be spent first understanding the organization of the dataset and the coding and labeling system of the variables even before variables of interest can be isolated and summary scales created. Further, the way in which a construct was measured in one wave of data may differ from how it was measured in a subsequent wave (e.g., father involvement).

Despite these challenges associated with the use of large-scale public datasets, they have the potential assist researchers in advancing our understanding of complex psychological and social phenomena. For example, the large sample size provided by the Fragile Families and Child Wellbeing Study afforded us the luxury of examining these associations among African American, Caucasian, and Latino adolescent and young adult parents. Unfortunately, we did not have large enough group sizes to examine other ethnic groups such as Native Americans or Asian Americans, nor examine subgroups within a particular ethnic group (e.g., Mexicans, Puerto Ricans, Brazilians). Future researchers designing large scale public-use data sets should make efforts to obtain diverse participants, particularly fathers (although they are historically a very challenging population to recruit and retain in research). The results presented in this paper suggest that rates of father involvement and in-kind support differ among African American, Latino, and Caucasian fathers and that aggregating data from different ethnic groups may obscure their unique differences.

Despite the above limitations, the current study adds to the existing literature on the relational context of young adult parenting. Interventions with young expectant parents should, for example, focus on improving the relationship quality of these inexperienced parents and their partners during pregnancy. The mother's perception of the relationship may be of particular importance because she often serves as a gatekeeper to their child. If the relationship is positive, then she may be more willing to provide fathers with continued access to their children, even if the romantic relationship dissolves.

By including mother and father reports, the study was able to elucidate some interesting differences in the significance of predictors using mother-report and father-report. Interestingly, the mother-reported variables were more likely to be significant predictors of father involvement and in-kind support than the father-reported variables. Although one could interpret this to mean that it is not important to obtain reports of fathering behavior from fathers, we do not believe this to be the case. One explanation could be that mothers are more relationally-focused and therefore their reports of relationship quality play a more significant role in fathers' involvement. Moreover, it could be that researchers are simply not assessing the variables that are important to the prediction of fathering from the father's perspective. More research should be conducted to increase understanding of which specific father variables play a role. For example, perhaps fathers' expectations of their roles as fathers are more predictive of long-term involvement or provision of in-kind support than relationship factors (Dallas and Kavanaugh, *in press*).

In addition, strength-based approaches may be valuable in future research. One recent example of this type of work was conducted by Florsheim and Ng (2006) who examined

a subsample of fathers from their larger study of at-risk parents using a combination of quantitative and qualitative data to identify themes that were associated with fathers who "beat the odds." Research that focuses on fathers' resilience factors may be useful in the development of interventions that promote positive father involvement.

Fully understanding father involvement also requires understanding the way in which fatherhood changes the family system and the effect of the family system on fathers and fathering behavior. Research using data from the National Survey of Family and Households has demonstrated that fatherhood can increase intergenerational interactions and social contact with extended family (Eggebeen and Knoester, 2001; Knoester and Eggebeen, *in press*) and that having a new child living with the father increases the support he receives from family (Knoester and Eggebeen, *in press*). Indeed, qualitative research on adolescent mothers and fathers suggests that paternal grandparents may play a role in supporting the father in his continued involvement (Furstenberg, 1995), particularly when fathers have few financial or social resources of their own. Perhaps given the limited resources of many of the fathers in the present study, inclusion of social support from extended family in the model would have explained additional variance, particularly in provision of in-kind support. Another contribution of this study was that it was able to compare predictors of the qualitative aspects of father involvement to the predictors of in-kind child support, thus providing significantly more information regarding fathering roles relative to previous studies that only examined state-mandated child support payments. Moreover, the finding that the predictors differed for each aspect of fathering underscores the multidimensional nature of father involvement.

In sum, the findings of this study extend the literature in important ways. We now have a better framework for understanding the key factors influencing father involvement with young mothers during their transition to parenthood. For example, we know that father-child cohabitation, relationship quality between the mother and father, and racial and ethnic differences, are all important determinants of father involvement. Future research should not only extend these findings, but should also re-examine the factors we have presumed to be critical, such as father's income. Understanding the processes that affect different aspects of fathering will assist both policymakers and clinical interventionists in supporting adolescent and young adult parents during the transition to parenthood and throughout their children's lives.

Acknowledgements This research was supported by NIMH K01MH72504 to Christina B. Gee. Data were provided by The Fragile Families and Child Wellbeing Study - a joint effort by Princeton University's Center for Research on Child Wellbeing (CRCW) and Center for Health and Wellbeing, and Columbia University's Social Indicators Survey Center and The National

Center for Children and Families (NCCF). For more information, see <http://www.fragilefamilies.princeton.edu/about.asp>. We would like to thank Ryan Watkins and the anonymous reviewers for their comments on an earlier draft.

References

- Arnett JJ, Taber S (1994) Adolescence terminable and interminable: When does adolescence end? *J Youth Adolesc* 23:517–537
- Black MM, Dubowitz H, Starr RH (1999) African-American fathers in low-income, urban families: Development, behavior, and home environment of their 3-year old children. *Child Dev* 70:967–978
- Burton LM, Jayakody R (2001) Rethinking family structure and single parenthood: Implications for future studies of African-American families and children. In: Thornton A (ed) *The well-being of children and families: Research and data needs*. The University of Michigan Press, Ann Arbor, MI, USA, pp 127–153
- Child Trends (2006) Facts at a glance. Washington, DC. Retrieved July 15, 2006, from http://www.childtrends.org/Files/FAAG2006_revised.pdf
- Coley RL, Chase-Lansdale PL (1998) Adolescent pregnancy and parenthood: Recent evidence and future directions. *Am Psychol* 53:152–166
- Crockenberg SB (1987) Predictors and correlates of anger toward and punitive control of toddlers by adolescent mothers. *Child Dev* 58:964–975
- Cutrona CE, Hessling RM, Bacon PL, Russell DW (1998) Predictors and correlates of continuing involvement with the baby's father among adolescent mothers. *J Fam Psychol* 12:369–387
- Dallas CM, Kavanaugh K (in press) Making room for daddy: The unmarried adolescent fathers' role in pregnancy. In: Johnson WE (ed) *Social work and social welfare: responses to African American males*. Oxford Publications
- Deal L, Holt V (1998) Young maternal age and depressive symptoms: Results from the 1988 National Maternal and Infant Health Survey. *Am J Public Health* 88:266–270
- Engelbein DJ, Knoester C (2001) Does fatherhood matter for men? *J Marriage Fam* 63:381–393
- Fagot BI, Pears KC, Capaldi DM, Crosby L, Leve CS (1998) Becoming an adolescent father: Precursors and parenting. *Dev Psychol* 34(6):1209–1219
- Florsheim P, Ng LQ (2006) Fatherhood as a transformative process: Unexpected successes among high-risk fathers. In: Kowaleski-Jones L, Wolfinger NH (eds) *Fragile families and the marriage agenda*. Springer, New York
- Furstenberg FF Jr (1995) Fathering in the inner city: Paternal participation and public policy. In: Marsiglio W (ed) *Fatherhood: contemporary theory, research, and social policy*. Sage, London
- Furstenberg FF, Harris KM (1993) When and why fathers matter: Impacts of father involvement on the children of adolescent mothers. In: Lawson A, Rhodes D (eds) *The politics of pregnancy*. Yale University Press, New Haven, CT
- Gavin LE, Black MM, Minor S, Abel Y, Papas MA, Bentley ME (2002) Young, disadvantaged fathers' involvement with their infants: An ecological perspective. *J Adolesc Health* 31:266–276
- Gee CB, Rhodes JE (1999) Postpartum transitions in adolescent mothers' romantic and maternal relationships. *Merrill Palmer Q* 45:512–532
- Gee CB, Rhodes JE (2003) Adolescent mothers' relationships with their children's biological fathers: Social support, social strain, and relationship continuity. *J Fam Psychol*
- Guagliardo MF, Huang Z, D'Angelo LJ (1999) Fathering pregnancies: Marking health-risk behaviors in urban adolescents. *J Adolesc Health* 24:10–15
- Jarrett RL (1994) Living poor: Family life among single parent, African American women. *Soc Probl* 41:30–49
- Jarrett RL, Roy KM, Burton LM (2002) Fathers in the "Hood": Insights from qualitative research on low-income African-American men. In: *Handbook of father involvement: Multidisciplinary perspectives*. Lawrence Erlbaum Associates, Mahwah, NJ
- Knoester C, Engelbein DJ (in press) The effects of the transition to parenthood and subsequent children on men's well-being and social participation. *J Fam Issues*
- Lamb ME, Pleck JH, Charnov EL, Levine JA (1985) The role of the father in child development: The effects of increased paternal involvement. In: Lahey BB, Kazdin AE (eds) *Advances in clinical child psychology*, vol 8. Plenum, New York, pp 229–266
- Lamb ME, Pleck JH, Charnov EL, Levine JA (1987) A biosocial perspective on paternal behavior and involvement. In: Lancaster JB, Altmann J, Rossi AS, Sherrod LR (eds) *Parenting across the lifespan: Biosocial dimensions*. Aldine de Gruyter, New York, pp 111–142
- Leadbeater BJ, Linares O (1992) Depressive symptoms in Black and Puerto Rican adolescent mothers in the first three years postpartum. *Dev Psychopathol* 4:451–468
- Leadbeater BJ, Way N (2001) Growing up fast: Transitions to early adulthood of inner-city adolescent mothers. Lawrence Erlbaum Associates, Mahwah, NJ
- Leadbeater BJR, Way N, Raden A (1996) Why not marry your baby's father? Answers from African-American and Hispanic adolescent mothers. In: Leadbeater BJR, Way N (eds) *Urban girls: Resisting stereotypes, creating identities*. New York University Press, New York
- Miller-Loncar CL, Erwin LJ, Landry SH, Smith KE, Swank PR (1998) Characteristics of social support networks of low socioeconomic status African American, Anglo American, and Mexican American mothers of full term and preterm infants. *J Community Psychol* 26:131–143
- O'Hara M, Swain A (1996) Rates and risks of postpartum depression: A meta-analysis. *Int Rev Psychiatry* 8:37
- Palkovitz R (1997) Reconstructing "involvement": Expanding conceptualizations of men's caring in contemporary families. In: Hawkins AJ, Dollahite DC (eds) *Current issues in the family series*, vol 3. University of Delaware Press, Newark, DE, pp 200–216
- Parke RD, Brott AA (1999) The biologically unfit father. In: *Throwaway dads*. Houghton Mifflin, New York, pp 17–29
- Rangarajan A, Gleason P (1998) Young unwed fathers of AFDC children: Do they provide support? *Demography* 35:175–186
- Reichman NE, Teitler JO, Garfinkel I, McLanahan SS (1998). Fragile families: sample and design. *Child Youth Serv Rev* 23:303–326
- Shapiro JR, Mangelsdorf SC (1994) The determinants of parenting competence in adolescent mothers. *J Youth Adolesc* 23:621–641
- Stier H, Tienda M (1993) Are men marginal to the family? Insights from Chicago's inner city. In: Hood JC (ed) *Men, work, and family*. Sage, Newbury Park, CA
- Thompson M, Peebles-Wilkins W (1992) The impact of formal, informal, and societal support networks on the psychological well-being of black adolescent mothers. *Soc Work* 37:322–328
- Unger DG, Cooley M (1992) Partner and grandmother contact in black and white teen parent families. *J Adolesc Health* 13:546–552
- Unger DG, Wandersman LP (1988) The relationship of family and partner support to the adjustment of adolescent mothers. *Child Dev* 59:1056–1060
- Wasserman GA, Brunelli SA, Rauh VA (1990) Social support and the living arrangements of adolescent and adult mothers. *J Adolesc Res* 5:54–66
- West C, Kantor G., Jasinski J (1998) Sociodemographic predictors and cultural barriers to help-seeking behavior by Latina and Anglo American battered women. *Violence Vict* 13(4):361–375

Copyright of *Journal of Youth & Adolescence* is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Copyright of *Journal of Youth & Adolescence* is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.