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Resident Father Involvement and Outcomes in Emerging Adulthood

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Although the role of parents during emerging adulthood (ages 18-25), can be substantial, the parent-child relationship during this phase of life is often highly variable (Aquilino, 1997; Arnett, 2000). While there has been an increased awareness of the importance of the role of fathers in the lives of their offspring, the involvement of *fathers* and the effects of such involvement on outcomes during emerging adulthood is a little researched or understood phenomenon. Most prior research that examines the role of parents during emerging adulthood often utilizes a single composite measure of parental involvement, focusing on parenting in general, with an emphasis on mothers. The body of research on fathers has focused primarily on younger children during early and middle childhood, to a lesser extent during adolescence (Bronte-Tinkew, Moore, & Carrano, 2006), with a few exceptions during emerging adulthood (Amato, 1994; Aquilino, 1997; Schwartz & Finley, 2006). The majority of these studies have been conducted using small, select, white middle class samples, and studies using nationally representative data that examine the processes of father involvement during emerging adulthood are sparse. In short, progress in understanding *how*, and in what *ways* fathers are involved and the implications of involvement for development during this phase of life has lagged behind other models of parenting (Erkut, Szalacha, & Coll, 2005; Lamb, 1997).

Given the limitations of prior research, using data from the National Longitudinal Survey of Youth 1997 (NLSY97), this study addresses three research questions: First, how and in what ways are resident fathers involved during adolescence, compared to resident mothers? We examine a variety of domains of father involvement – tapping critical dimensions of involvement that fathers can provide during adolescence. Second, net of mother involvement, individual father characteristics, household characteristics and young adult characteristics, does father involvement during adolescence have an influence on outcomes during emerging adulthood (above and beyond mother involvement)? We ascertain whether these varied domains of involvement are associated with outcomes for young adults in the domains of self-sufficiency, academic achievement, risky behaviors, and parental referencing. Third, we examine whether there are

gender differences in the influence of father involvement during adolescence on outcomes during emerging adulthood? We ask the question: Does the influence of father involvement on young adult outcomes differ by the gender of young adults?

This study builds upon past research and extends knowledge regarding fatherhood and the period labeled emerging adulthood in several ways. First, we use a nationally representative sample of young adults from the National Longitudinal Study of Youth (1997-2002). Few prior studies of father involvement have focused on emerging adulthood as an important phase of the life course. Second, using identical measures for fathers and mothers, we independently compare fathers' and mothers' involvement, given that mothers and fathers may be differentially involved, and their involvement may be correlated. Few studies of the father-child relationship have included controlled for levels of supportive maternal involvement. Third, we examine whether the father-child relationship interacts with gender to influence involvement. Fourth, we adopt a life course theory of family development approach and use longitudinal data to examine changes in father involvement over time. Finally, we use youth-report data, rather than parent-reported data, on the father-young adult relationship, reducing the likelihood of common method variance. Our analyses focus on resident fathers, because the patterns and predictors of father involvement and the forms of father involvement are structurally different for residential and non-residential fathers. Considering the growing awareness of the importance of fathers in the lives of their offspring from childhood into adulthood, and the importance of the period labeled emerging adulthood, it is imperative to clarify how fathers' involvement influences emerging adult outcomes, since it is a period characterized by considerable development and multiple transitions (Furstenberg, Rumbaut, & Settersten, 2005).

Theoretical Framework

Our analyses will be informed by the life course theory of family development (Elder, Liker, & Cross, 1984; Roberts & Bengtson, 1993). This theory of development suggests that both recent and past experiences, interactions, and relationships with family members and others contribute to current conditions and roles. While life course theory alone emphasizes the successive events in the life of an

individual (Elder, 1998), the life course theory of family development seeks to understand the transitions faced by families as units (Aldous, 1990). By incorporating elements of both life course theory and family development theory, the life course theory of family development allows us to understand the family in terms of its structural characteristics and the shifting nature of members as they develop over the life span (Bengtson & Allen, 1993).

This theoretical framework allows us to conceptualize the ways in which youths' experiences with fathers during adolescence are related to their experiences and relationships with their fathers in emerging adulthood. Further, the life course theory of family development is inclusive of both aspects of child development and aspects of parent development. This is particularly critical for our research on father involvement during emerging adulthood, because studies have demonstrated that the developmental concerns of adolescents and their parents may be complementary (Steinberg & Steinberg, 1994). Further, the life course theory suggests that just as familial relationships in adolescence are regularly determined by familial relationships in childhood (Rutter, Graham, Chadwick, & Yule, 1976), so too is parent involvement in emerging adulthood regularly reflective of parent involvement in adolescence.

Literature Review

Defining Emerging Adulthood. The period labeled "emerging adulthood" roughly spans ages 18-25, and is a period characterized by ongoing exploration of identity, values, and occupations, in a time when individuals are neither fully dependent on others nor fully responsible for themselves (Arnett, 2000). Emerging adulthood is the period during which youth typically focus on the transitions from schooling to the workforce, parental dependence to self-sufficiency, and familial cohabitation to the establishment of independent households (Arnett, 2000). Emerging adulthood covers the end of the second and beginning of the third decades of life and is often characterized as a life stage of quasi-independence, during which youth assume some adult roles and responsibilities but are dependent on their parents or other adults for housing or other forms of financial and emotional support.

Patterns of Father Involvement from Adolescence through Emerging Adulthood. How much involvement from fathers should we expect to observe when youth transition from adolescence to emerging adulthood? Does the nature and extent of involvement change between adolescence and the beginning of the emerging adult years? The answers to these questions remain unexplored, as most research on fathers has focused on adolescents and younger children. What we do know about trajectories of father involvement suggests that father involvement is highly variable over the life course (Harris, Furstenberg, & Marmer, 1998). Some studies indicate that the linkages between earlier relationship quality tend to weaken as children progress through the adult years, reflecting a discontinuity in affective relations between parents and children from adolescence to young adulthood (Tubman & Lerner, 1994).

As adolescence progresses, children's increasing assertiveness and autonomy regularly result in renegotiations and re-evaluations of parent-child relationships (Grotevant & Cooper, 1986; Steinberg, 1987). Studies have found that patterns of family interaction often diminish as children grow older, especially in young adulthood, reflecting increasing psychological and geographic distance between parents and children. Although some studies indicate a sharp decrease in intimacy as adolescents mature (Rossi, 1984), and peer and other influences assume more salience, others document only modest declines and suggest that most parent-adolescent relationships remain close and supportive across the transition from childhood (Moore, Guzman, Hair, Lippman, & Garrett, 2004).

Overall, research indicates that as youth leave enter late adolescence and emerging adulthood, relationships may be characterized by a transition from dependence on parents, to one of interdependence and decreases in parent-child conflict over everyday issues due to a lessening of parents' attempts to control or monitor children's behaviors (Aquilino, 1997). Emerging adulthood is therefore seen as a phase of the continuation of the individuation process begun in late adolescence, with communication, shared activities, support, and the expression of closeness being reevaluated (Aquilino, 1997).

Some research indicates that in two-parent families, the nature and type of involvement of parents is a gendered set of tasks (Videon, 2005). Compared with mothers, fathers spend less time performing

childcare and household duties and interacting with offspring. The types of activities that mothers and fathers engage in with older offspring are also different, with fathers engaging in more instrumental care such as advice, and mothers being involved in more emotional care (Youniss, 1985). Therefore, fathers' involvement may be particularly important for young adults as they make decisions about careers, workforce entry, and education decisions. Regrettably, however, there has been little research focusing on how and the extent to which fathers are involved during the late teens and in emerging adulthood.

Parenting styles in emerging adulthood have not been the subject of much prior research. Past studies suggest that during adolescence, an authoritative style of parenting is predictive of more positive outcomes (Maccoby & Martin, 1983; Steinberg, 2001). Authoritative parenting involves high levels of both support and demandingness or strictness from parents, compared to authoritarian parenting (high demandingness, low support), permissive parenting (low demandingness, high support), and uninvolved parenting (low demandingness, low support). No studies have examined paternal parenting styles across adolescence into emerging adulthood. Based on prior research, we hypothesize that the patterns and the types of activities in which fathers and mothers are involved in with adolescents are likely to differ, as will their parenting styles.

The Father-Child Relationship and Outcomes during Emerging Adulthood

Parent-child relationships constitute important influences on child development, and parent-child relationships in the adolescent years may influence the long-term trajectory of offspring well-being into adulthood (Biller & Lopez Kimpton, 1997; Videon, 2005). Unfortunately, however, there has been little research focusing on the extent to which *father-child* relationships have an influence on offspring outcomes during the emerging adult years.

The quality of father-child relationships, including both emotional and instrumental aspects, the amount and quality of contact with fathers, the attention fathers give to monitoring and care, and the parenting styles of fathers may all be important predictors of healthy adult outcomes (Coleman, 1990). Although there is no single or normative pathway through which individuals in their late teens and early

twenties successfully transition to adulthood, positive parental involvement during the teen years has been found to be associated with an optimal foundation for development during adulthood (Goldscheider, Thornton, & Yang, 2001). Father involvement may be critical during the transition from late adolescence to early adulthood, as healthy development involves the emergence of characteristics such as autonomy, responsibility, the ability to plan, self-regulation, and moral development (Eccles & Gootman, 2002). Although there is an implicit understanding that critical tasks such as social development and self-dependence will or should be achieved during emerging adulthood, research in this area in the US is inconclusive, and is short-term and correlational (Kennedy & Hofer, 2007).

Self-Sufficiency. Exactly how *father* involvement is associated with self-sufficiency in emerging adulthood is not known. Some studies suggest that, generally, parent involvement (that of both mothers and fathers) is associated with self-sufficiency in late adolescence (Ryan & Deci, 2000). For example, positive parental involvement including closeness, autonomy, and support are positive predictors of healthy individuation, non-dependence on parents, and self-regulation, all critical tasks for developing self-sufficiency in adolescence and beyond (Brack, Gay, & Matheny, 1993; Nelson & Barry, 2005; Ryan & Deci, 2000). Other aspects of parent involvement, including over-monitoring and restriction, or alternatively, indulgence, have been found to have negative effects on self-sufficiency, as they are often associated with continued dependence on parents and general irresponsibility (Steinberg, 2001). Some studies have also found an association between positive relationships with parents and performance of workplace tasks (Mortimer, Finch, Ryu, Shanahan, & Call, 1996). Fathers may be important given that they themselves may work and have relevant contact that may be useful during the search for jobs. This has however not been a widely explored topic. On the basis of prior research, we hypothesize that more positive father involvement during adolescence will be associated with higher self-sufficiency during emerging adulthood.

Academic Achievement. Most studies have found that a positive father-child relationship is associated with enhanced academic outcomes during later adolescence (Herman, Dornbusch, Herron, &

Herting, 1997), although few studies have been conducted among young adult populations. Studies conducted with older adolescents suggest that levels of father involvement influence children's academic and educational achievement (Harris et al., 1998). One study of British adolescents, for example, found that perceived father involvement, controlling for mother involvement was positively associated with positive school attitudes (Flouri, Buchanan, & Bream, 2002). A study among a small sample of college students in the U.S. also found that perceived low parental closeness was related to lower self-reported scholastic competence (Fass & Tubman, 2002). The absence of an involved stepfather or non-resident father has also been found to be negatively associated with academic outcomes (failing grades) for older adolescents from non-intact households who do not report close relationships with their fathers (King, 2006). We anticipate that higher father involvement during adolescence will be associated with more favorable academic outcomes during emerging adulthood.

Risky Behaviors. As a group, youth in the transition to adulthood experience higher rates of many types of risky behavior than do adolescents (e.g., binge drinking, illicit drug use, and tobacco use) (U.S. Department of Health and Human Services, 2002). The transition to adulthood is a period during which youth may act impulsively or take risks that older adults may avoid, and research indicates that risky behaviors such as binge drinking reach their peak in emerging adulthood (Bachman, Johnston, O'Malley, & Schulenberg, 1996). During these ages, youth gain both legal and illegal access to both tobacco and alcohol, and many may live independently for the first time, without constant parental supervision and support. Some research suggests that impulsiveness and risk-taking behavior may be reduced when youth have had positive parenting in adolescence, indicating that parent-child relationships, including the father-adolescent relationship, may play a role in how young adults may make decisions regarding risky behaviors (Williamson, 2005).

Father's may also monitor young adults' behaviors, and may contribute to the formation of healthy behaviors during the transition to adulthood. Net of other factors, including the mother-child relationship, the risk of initiating delinquent activity and the risk of first substance abuse have been found to be

significantly lower for older adolescents with more positive father-child relationships (Bronte-Tinkew, Moore et al., 2006b). Overall, limited research suggests that higher levels of father involvement and close relationships between fathers and youth in late adolescence, are related to decreases in delinquent activity (Harris et al., 1998). The majority of these studies however have been conducted with older adolescents, as opposed to emerging adults. We anticipate that higher levels of father involvement during adolescence will be associated with less risky behaviors during emerging adulthood.

Parental Referencing. While peer referencing and family discord often rise in early and mid-adolescence, many older adolescents and emerging adults describe supportive relationships with their parents, in which they see their parents as a source of advice (Bednar & Fisher, 2003; Brown, 1990; Steinberg, 2001). Seeking parental advice about topics such as important decisions and relationships represents one aspect of strong relationships in the transition to adulthood. Although emerging adults may not, or should not, necessarily seek out their parents' advice regularly on all topics, understanding that parents have experiences that may be useful to their own lives is an important aspect of emotional autonomy development and self-regulation (Steinberg & Silverberg, 1986). Parental involvement and secure attachments in adolescence are critical foundations on which emerging adults develop coping resources and maintain close bonds with their parents in adulthood (Brack et al., 1993; Fass & Tubman, 2002). These findings suggest that certain aspects of father's involvement may be important for predicting later referencing and relationships (Fuligni & Eccles, 1993). For example, one study of early adolescents found that children of highly controlling and strict parents were less likely to turn to their parents for advice than were children of authoritative parents (Fuligni & Eccles, 1993). These studies suggest that parental closeness and support may predict later parental referencing. Regrettably, most of these studies have focused on adolescent populations and parents in general, as opposed to focusing on fathers specifically. We anticipate that higher father involvement during adolescence will be associated with higher levels of parental referencing during emerging adulthood.

Differences by Gender

On the basis of identity theory, some studies suggest that the benefits of close ties with parents depends on the salience of the son/daughter role (Roberts & Bengtson, 1993). In other words, gender may influence outcomes during emerging adulthood, if adolescents have greater emotional and behavioral involvement with the same sex parent (Amato, 1994; Videon, 2005). For example, boys during adolescence may look to their fathers rather than their mothers for guidance (Richardson, Galambos, Schulenberg, & Petersen, 1984). Adolescent boys, but not girls, have also been found to benefit from a high-quality relationship with their nonresidential father in terms of better grades and less acting out in school (King & Sobolewski, 2006). Recent research also suggests that fathers may also be more influential for boys than for girls in the development of intimacy (Risch, Jodl, & Eccles, 2004). Research on two-parent families suggests that fathers are more involved with sons than with daughters (Bronte-Tinkew, Moore, & Carrano, 2006a; Bronte-Tinkew, Moore, Capps, & Zaff, 2006; Harris & Morgan, 1991), and that boys report closer relationships to their fathers than do girls (Youniss, 1985). In addition, the family processes associated with problem behaviors often differ by gender, and boys are at greater risk than are girls for externalizing behaviors and conduct problems (Loeber & Hay, 1997). Accordingly, we hypothesize that there will be differences by gender in the influence of father involvement on outcomes during emerging adulthood. These effects will be stronger for boys than for girls.

The Influence of Other Socio-Demographic Factors

Although father involvement is likely to influence young adults' outcomes, additional father characteristics, mother characteristics, and child characteristics are likely to influence both father involvement and young adult outcomes. To better isolate the relationship between father involvement and these outcomes, we account for these potentially confounding factors, which we expect to be correlated with both father involvement and the range of outcome domains.

Father Characteristics

Race/Ethnicity. Evidence is mixed regarding the relation between race and engagement, with some research finding that Black fathers are more engaged with their children than are White fathers, and other

research indicating that father involvement is lower among Black fathers (Marsiglio, 1991a; Pleck, 1997). Some studies also suggest that Hispanic fathers may be more involved with their children than non-Hispanic fathers (Cooksey & Fondell, 1996). Patterns of involvement during the transition to adulthood, however, are generally unknown. Some studies also suggest negative outcomes such as risky sexual behaviors and deviant behaviors for children of minorities (Blum et al., 2000).

Citizenship Status. Immigrant fathers face stressors such as underemployment, unemployment, language barriers, shifts in identity roles, and barriers to services (e.g., lack of information, fear of stigmatization) that can affect their parenting abilities and behaviors (Clarke, Shimonti, & Este, 2000). Additionally, socio-cultural beliefs about the roles and expectations of fathers may also differ according to the norms in a fathers' native country, resulting in differences in involvement (Bronte-Tinkew, Moore, Capps et al., 2006; Shimonti, Este, & Clark, 2003). Some studies have also found that children born to immigrant parents are less likely to engage in risky behaviors (Georgiades, Boyle, Duku, & Racine, 2006).

Educational Attainment. Research suggests that fathers with higher levels of educational attainment are more involved with their children than are less educated fathers (Griswold, 1993; Marsiglio & Cohan, 1997; Nord, Brimhall, & West, 1997). This pattern has been found among resident as well as nonresident fathers with adolescent children (King, Harris, & Heard, 2004). Most research suggests that children of more highly educated parents have more positive outcomes (Xie, Gilliland, Li, & Rockett, 2003).

Employment Status. Some studies suggest that unemployed fathers spend more time with their children (Pleck, 1997), although many of these studies have looked at fathers of school-aged children. Other studies have found that fathers who work longer hours are less involved with their children than fathers who work fewer hours (Marsiglio, 1991b). Research has also found that fathers experiencing work stress and role overload are less involved with their children than are those who do not experience similar levels of stress (Dubas & Gerris, 2002). Some studies have found that fathers' long-term unemployment is negatively associated with adolescent outcomes (Sleskova et al., 2006).

Biological Father. Research indicates that non-biological fathers often expect to be less involved in the lives of children than do biological fathers (Fine, 1995; Hofferth, 2006; Nord et al., 1997). These differences may have a basis in evolutionary mechanisms, as fathers may be less invested in non-biological children since there is no incentive to carry on the father's genetic line (Emlen, 1995, 1997). Other evidence, however, has suggested that fathers' involvement with non-biological children may be higher if the father enters the family when a child is very young (Dunn, Davies, O'Connor, & Sturgess, 2000).

Mother Characteristics

Mother Involvement. Research suggests that highly involved mothers may encourage or support fathers to become more involved in their children's lives (Amato & Rivera, 1999). In contrast, some studies show that mothers who do not trust their partner's capabilities or who do not want to share parenting responsibilities may engage in "gatekeeping" behavior that prevents fathers from being highly involved with their children even when mothers are highly involved (Allen & Hawkins, 1999).

Mother's age. Research has shown that fathers are more involved with their children when mothers are older (Pleck, 1997), although several of these studies have focused on mothers with younger children. Some studies also show that a higher maternal age is associated with more positive outcomes for adolescents and young adults (Fergusson & Woodward, 1999).

Mother's Education. Higher levels of maternal education have been linked with higher levels of paternal involvement, especially in leisure activities, although this relationship has been inconsistent (Pleck, 1997). Some studies have found no association between maternal educational attainment and overall paternal involvement (Marsiglio, 1991a; Nord et al., 1997)

Mother's Employment. Maternal employment has been linked to higher levels of paternal involvement (Harris & Morgan, 1991). Some studies, have also found that maternal work schedules are unrelated to fathers' involvement with children and adolescents (Marsiglio, 1991b). Although research suggests that mother's employment may reduce adolescent behavior problems (Ruhm, 2004), these effects have not been consistent in terms of adolescent development (Montemayor & Clayton, 1983).

Family Context

Household Poverty. Research indicates that household poverty status has negative implications for both parental involvement and outcomes for youth (Coley & Hernandez, 2006; Crosnoe, 2001) from birth through adolescence (Bradley & Corwyn, 2002). Low SES has also been found to be associated with increased risky behaviors in adolescence (Williams, Currie, Wright, Elton, & Beattie, 1997).

Father-Mother Relationship. Higher levels of father involvement have been found to exist when parents share a stable and happy relationship than when parents have a conflictual relationships (Coiro & Emery, 1998; Harris & Morgan, 1991; Harris et al., 1998). Positive mother-father relationships may enable men to identify more strongly with their roles as fathers and thus become more actively involved in parenting. More conflictual mother-father relationships have also been found to be associated with less positive outcomes for adolescents in the domains of psychological well-being (Belsky, Crnic, & Gable, 1995).

Family Routines. Few studies have examined the association between family routines and father involvement among older children and adolescents. Studies of younger children, however, have found that fathers in families with distinct routines are more involved than fathers in families without specific routines (Coltrane, Parke, & Adams, 2004). Family routines have also been found to be protective for adolescent females in households with higher levels of cumulative risk (Loukas & Prelow, 2004).

Number of Children in the Household. Research suggests that the number of children fathered is negatively associated with father involvement (Harris & Morgan, 1991; Hofferth, 2003). As the number of children in a household grows, a father may have less time to interact with each child, especially if the presence of younger children, who need more care, in the household, takes time away from fathers' interactions with older children (Harris & Morgan, 1991; Marsiglio, 1991b). Larger family sizes have also been found to be associated with more negative outcomes for children (Blake, 1981).

Child Characteristics

Child Age. There is mixed evidence on the association between child age and father involvement. Some suggests that fathers are more involved with older children than with younger children (Nord et al., 1997; Seltzer, 1991), while other research suggests no association between father involvement and age (Cooksey & Craig, 1998), and other research suggests a decrease in father involvement as adolescents age (Harris & Morgan, 1991).

Method

Data

These analyses use data from the National Longitudinal Survey of Youth, 1997, a nationally representative survey created to document the transition from adolescence into adulthood. For the present study, we use data from four rounds of the survey in Round 1 (age 14), Round 2 (age 15), Round 5 (age 18), and Round 6 (age 19). These data were collected between 1997 and 2002, and include parent-specific demographic information collected at baseline, as well as adolescent and young adult-specific information collected annually. One of the strengths of the NLSY is that it is a multi-topic survey that taps many dimensions of household well-being and contains many family process measures. The survey also consists of a fairly large sample of adolescents and young adults, which allows us to create data files for specific populations of adolescents (e.g. by gender). In addition, it is longitudinal, making it possible to connect variables in early adolescence with outcomes measured in early adulthood. In the initial wave of the study, both the parent (usually the mother) and the young adults were interviewed, and we use demographic data obtained from both parent and adolescent/young adult reports. In Round 1 of the survey, data were collected for 8984 youth, in Round 2 for 8386 adolescents, in Round 5 for 7883 adolescents, and in Round 6 for 7897 young adults.

Sample for Analyses

Our analytical sample is restricted to 1,082 participants aged 15 in Round 2 of the survey, who had a resident biological father or a non-biological father figure beginning in Round 1 through Round 6 (age 19), the point at which our outcomes are assessed. Only residential parents (fathers and mothers) of

respondents were considered in these analyses. We also excluded participants who indicated that they were of a race “other” than black, white, or Hispanic. The NLSY reports a retention rate of 87.9% for all participants, across Rounds 1 through 6 (Bureau of Labor Statistics US Department of Labor, 2001). All participants included in the analyses were aged 15 in Round 2 and aged 19 in Round 6. Because our sample contains families that remained intact for at least 4 time points of observation, these families differ from non-intact families, and therefore are not representative of all families in the United States, but only of intact two-parent families. In addition, given that these young adults live in intact families, our sample may under-represent young adults who are more likely to engage in risky behaviors.

Analytic Strategy

We begin by examining the effects of the father involvement covariates on outcomes for young adults in four domains using logistic regression models (Allison, 1999). This is the appropriate statistical test for dichotomous dependent variables. In these models, the logistic regressions explore whether specific aspects of father involvement significantly predict the odds of becoming disconnected, completing high school, binge drinking, referencing fathers for advice on relationships, and referencing fathers for advice on decisions. The independent and control variables measure fathers’ socio-demographic characteristics, other father characteristics, mother characteristics and child characteristics. Results are interpreted in terms of odds ratios. For categorical variables, an odds ratio greater than one indicates an increased chance of an outcome occurring; those odds ratios less than one signify a decreased chance of an outcome occurring. An odds ratio of 1 means that the variable has no effect. For continuous variables such as scales, the odds ratio measures the change in the dependent variable per unit change in the variable. In such cases, we calculate the percentage change, $100(e^B - 1)$, in the odds for each 1-unit increase in the independent variable (Allison, 1999). We report odds ratios because conceptually, odds ratios bear more social impact than the reporting of explained variance, which is the traditional metric of continuous regressions.

Models were built using hierarchical regression. First, each event of interest was modeled including the father involvement measures as the primary predictors. Second, the effects of fathers’

sociodemographic characteristics were tested independently of other variables. Third, variables included to test alternative hypotheses, including mother characteristics and child characteristics, were added to the models to measure their effects on child outcomes and the size and statistical significance of the father involvement coefficients.

In each model (i.e., for each outcome examined), the standard errors of the logistic coefficients predicting young adult outcomes were adjusted using a Huber correction in SAS for the effects of cluster sampling. The possible presence of more than one child per family in the sample violates the assumption that each observation is obtained from its own cluster. This would have led to a substantial underestimate of the variance of the estimated coefficients. The Huber procedure corrects for the likelihood of children being interrelated within groups. It corrects for the requirement that the errors are homoscedastic and that observations follow the assumed distribution. As a validity check, the models are run with one child randomly selected per family. These results differ very little from the models with the Huber correction and all children present in the family, which suggests that the findings are robust.

Finally, we added two-way interaction terms (gender) to the main effect models. Log-likelihood tests confirming the direct effect models and interaction models were conducted to determine whether the addition of interaction terms significantly increases predictive power while controlling for other variables. The log-likelihood statistic $c = -2(\log L_0 - L_1)$ tests the hypothesis that all coefficients except the intercept are 0. Analyses were conducted using various sample weights. Throughout the analysis, the results we report are weighted using sample weights included in the data set.

Measures

Outcome Variables

Self-Sufficiency. Self-sufficiency was operationalized using a measure of being “disconnected” at Round 6 (age 19). This variable was created by merging participants’ answers to two questions: enrollment in any type of educational institution, and employment since the date of last interview. Respondents who

indicated that they were neither enrolled in school nor employed were coded as disconnected (1), and those who indicated that they were either enrolled in school or employed were coded as connected (0).

Academic Achievement. Academic achievement was measured at Round 6 (age 19) and assessed participants' completion of high school. Participants were coded as having completed high school (1) if they reported having finished the 12th grade and (0) if they had completed less than the 12th grade.

Risky Behaviors. Risky behavior was operationalized using a measure of binge drinking at Round 6 (age 19). Binge drinking was assessed by determining how many days in the past month the respondent had five or more alcoholic drinks in one sitting, considered an episode of binge drinking (Bachman et al., 1996). Respondents who indicated that they had five or more drinks on at least three occasions in the past month were coded (1), engaging in binge drinking and those who did not were coded (0).

Parental Referencing. Parental referencing was measured at Round 6 (age 19) using two questions asking respondents how frequently, they: 1) went to their fathers for advice about relationships, and 2) went to their fathers for advice about important decisions. For each of these items, participants were coded as a (1), if they reported referencing their fathers either *some of the time* or *all the time* and (0) if they reported that they *never* went to their fathers for advice on these topics.

Primary Predictors

Father Involvement

Closeness. Closeness between residential fathers and adolescents was measured at Round 2 (age 15) and again at Round 5 (age 18) using three items: "I think highly of my father," "I want to be like my father, and I enjoy spending time with my father. For each of these items, participants responded on a 5-point Likert-type scale ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). Each item was coded as a dichotomous variable with responses of strongly disagree, disagree, and neutral/mixed all coded as (0) and strongly agree and agree coded as (1).

Support. Father support was measured using four items as reported by participants at Round 2 (age 15). These items included: How often does he praise you for doing well?; How often does he help you do

things that are important to you?; How often does he cancel plans for no reason?; and How often does he blame you for his problems? Participants responded on a 5-point Likert-type scales ranging from 0 (*never*) to 4 (*always*). Responses were coded into dichotomous variables with never, rarely, and sometimes coded as (0) and usually, and always coded as (1).

Monitoring. Monitoring was assessed using respondents' self-report data in Round 2 (age 15). The four items used to capture fathers' knowledge of adolescents included: How much does your father know about your close friends?; How much does your father know about your close friends' parents?; How much does your father know about who you are with when he is not home?; and How much does your father know about your teachers and school? Responses were answered on a five-point Likert scale ranging from 0 (*knows nothing*) to 4 (*knows everything*) and were recoded into dichotomous variables with responses of *knows most* (3) and *knows everything* (4) coded as *yes* (1), and responses of *knows nothing* (0), *knows just a little* (1), and *knows just some things* (2) were coded as *no* (0). An analysis of predictive validity for this index found that both mothers and fathers who were rated high on monitoring were also rated as more strict and had adolescents with fewer behavioral problems (Moore, McGroder, Hair, & Gunnoe, 1999).

Parenting Styles. Using the typology of parenting styles developed by Maccoby and Martin (1983), this measure was created by crossing two global dimensions of parenting: "demandingness" (e.g., strictness), and "responsiveness" (e.g., warmth, support). Authoritative parents are high on both demandingness and responsiveness; authoritarian parents are high on demandingness and low on responsiveness; indulgent parents are low on demandingness and high on responsiveness; and indifferent-uninvolved parents are low on demandingness and responsiveness. The two items that comprise this measure are asked of youth regarding whether the parent "in general is very supportive, somewhat supportive, or not very supportive"; and is "permissive or strict about making sure you did what you were supposed to do." The supportiveness responses were measured on a three-point scale ranging from very supportive to not very supportive. The strictness responses were measured on a two-point scale ranging from permissive to strict. Responses of *not very supportive* and *somewhat supportive* on the supportiveness

items were recorded 0 (*non-responsive*); responses of *very supportive* were recoded as 1 (*responsive*). Responses of *strict* on the permissive/strictness item were recoded as 1 (*demanding*), and responses of *permissive* were recoded 0 (*non-demanding*). The two two-level variables are combined to produce a parenting style variable with four categories: *uninvolved* (permissive and not very or somewhat supportive), *authoritarian* (strict and not very or somewhat supportive), *permissive* (permissive and very supportive) and *authoritative* (strict and very supportive). Both construct and predictive validity have been found to be good for these parenting styles (Moore et al., 1999). Each category was dummy-coded (1) *father uses parenting style*, and (0), *father does not use parenting style*. The correlations between the various dimensions of father involvement are presented in Table 5.

Control Variables

To better isolate the relationship between father involvement and the outcomes of interest, we account for a number of potentially confounding factors.

Mother Characteristics. We include similar measures of mother involvement as were included for fathers. Measures of mother involvement included closeness, support, monitoring and mother's parenting styles. Additional mother characteristics included mother's educational attainment, age, and employment status. Mother's education was coded as a continuous variable ranging from (0) *less than high school* to (2) *some college or more*. We included a measure of mother's current age at Round 1 (1997), which was computed by summing mother's self-reported age at the birth of the youth respondent and the youth respondent's current age at Round 1. Mother's current ages at Round 1 ranged from 27 to 57 years for mothers of our participants ($M = 40.1$, $SD = 5.15$). Mother's employment status was measured at Round 2 (1998) and was coded as a dichotomous variable with mothers who reported having received income from a job in the past year coded as (1) for being employed, and those who did not were coded as (0).

Family Context. In addition to assessing mothers and fathers individual characteristics, we also included measures of the family context. Specifically, we included measures of family routines, marital

status of parents, mother-father relationship quality, number of children under 18 in the household, and family poverty status.

Participation in family routines was measured using a four-item scale, on which participants rated the frequency with which they participated in various activities each week with their parents. The activities measured were: Number of days per week participant eats with family; number of days per week participant does fun activities with family; number of days per week housework gets done when it's supposed to; and number of days per week participant does religious activities with family. Respondents answered these questions at Round 2 (age 15) using an eight-point frequency scale ranging from zero to seven times per week. Responses to each question were summed to create a continuous scale of frequency of participation in family routines. Scores range from 0 to 16. Higher scores indicate a higher frequency of family routines.

Marital status of parents was assessed at Round 1 (1997) using parent respondents' reports of their marital status. This variable was dummy coded, with married parents being coded as (1) for marital status and unmarried parents being coded as (0). Parents' relationship quality was measured at Round 2 using the mother-father relationship index. The index is comprised of six items asked of residential parents which asked whether their spouse is: fair and willing to compromise when there is a disagreement; screams or yells when he/she is angry; insults or criticizes ideas; expresses affection or love; encourages or helps the respondent do things that are important; and blames spouse for problems. The responses are measured on a five-point scale ranging from never to always. This measure has a range from 0-24. Higher scores indicate a more positive marital relationship. The alpha coefficient of reliability for the scale with all six items is .83 (residential mother's report of support from the residential father).

Number of children in the household was a continuous variable measured at Round 1 (age 14), which gauged the number of children in the adolescent respondents' household who were under age 18. Responses for this variable range from one to nine ($M = 2.44$, $SD = 1.26$). Poverty status was assessed at Round 1 (1997) by parent respondents' reports of income. The NLSY-coded categorical variable included

categories for: less than 100 percent of the poverty line, 100-200% of the poverty line, 200-400% of the poverty line, and greater than 400% of the poverty line. We recoded each of these categories into two dummy variables (0/1) indicating that participant was living in poverty and participant was not living in poverty. The reference category was participants living above the poverty line.

We also include measures of father characteristics that capture father's employment status, educational attainment, immigrant status, and biological relationship to the adolescent all measured at Round 2. Father's education was coded as a continuous variable ranging from (0) *less than high school* to (2) *some college or more*. Employment was coded using two dummy variables, with fathers who reported having received income from a job in the past year (1997-1998) being coded as (1), and those who were not (0). A measure of father's immigrant status was also included with those who reported not being born in the United States coded as (1), and others (0). Biological relationship to the adolescent respondent was assessed in Round 2 (1998). Participants who lived with their biological father were coded as (1), and participants who did not were coded as (0).

Child Characteristics. Individual child characteristics included respondent self-reports of gender, race, and receipt of allowance. A dummy variable identifying whether the adolescent was male or female was included. Race was coded using three dummy variables identifying whether respondents were Black, White, or Hispanic. Finally, receipt of allowance was measured in Round 2 by asking the youth respondent whether or not they received any allowance from the family in the past year. Respondents who received an allowance were coded (1), and those who did not were coded (0).

Results

Descriptive Statistics

Table 1 reports the weighted means, percentages, and standard deviations of the variables used in the analyses. Eighty-two percent of fathers were the biological fathers of youth. Regarding formal education attained, 15.8% of fathers completed less than high school, 33% of fathers completed high school only, and 51.2% of fathers completed some college or more, and the majority of fathers were employed.

Less than ten percent of the sample comprised immigrant fathers. Mothers in the sample had a mean age of 40.2 years, and 76.5% had received income from a job in the past year. Approximately half of adolescent respondents were males (52.3%), while the other 47.7% were female. Of adolescent respondents, 75.5% were white, 11.4% were black, and 12.6% were Hispanic. The family context of our sample was such that 91.8% of respondents had a mother and a father who were married. Regarding formal education attained, 15.86% of fathers completed less than high school, 32.98% of fathers completed high school only, and 51.16% of fathers completed some college or more. Similarly, 14.07% of mothers completed less than high school, 35.09% of mothers completed high school only, and 50.85% of mothers completed some college or more.

[TABLE 1 ABOUT HERE]

Question 1: How and in what ways are resident fathers involved during adolescence compared to resident mothers?

Table 2 shows the ways in which resident fathers and residential mothers are differentially involved in the lives of their children. With regard to *closeness*, compared to mothers, adolescents report significantly lower levels of closeness to resident fathers than they do to resident mothers. On average, adolescents report thinking more highly of their resident mothers and report enjoying more time with resident mothers than with resident fathers.

With regard to *support*, adolescents report that resident mothers are more likely to help adolescents compared with resident fathers, and residential fathers are, more likely to criticize adolescents compared to residential mothers. With regard to *monitoring*, residential fathers had significantly lower levels of monitoring than resident mothers on all measures. Residential fathers are less likely than residential mothers to know about adolescents close friends, to know about close friends' parents, to know who they are with when they are not at home, and to know teachers and school activities.

Results indicate that there are a number of significant differences in *parenting styles* between mothers and fathers. Specifically, respondents were significantly more likely to indicate that their fathers

were authoritarian and uninvolved compared to mothers. Compared with mothers, fathers were less likely to be permissive and authoritative.

[TABLE 2 ABOUT HERE]

Multivariate Results

Question 2: Does father involvement during adolescence have an influence on outcomes during emerging adulthood (above and beyond mother involvement)?

Our second objective was to conduct multivariate analyses to examine whether father involvement during adolescence is associated with outcomes in four domains during emerging adulthood: self-sufficiency, risky behaviors, academic achievement, and parental referencing. Table 3 presents the results of logistic regression analyses for these outcomes. Results are interpreted in terms of odds ratios.

Self-Sufficiency (Disconnected). Model 1 of Table 3 shows significant associations between father support and being disconnected. Specifically, young adults with fathers who blamed them for their own problems (OR=5.52) and criticized them (OR=2.27), had increased odds of being disconnected. Young adults with fathers who helped them had a reduced likelihood of being disconnected (OR= 0.98). Additional covariates associated with an increased odds of being disconnected during emerging adulthood include, having a mother who blames (OR=3.77), having a mother who criticizes (OR=1.39), living in a home with a larger number of children under age 18 (OR = 1.46), and having a father with less than high school level of education (OR=3.50). Covariates associated with a decreased odds of being disconnected include having a father who completed more years of formal education (OR = .60) and participating in more routines and activities with family members (OR = 1.09).

Risky Behaviors (Binge Drinking). Model 2 of Table 3 shows that two measures of father involvement were (marginally) significant in predicting binge drinking. Father support in the form of blaming the adolescent for problems (OR = 2.16), increased the odds of binge drinking, while the father helping the adolescent (OR=0.59), reduced the odds of binge drinking. Fathers' monitoring (knowing who the adolescent was with when he/she is not home) (OR = .53), and knowing close friends (OR=0.93),

reduced the likelihood of binge drinking. Participating in more family routines also decreased adolescents' odds of binge drinking (OR = .94). Mothers' *monitoring* in the form of knowledge of close friends (OR=0.40) and close friend's parents (OR=0.90), reduced the odds of binge drinking. Additional covariates associated with a greater likelihood of binge drinking include being male (OR = 2.14).

Academic Achievement (High School Completion). Model 3 of Table 3 indicates significant associations between father *closeness* and young adults academic achievement. Specifically, thinking highly of the father increased the odds of finishing high school (OR = 5.91), as well as enjoying time with father (OR=2.14). In addition, experiencing a reduction in this closeness over time reduced the odds of finishing high school (OR = .24). Additional covariates associated with a greater likelihood of finishing high school include the mother knowing the adolescents' close friends parents (OR = 3.19). Mothers' criticisms were associated with a lower odds of finishing high school (OR=0.18). Lower years of education for both mothers and fathers (OR = 0.17 for fathers; OR = 0.13 for mothers) were both associated with a lower likelihood of high school completion. Being Hispanic was also associated with a decreased odds of high school completion (OR = .32).

Parental Referencing. Model 4 of Table 3 shows results for seeking out the father for relationship advice during emerging adulthood. Father *closeness* and *support* were significant predictors of parental referencing for relationship advice. Enjoying time with father during adolescence was associated with increased odds of paternal referencing in emerging adulthood (OR = 2.73), and a reduction in that closeness between age 15 and age 18 (OR = .25) was related to decreased odds of asking father for advice about relationships in emerging adulthood. Higher monitoring (the father knows who one is with when not at home) was also associated with an increased odds of going to the father for advice on relationships (OR = 2.30). Having a residential father who is one's biological father (OR = 2.83) also increased the likelihood of parental referencing for relationship advice.

Model 5 of Table 3, present results on referencing fathers for advice on important decisions. Fathers' *closeness*, *monitoring*, and *parenting styles* were significant predictors of parental referencing in

emerging adulthood. In particular, thinking highly of father (OR = 5.61) and increases over time in thinking highly of the father (OR = 3.76) were both related to increased odds of referencing father for advice on important decisions in emerging adulthood. Young adults reporting a reduction over time in enjoying time with their fathers (OR = .19) and a reduction over time in thinking highly of their fathers (OR = .35) had a reduced likelihood of referencing the father for advice on relationships in emerging adulthood. Higher father monitoring in the form of having a father know close friends' parents, was also associated with increased odds of going to father for advice on decisions (OR = 2.56). Finally, respondents indicating that their fathers were uninvolved parents, as opposed to authoritative parents, were significantly less likely to report going to their fathers for advice on decisions (OR = .23). Additional covariates associated with a higher likelihood of referencing on important decisions include having a resident father who was one's biological father (OR = 3.61). In contrast, having a mother who is helpful (OR = .44) was related to decreased odds of going to the father for advice on decisions.

[TABLE 3 ABOUT HERE]

Question 3: Are there gender differences in the influence of father involvement during adolescence on outcomes during emerging adulthood?

Because father involvement with young adults may vary by gender of the adolescent, we test whether gender interacts with father involvement to affect each of these outcomes. To examine this relationship, we included a two-way interaction term between each of the father involvement domains and the participants' gender in each of the baseline models for all outcomes- controlling for fathers' socio-demographic characteristics, mother characteristics, household characteristics, and child characteristics.

Model 1 of Table 4 shows that there is a significant interaction of being male between father involvement and becoming disconnected. Specifically, there are stronger effects for sons of father monitoring on being disconnected (OR=3.94). *Model 2* shows that there are stronger effects for sons of father's support and monitoring on binge drinking (OR=7.90). *Model 3* shows stronger effects for sons of father's closeness (OR=2.75, 2.13) and father's monitoring on high school completion (OR=1.06). *Models*

4 and 5 shows stronger effects for sons of fathers' closeness and support on parental referencing (relationship advice and advice on decisions).

[TABLE 4 ABOUT HERE]

Discussion

Using a life course theory of family development, this study had three objectives: (1) to determine differentials in resident mother and father involvement during adolescence; (2) to determine whether father involvement during adolescence had an influence on outcomes during emerging adulthood (above and beyond mother involvement); and (3) to determine whether there were gender differences in the influence of father involvement during adolescence on outcomes during emerging adulthood.

With regard to our first research question concerning differentials in mother and father involvement, we found that there were significant differences in levels of involvement in specific activities in which mothers and fathers were involved. With regard to *closeness*, compared to mothers, adolescents report significantly lower levels of closeness to resident fathers than they did to resident mothers. With regard to *support*, adolescents report that resident mothers are significantly more likely to help adolescents compared to resident fathers. Residential fathers are, however, more likely to criticize adolescents compared to residential mothers. With regard to support, neither mothers nor fathers stood out as being significantly higher or lower. With regard to *monitoring*, residential fathers had significantly lower levels of monitoring across all activities compared to residential mothers. We also found significant differences in *parenting styles* between mothers and fathers. Fathers exhibited more authoritarian and uninvolved parentings compared to mothers, and were less likely to be permissive and authoritative.

The general pattern that emerges is that residential mothers and fathers with adolescents are higher and lower on certain activities, and these patterns vary with the activity in question. Compared to mothers, fathers are less involved in certain activities especially with older youth. The closeness or warmth of the father-child relationship is a crucial source of social capital that is often strongly associated with offspring well-being (King et al., 2004). That adolescents may report lower levels of closeness to resident fathers is

not surprising as some research indicates that parental involvement with older adolescents in two-parent families, is a gendered set of tasks (Videon, 2005). Fathers may interact with older adolescents in different ways through varied behaviors (Cabrera, Tamis-Le Monda, Bradley, Hofferth, & Lamb, 2000).

Nevertheless, the conceptualization of involvement as a combination of several components provides a strong framework for understanding how fathers can influence their offspring. Fathers matter for separate and related reasons. Evidence provided here suggests that the father-child relationship even during adolescence reflects both these emotional and behavioral components.

With regard to the influence of father involvement on outcomes during emerging adulthood, we found that some aspects of father involvement were predictive of specific outcomes. We found significant associations between father support and self-sufficiency, father closeness and changes in closeness and young adults' academic achievement, closeness and support were significant predictors of parental referencing for relationship advice, and fathers' closeness and monitoring were significant predictors of parental referencing in emerging adulthood. These results remain consistent after controlling for mothers' involvement, father characteristics, mother characteristics, the family context, and child characteristics. We interpret this to mean that specific dimensions of father involvement matter for varied outcomes in emerging adulthood. Our results also confirm that father involvement is multidimensional, and the importance of individual dimensions are varied in their implications for young adult well-being. These related, but distinct aspects of father involvement matter in different ways for young adult outcomes across domains. Some research indicates that young adults' psychological well-being benefits when fathers are involved (Amato, 1994; Videon, 2005) and is also confirmed in this nationally representative sample of young adults and their resident fathers illustrating benefits also in the domains of self-sufficiency, academic achievement, the formation of close parent-adult relationships and risky behaviors. These findings support the notion that fathers' involvement is multifaceted, comprising a range of activities and interactions and provides unique contributions to adult offspring well-being.

An interesting and noteworthy finding is that lower levels of paternal education were associated with an increased likelihood of being disconnected during emerging adulthood. This suggests that fathers are also an important form of human capital, and their presence provides the potential for a stimulating environment that facilitates learning and success (Amato, 1998; Becker, 1981; Coleman, 1990), in this case the likelihood of not being disconnected in the young adult years. Fathers' human capital can impact offspring through the provision of a rich and stimulating environment or through modeling behaviors and expectations of academic achievement and success (Coleman, 1990).

With regard to the third research question, we found that there were some differences by gender in the effects of father involvement on young adult outcomes. There were stronger effects for sons of father monitoring on being disconnected, stronger effects for sons of father's support and monitoring on binge drinking, stronger effects for sons of father's closeness and monitoring on high school completion, and . stronger effects for sons of fathers' closeness on parental referencing (relationship advice). These findings suggest that specific aspects of the father involvement are more protective for males as opposed to females for particular outcomes. Fathers may be more involved with adolescent males as opposed to females, and may be more able to easily identify, relate, and interact with the same-sex adolescent, serving as a role model, especially for boys (Bronte-Tinkew & Moore, 2006). These results imply that although the father-child relationship may influence young adult outcomes, looking at this relationship without accounting for gender may tell an incomplete story. Gender interactions are important in influencing parenting and subsequent outcomes with effects being observed even during the early adult years.

Limitations of Current Study. There are some limitations of this study that should be noted. First, we used available measures of father involvement. Similar measures of involvement were not used across all waves of the NLSY (i.e., Rounds 2, 5 and 6), precluding an examination of changes in the *same* measures of father involvement over time, thus while we would have liked to have been able to examine the nature and type of involvement and how this changes as older adolescents mature into young adults we

could not do so. This reflects of course changes in parent-child activities, residential changes after high school, and changes reflecting increased maturity and independence among young adults.

As mentioned, there is an ongoing fatherhood initiative to create valid and reliable measures of the father-child relationship (Bronte-Tinkew, Moore, & Cabrera, 2002). Both the psychometric and substantive analyses presented here suggest that the measures in the NLSY97 capture critical influences in the lives of young adults and are robust predictors of important outcomes. Unfortunately, our data do not contain variables that would allow us to measure the possible negative influences of parents' own risky behaviors on young adult outcomes, nor did we conduct separate analyses for step-fathers and biological fathers. Furthermore, because our sample contains two-parent families that remained stable for multiple years, these families are not representative of all young adults who are at risk of engaging in risky behaviors. Our results may also be influenced by young adults' underreporting of negative behaviors (e.g. binge drinking). Another limitation involves the fact that adolescents provide information about the father-child relationship as well as their own risky behaviors. For this reason, same-source bias may affect our estimates of father effects.

Contributions of the Present Study. Despite these limitations, the present study makes a straightforward contribution to the literature on both fathers and the emerging adulthood. Using data from fathers in a nationally representative sample, we are able to demonstrate the unique influence of father involvement on varied outcomes during emerging adulthood, and these findings hold when we control for the mother-child relationship. Our study provides strong evidence of a link between paternal involvement and outcomes in emerging adulthood. This study is also one of few to measure both the quality of the father-child in addition to the mother-child relationship. Our attempts to capture dimensions of the quality and quantity of involvement remind us that a constellation of parenting behaviors are ideal for good parenting.

Implications for Policy and Practice. Regarding fathering, our study provides continuing evidence that fathers are important to the well-being of young adults, and suggests that any holistic policy or

program to promote well-being in the early adult years should include fathers when feasible. Work aimed at improving the measurement and collection of the father-child relationship data in nationally representative surveys and including fathers in analytical work is well warranted. More broadly, these analyses indicate that parental influence, fathers as well as mothers, continue into the early years.

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