

Pre-divorce Factors Related to Post-divorce Father-child Relationship Quality

Mindy E. Scott

Alan Booth

The Pennsylvania State University

Department of Sociology, 211 Oswald Tower, The Pennsylvania State University,
University Park, PA 16802 (mscott@pop.psu.edu).

This research was supported by funding (R01 HD043384) from the National Institute of Child Health and Human Development (NICHD) to Valarie King, principle investigator and by the Pennsylvania State University Population Research Institute with core support from the National Institute of Child Health and Human Development (5 R24 HD041025). This research uses data from the National Longitudinal Study of Adolescent Health (Add Health), a project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from NICHD, with cooperative funding from 17 other agencies. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (www.cpc.unc.edu/addhealth/contract.html). We are indebted to Paul Amato, Dan Hawkins, Valarie King, and Juli Sobolewski for insightful comments on an earlier version of this paper.

Corresponding author: Mindy E. Scott (phone: 814-360-3982; fax: 814-863-7216; email: mscott@pop.psu.edu)

Abstract

Pre-divorce antecedents of change and stability in father-adolescent closeness following parental divorce were investigated using the National Longitudinal Study of Adolescent Health (Add Health). Examination of patterns of stability and change revealed that some relationships increased in closeness (16%), one third remained the same and, as expected, the majority (51%) of relationships declined. Pre-divorce parental marital quality, mother-adolescent affect, adolescent's desire to leave home, involvement in peer group activities, dislike of school, and a sense of well being predict post-divorce father-adolescent closeness. The overall pattern is that offspring with strong family and extra-familial ties, along with a robust sense of well-being, report a decline in father-adolescent closeness. On the other hand, those not doing as well with respect to these dimensions are more likely to report maintaining or increasing father-adolescent closeness. Adolescents with fewer social and individual resources may be motivated to overcome the barriers that result from a father's departure to maintain or improve relationships with their fathers.

Key words: non-resident father involvement, relationship quality, child well-being

Pre-divorce Factors Related to Post-divorce Father-child Relationship Quality

Many studies have focused on father involvement with their offspring following divorce (e.g., Ahrons and Tanner 2003; Pruett, Williams, Insabella, and Little 2003; Shapiro and Lambert 1999; see Amato and Sobolewski 2004 for a review). One of the best known is Hetherington's longitudinal study of divorce and remarriage. With her colleague Kelly (2002) she describes three types of response patterns: divorce-deactivated fathers (amount and quality of interaction declines), consistent (post-divorce relationship similar to pre-divorce affiliation), and divorce activated fathers (amount and quality of interaction increases). Their study, like others, focuses on factors surrounding the divorce and its aftermath that influence father-child relationship quality. We argue that factors antecedent to events surrounding divorce also influence change and stability in father-child closeness. Years together as an intact unit lead to well established patterns of interaction that should influence post divorce relationships. We explore the potential for pre-divorce family relationships, extra-familial social integration and individual qualities to explain post-divorce nonresident father-adolescent relationship quality. Recent research showing the beneficial effects of father-offspring closeness following divorce (e.g., Lamb 1999; Kelly 2000) behooves us to increase our understanding of the pre-divorce factors that influence continuity and change in father-adolescent closeness.

Prior research tends to assume that the father is the primary agent of change when in fact there are at least two people involved—the father and his offspring. Hetherington and Kelly (2002), for example, refer to activated and deactivated fathers. Fathers are often viewed as agents of change because, compared to pre-divorce closeness, their post-divorce involvement tends to be low. Only 25% communicate with their child once a

week or more following divorce (King 1994; Manning and Smock 1999; Seltzer and Bianchi 1988) and far fewer pursue joint or full custody. It is difficult to imagine children who have lived with their father for many years would perpetrate such a severe reduction in contact except in rare cases where the father was abusive. These facts notwithstanding, we regard the child as being equal to or more important than the father as an agent of change with respect to father-child closeness because offspring have such great power in encouraging and discouraging contact with their father. Whether a child complains to the mother about spending time with her/his father or pleads with her for additional visits makes an important difference as to whether the mother makes visitation difficult or takes action to make it happen. Offspring who appear bored the entire time they are with their father inhibit him from taking the initiative in the future whereas if the child is happy and affectionate, the father will be encouraged to have contact more often. In short, children are quite capable of deciding just how much they want their fathers in their lives after he has left home. To our knowledge, this is the first study to take into account pre-divorce offspring's perceptions and behavior in explaining father-adolescent closeness.

We propose that a decline in father-adolescent closeness is to be expected for two reasons. First, fathers typically have a lesser role in the day-to-day care of and communication with their children. It is difficult to move from a life long history of having a secondary role in the child's life to playing an independent and more active role. Therefore, it is easier for both offspring and fathers to let the relationship erode as time passes. Second, during adolescence children are increasingly committed to the development of extra-familial ties and highly demanding ties with fathers may interfere with the cultivation of peers (e.g. Steinberg and Silk 2002). The demands of non-family

affiliations may lead offspring to be less interested in maintaining a high quality relationship with their father. The lack of interest on the part of offspring also discourages fathers from developing and maintaining relationships with their offspring.

We propose that there are circumstances when both offspring and fathers work very hard to improve their relationship. Those fathers that do maintain or improve their relationships with their children may feel morally and socially obligated to do so if his child has poor relationships with other family members, is less socially integrated, and has a low sense of well-being. These same factors may motivate a troubled adolescent to attempt to maintain a close father-child relationship to fulfill social and personal voids.

Despite the importance of these factors social scientists have limited their focus on pre-divorce factors that influence post-divorce contact to offspring's gender and age. Some studies find no difference between son's and daughter's contact with father (e.g., Cooksey and Craig 1998), others find sons more involved with fathers (e.g., Manning and Smock 1999), and still others find son's contact less than daughters (e.g., Seltzer 1991). With respect to age, some studies find post-divorce father involvement is greater when children are older (e.g., Seltzer 1991) and others indicated it is greater when the children are younger (e.g., Nord and Zill 1996). While we cannot focus on children of all ages, we will assess differences in stage of adolescence (middle and late) for males and females as well as their pre-divorce family relationships, extra-familial social integration, and individual qualities.

The conceptual framework guiding the study begins with the distinction between continuity and change. The continuity perspective suggests that father-adolescent closeness following divorce is likely to be a continuation of pre-divorce relationships. We

view continuity as having two sources. First continuity results from fathers and offspring working hard to maintain a good relationship that is challenged by father's departure from the home. Second, continuity will be maintained when father-offspring relationship quality is poor, with neither party feeling any pressure to improve it. The change prospective assumes that divorce reorganizes father-adolescent relationships. A significant literature suggests that the majority of the relationships decline. There is, however, research indicating that a small number of father-offspring relationships improve following divorce. We review the theory and research pertinent to each trajectory.

Continuity in father-adolescent closeness

Father-child interaction and relationship quality patterns are reinforced daily over a period of years, in the case of this study a minimum of 13 years. The often used phrase "the best predictor of the future is the past" would lead us to expect father-child closeness to remain unchanged in a number of cases. Supporting the idea of stability in father-child closeness before and after divorce are studies indicating continuity in behavior problems before and after significant events in children's lives. They indicate that post-event problem behavior is often evident years before the event. For example, Caspi and Moffitt (1991) studied the link between stressful or early menarche and behavioral problems. Their research indicates that stressful transitions accentuate behavioral problems already in evidence rather than create new ones. A study of the adjustment of non-marital birth mothers following birth indicates that adjustment problems are manifested well before the birth (Jaffee 2002). In a longitudinal study of the impact of divorce on behavior problems among children in England, Cherlin and his colleagues (1991) discovered

evidence that post divorce behavior problems were evident years before the divorce. A prospective study of the influence of parental-child relationship problems and parental marital quality on parent-child affection over a period of years is especially salient to the present study. Amato and Booth (1996) found that parental marital happiness consistently predicted parent-child affection over an eight year period. These studies suggest that pre-divorce levels of closeness may be carried over to post-divorce father-adolescence closeness.

The proposed continuity in father-child closeness is also consistent with set-point theory which suggests that while many people react strongly to life events, they eventually return to their initial levels of well-being (e.g., Brickman, Coates, and Janoff-Bulman 1978).

Change in father-adolescent closeness

Transitions in family structure are well known for their potential to affect offspring well-being and life chances (e.g., Wu and Martinson 1993). More specifically, divorce often has profound influences on children's lives (e.g., Amato and Booth 1997). Perhaps the most significant change associated with divorce is the departure of a parent (typically the father) from the home. Father absence challenges the integrity of parent-child relationships and one would expect a decline in relationship closeness (Furstenberg and Harris 1992). Not only does father's departure result in the loss of a co-parent, creating economic and emotional stress for the custodial parent, but it often results in the child feeling abandoned by her/his parents (Lamb 2004). Nevertheless, as Hetherington and Kelly (2002) point out, in addition to the expected decline, father-child relationship closeness may increase in other individuals. They propose that the father's fear of losing

the child's affection or because conflict with the mother has faded account for the increase in closeness. While these may be important, we have no way of measuring either variable.

Recent set-point research explores a range of conditions influencing the amount of reaction to events as well as whether people return to baseline levels of well-being. These models are relevant to the study of father-child post divorce closeness. A recent study explores the circumstances under which reaction to marriage or the death of a spouse are modest (Lucas, Clark, Georgellis, and Diener 2003). For example, people whose initial level of well-being was high reacted least positively to marriage. The authors suggest that a very happy individual is likely to have a rich social network and has less to gain from marriage. The implication of this finding for father-child closeness following divorce is that children whose pre-divorce overall level of wellbeing is high with respect to family relationships, extra-familial affiliations, and individual qualities are going to be less affected by divorce. As a result, they may do little to prevent the natural collapse of the father-child relationship caused by the father leaving home. Offspring's lack of interest in pursuing the relationship may lower the father's interest in preventing the deterioration of the association. On the other hand, children whose pre-divorce life in and outside the family is not very satisfying have more to lose as a result of divorce and may try to reinforce a relationship with their father they judged to be favorable or to invest in increasing the quality of a moderately satisfying relationship.

Pre-divorce Factors Linked to Father-child Closeness.

We selected pre-divorce family relationships, non-familial social networks, and individual competence as variables most likely to influence change or stability in father-child closeness following divorce. These areas were selected because they cover broad aspects of children's lives and are consistently related to a wide range of child outcomes.

Parental marital relationship quality has consistently been shown to be related to youth outcomes (Amato and Booth 1997; Amato and Booth 1996). In keeping with our conceptual framework we expect adolescents whose parents report high levels of marital quality to let the father-child relationship decline with the force of father absence. As a result of living with happily married parents, adolescents will have developed a good deal of resilience (Masten, Best, and Garmezy 1990), enough to let the father-child relationship decline. If marital quality is low, we expect youth will have more incentive to work toward maintaining high quality father-child relationships, perhaps even a relationship of moderate quality.

Two caveats. Some children whose parents have a low quality marriage may recognize it is better to distance themselves from abusive fathers or neglectful parents (Booth and Amato 2001). Still other youth and their fathers, once freed from a bad marriage that constrained quality father-child interaction, recognize the advantages of building a positive relationship.

Mother-child affect is consistently linked with adolescent adjustment and competence (Park and Buriel 1998). Children who are well off socially and psychologically as a result of close relationships with their mothers will let satisfactory father-child closeness erode. Those who do not have affectionate relationships with their

mother are not well off, and will attempt to enhance a moderately satisfying relationship with their father or prevent the erosion of a very good relationship with their father.

Desire to leave home is an attitudinal measure that is assumed to reflect all aspects of home life including the quality of parents' marriage, relationship with each parent, sibling relationships, and home amenities. In accord with our conceptual framework those with little desire to leave home would be less inclined to invest in maintaining high levels of father-child closeness or in increasing the quality of their relationships with their father. Whereas those who wish to leave home may attempt to enhance their relationship with their father.

Group activity is an extra-familial form of social integration that has big payoffs in opportunities for skill building, identity development, and establishing valuable social ties with peers and adults. These activities include hobbies, team sports, roller blading, and karate or dancing; activities that typically involve organized involvement with other people including adults. As children move into and through adolescence, extra-familial relationships take on increasing significance both in terms of preference and socio-emotional development (Steinberg and Silk 2002). Those who are highly involved in such activities are less likely to build or maintain close post-divorce relationships with their father. Those less involved in group activities may invest more in maintaining close relationships with their fathers or enhancing those that are moderately close. Consistent with this proposition is Wallerstein, Lewis and Blakeslee's (2002, 174-185) finding that court ordered visitation is sometimes resented because it interferes with time spent in group activities

Dislike of school may reflect the adolescent's views on a number of elements that comprise integration in school. They include whether teachers are fair, friendly, and interested in student progress. They also reflect the extent to which students feel accepted by peers and an attachment to school. As one might expect disliking school is negatively related to school performance and positively related to risky behavior and other adjustment problems (Wentzel 2002; Dornbush et al. 2001). Those who like school are less likely to invest in building or maintain close relationships with father because they have strong extra-familial ties, whereas those who dislike school are more likely to make such investments.

Sense of wellbeing is an individual quality that combines feelings of personal efficacy and control with life satisfaction. Sense of wellbeing is related to a wide range of social, individual and contextual variables. Adolescents with high feelings of wellbeing are less likely to invest in building or maintaining father-offspring relationships following divorce. Those with moderate or low feelings of wellbeing are more likely to attempt to enhance or maintain their relationship with their father.

Proposed Analysis

From the Add Health data we draw on sub-samples of adolescents who were living with both biological parents at the time of their first interview and had experienced a divorce between the first wave of interviews and the third wave five years later. There were divorces that took place between wave one and two, but too few cases to analyze separately. These cases were, however, included in the sample. The five year span gave us enough cases to conduct the analysis. We used ordinal regression to evaluate the

influence of pre-divorce family, extra-familial, and wellbeing factors on continuity and change in father-adolescent closeness.

Methods

Data

The National Longitudinal Study of Adolescent Health (Add Health) is a nationally representative survey of high school and middle school students in the United States. The full sample consists of 14,322 respondents interviewed over three waves in 1995, 1996 and again during 2000-2001. The respondents were from grades seven through twelve at the first wave. A parent or parent-figure (usually the resident mother) of each adolescent was also interviewed at the time of the first wave.

For the purposes of this study, we selected a subsample of respondents living with both biological parents during the first wave who subsequently divorced. Respondents were not asked directly whether or not their parents had divorced since the first wave, but we were able to obtain this information indirectly. For divorces that occurred between Waves 1 and 2, we utilized information from the household roster to estimate the number of households in which the biological father was still living, but no longer present in the household.

A count of the number of divorces that occurred between Waves 2 and 3 was obtained from a question that asked, “Do your biological parents still live together?” If respondents’ parents were no longer living together, and both still alive, we counted them as divorced. Our final sample consists of 483 respondents who were living with both biological parents at the first wave, had experienced a divorce sometime before the third wave, and for whom we have complete data.

Measures

Change in Closeness Because we are concerned with how divorce affects fathers' relationships with their children, our dependent variable measures the amount of change in the adolescents' feelings of closeness to their fathers. Respondents were asked "How close do you feel to your father?" and answered on a five-point scale with categories not at all, very little, somewhat, quite a bit and very much. Closeness at wave one was subtracted from closeness at wave three to estimate the change in closeness since wave 1. A positive value indicated an increase in closeness and a negative value a decline. The no-change category was coded 0. Those who didn't change but received a value from 1 to 3 in both waves were assigned a score of 0 as were those who received a closeness score of 4 or 5 but didn't change. This takes into account those who scored low had more opportunity to increase over the five year period and those scored high had more opportunity to decrease of the course of the study. We also check floor and ceiling effects by rerunning the equations leaving out the highest and lowest score on the scale. The coefficients for the independent variables were in the same direction as in the analysis including all cases. Three of the six continued to be statistically significant and the remaining three had probabilities between .13 and .21. This suggest that floor and ceiling effects do not compromise our models

Respondents provided information on additional dimensions of the father-child relationship in wave one, but not in wave three. Relationship closeness is highly related to other aspects of the father-adolescent relationship in wave one such as feelings of caring, warmth and love, good communication, satisfaction with the father-child relationship and enjoying activities with fathers. The correlations between these

dimensions of closeness and adolescents' reports of how close they feel toward their fathers were .54 or higher.

Our independent measures from the first wave include pre-divorce family, extra-familial and individual level predictors. Marital quality was measured using data from the mothers' interview, while the remaining items come from interviews with the children. The dimensionality of multiple item scales was checked using factor analysis techniques. All scales represent uni-dimensional constructs.

Family Level Predictors

Pre-Divorce Marital Quality We use mothers' information about various aspects of her marital relationship to create a scale of marital quality. Mothers were asked how happy they were with their marriage, whether or not they had talked to their husbands about separating in the past year, and how often they fight with their spouse. The three items were recoded so that high scores reflect greater marital quality. We then created z-scores so that each variable had a mean of zero and a standard deviation of one. The standardized items were then combined to form a single scale ($\alpha=.44$).

It was not always the mother who completed the parent interview. This resulted in 386 cases instead of 483 when data from the mother's interview was used. Missing cases were replaced with imputed values using the expectation maximization (EM) algorithm (Allison 2001). This procedure was performed for all other independent variables, although there was never more than one or two missing cases in each of the other variables.

Mother Affect Mother affect is a scale comprised of four items that reflect the quality of the adolescents' pre-divorce relationship with their mothers ($\alpha=.85$).

Respondents were asked how much they agree (1=strongly disagree; 5=strongly agree) that their mother is warm and loving, their mother discusses and helps them understand things they do wrong, they are satisfied with the way they communicate with their mother, and are satisfied with the overall relationship they have with their mother.

Want to Leave Home Adolescents' desire to leave home is measured by a single item asking respondents "How much do you feel that you want to leave home-not at all, very little, somewhat, quite a bit or very much?"

Extra-Familial Level Predictors

Group Activities This measure reflects the frequency of respondents' participation in activities that typically include other adolescents. Respondents were asked how often in the past week (0=not at all; 1=one or two times; 2=three or four times; 3=five or more times) they went roller-blading/skateboarding/bicycling, played an active sport, or exercised. The four items were summed together to obtain a measure of whether or not they participated in one or more of the activities, and how often. The final measure ranges from zero to nine times in the past week.

Dislikes School Respondents were asked a number of questions related to their attitudes toward their school environment, their teachers and their classmates. We tested the relationships among all school-related items using factor analyses. To measure respondents' dislike of school we chose three items that create a uni-dimensional scale reflecting the extent to which respondents strongly agree, agree, neither agree nor disagree, disagree or strongly disagree that they feel close to people at school, they feel like they are a part of their school, and they are happy to be at their school ($\alpha=.74$). Including other items in the scale reduced its reliability.

Individual Level Predictor

Well-Being Adolescents' well-being reflects their feelings about the quality of relationships with others ("feel loved and wanted"; "feel socially accepted") and perceptions of their own qualities and abilities ("have a lot of energy"; "are well coordinated"; "are physically fit"; "have a lot of good qualities"; "have a lot to be proud of"; "like themselves the way they are"; and "feel they are doing everything just about right"). Respondents answered whether or not they agree or disagree about each of these nine aspects of well-being on a five-point scale (strongly disagree, disagree, neither agree nor disagree, agree or strongly agree). The items are combined into a scale of well-being ($\alpha=.86$).

Controls

Our final models control for respondents' gender and age. Previous research suggests that offspring's gender and age around the time of divorce influence how divorce affects children's well-being and parent-child relationships following divorce (Booth and Amato 2001; Orbuch et al. 2000). Gender is a dichotomous variable where 1=female (51.9%).

We divided adolescent age into two categories to reflect important developmental differences between middle and late adolescence. The differences include a decline in parent-child conflict often found in middle adolescence. In addition, compared to those in middle adolescence, those in late adolescence engage in greater multidimensional and relativistic thinking, have more autonomy and greater geographic mobility, are more involved with the opposite sex, and are less involved in day to day activities with their

parents (Steinberg and Silk 2002). Adolescents ages 13, 14, and 15 were coded 0 (36.6%) and those 16, 17, and 18 were coded 1.

We tested for potential interactions with race, but found no significant differences between Non-Hispanic Whites, Non-Hispanic Blacks, Hispanics and Asians. Nor, were any of the direct effects statistically significant. Race was, therefore, not included in our final models.

Analytic Strategy

We begin by summarizing the amount and patterns of change in father-child relationship closeness that occurred among our sample of adolescents that experienced a divorce after the first wave. Our dependent variable is a categorical variable that allows us to examine the number of respondents that experienced a decrease, an increase or no change in father-child closeness following divorce.

Next, ordinal logistic regression is employed to predict stability and positive or negative change in father-child closeness based on pre-divorce family, extra-familial and individual conditions. In ordinal logistic regression, the antilog of the regression coefficients represent the expected change in the odds of being one step higher on the dependent variable corresponding to a unit change in the predictor, controlling for the other variables in the model (Pleck, Sonenstein and Ku 1991, 738-740).

Ordinal logistic regression is appropriate for several reasons. First, it allows us to predict a change in closeness regardless of respondents' initial level of closeness. This alleviates any potential ceiling and floor effects that may occur due to the limited response nature of our closeness variables. Second, ordinal logistic regression allows us to combine respondents that experienced no change in closeness with those that

experienced a change (either an increase or a decrease) in closeness in the same dependent variable. We divided the no change group into two categories; those that had high versus low levels of closeness at the first interview.

Analyses are conducted using the overall sample weight to correct for the differential probabilities of sample selection resulting from factors such as the oversampling of minority groups. The SVY procedures in STATA (Stata Corp 2003) are used to adjust the standard errors of the model estimates for the clustered and stratified design of Add Health (Chantala and Tabor 1999).

We first test the effects of each independent variable on a change in closeness controlling for age and gender. Next, the independent variables are entered into a single equation to examine the extent to which the independent variables are interrelated, and also which variables have the most power in explaining changes in father-child closeness after controlling for the effects of the other independent variables.

To assess the consistency of our results, we compare our final models to those generated from ordinary least squares regression. All of the coefficients were in the same direction found in the ordinal analysis and statistically significant.

Results

Amount and Direction of Change in Closeness between the First and Third Waves

Our first goal was to analyze the patterns of change in father-adolescent relationship closeness before and after divorce. Evidence for both the continuity and change perspectives are present. The patterns were in expected directions as indicated by the frequencies for each level of change shown in Table 1. A majority of adolescents (51 percent) reported a decline in closeness while one third reported no change. Of those that

experienced no change, 85% were consistently high, while only 15% were consistently low. Only 16 percent reported an increase in adolescent-father relationship quality.

----- Table 1 about here -----

Pre-divorce Factors Linked to Stability and Change in Father-child Closeness.

A correlation matrix (Table 2) reveals that female offspring and those in late adolescence may be closer to their biological fathers than males and those in early adolescence. The predictor variables are related to each other in consistent directions. That is, favorable attributes are positively linked with other favorable attributes and negatively associated problem attributes. The correlations between adolescent-father closeness and the independent variables are in a direction suggesting that offspring in rich familial, extra-familial environments, and who have positive attitudes tend to report a decline in father-offspring closeness while those at a disadvantaged in these areas report an improvement in closeness.

----- Table 2 about here -----

Multivariate analysis reveals that age and being female were consistently and positively related to increasing offspring-father relationship closeness in all equations. The results for age and female, along with the familial, extra-familial and individual variables that were significantly related to a change in father-child closeness are presented in Table 3.

----- Table 3 about here -----

Family Factors

Higher levels of pre-divorce marital quality were related to declines in father-adolescent post divorce closeness while adolescents residing with less happily married parents were more likely to experience no change or perhaps an increase in closeness.

Similar to marital quality, mother affect was negatively related to a change in father-adolescent closeness. Higher levels of mother affect were associated with a decline in offspring-father closeness following divorce while lower levels increased the odds of an improvement in father-adolescent closeness.

The third family predictor examined was the adolescent's desire to leave home. We assume the wish to leave was because family relationships were unpleasant. The coefficient was positive indicating that the stronger the desire to leave home the greater the likelihood there will be no change or an increase in post-divorce offspring-father closeness. Offspring that had no interest in leaving home were more likely to experience a decrease in closeness.

With respect to the family variables it appears that the less favorable the quality of family relations, the more likely adolescents are to maintain or develop closer relationships with their father following divorce. When family relationships were of higher quality, offspring were more likely to experience a decline in closeness with their fathers.

Extra-familial and Individual Factors

Participation in organized group activities was negatively related to a change in father-adolescent relationship closeness. Compared to those who were minimally involved in group activities, adolescents highly involved in shared activities with their

peers were more likely to report a decline in father-child closeness. Along with their involvement in group activities, the extent of adolescents' dislike of school reflects their level of social integration. Greater levels of social integration as measured by more positive attitudes toward school decrease the odds of an improvement in father-child relationship closeness while a greater dislike of school was positively related to increases in relationship quality.

Individual well-being was negatively related to a change in closeness. Individuals with a low level sense of well-being were more likely to report an increase in offspring closeness while those with a high sense of well-being indicated a decline in closeness.

Collective Influence of Independent Variables

When all six variables were entered into a single equation only mother's affect and involvement in group activities were marginally significant at the .10 level. This indicated that many of the variables were highly interrelated. For example wanting to leave home was correlated -.40 with mother's affect. Wellbeing was correlated -.42 with disliking school.

Examining the independent variables in subgroups reveals their individual contributions. With respect to familial variables, the mother-child relationship overpowers the effects of parents' marital quality and adolescent's desire to leave home. Marital quality and offspring's desire to leave home become non-significant when mother affect is entered into the model (see Table 4, column 1). When all three measures of extra-familial social integration are in the equation, group activities remained marginally significant while the other two are no longer significant (Table 4, column 2). It appears that affect with the primary caretaker and integration with peers are key variables to

understanding closeness to non-resident father-adolescent closeness. If we enter the two key variables in (mother affect and group participation) in the equation both are statistically significant (Table 4, column 3). This indicates that both familial and extra-familial factors are important in predicting post-divorce father-adolescent closeness. The fact that mother-adolescent affect is a powerful predictor is not surprising given the mothers are typically the primary caretaker. Developing relationships with peers is one of the primary aspects of adolescent developmental (the other being the development of secondary sexual characteristics). Thus, it is not remarkable that peer activities are also a key factor in understanding post divorce father-adolescent relationship closeness.

----- Table 4 about here -----

Summary of Results

In summary, multiple aspects of familial relations influenced the change in father-adolescent closeness, as did three aspects of extra-familial social integration. Respondents' in supportive environments and with positive attitudes tended to report a decline in father-adolescent closeness whereas those in disadvantaged environments and negative attitudes were likely to report an increase in the quality of their relationship with their father. Mother's affect and involvement in group activities were the most powerful indicators of father-offspring closeness. This is not surprising because the predictors have deep roots in such personality qualities as locus of control and feelings of efficacy and interpersonal effectiveness.

The results obtained through ordinary least squares regression were very similar to those using ordinal logistic regression techniques, lending further support to our

findings. Removing those respondents at the extreme levels of pre-divorce father-child closeness also showed similar results.

As is evident from the analyses presented above, a single theme pervades the findings. Adolescents who, prior to parental divorce, were part of a family whose interrelationships were of low quality, had low sense of well-being, and were not well integrated socially were less likely to experience a decline in offspring-father closeness and more likely to report no change or an increase in closeness. Offspring who enjoyed high quality family relationships, had a sense of well being, participated in group activities, and liked school, on the other hand, were more likely to experience a decline in closeness with their father.

There are several ways to interpret the finding that disadvantaged adolescents are more likely to report an increase (or no change) in closeness to their fathers following divorce while youth under more favorable circumstance appear to report a decline in closeness. One explanation is that adolescents with more favorable family, individual, and extra-familial circumstances adapt more easily to parental loss. Another is that offspring's social lives are so rich that they don't need to cultivate a closer relationship with their fathers. Still another possible explanation is that fathers take the initiative and cultivate a relationship with their son or daughter, through a sense of obligation to a needy child.

Discussion and Conclusion

Pre-divorce antecedents of change and stability in father-adolescent closeness following parental divorce were investigated using Add Health data. Examination of patterns of stability and change revealed that a few relationships increased in closeness

(16%), one third remained the same and the majority (51%) of relationships declined, a finding to be expected given the barriers associated with maintaining or increasing relationship quality that accompany father's departure from the household. Pre-divorce parental marital quality, mother-adolescent affect, adolescent's desire to leave home, involvement in peer group activities, dislike of school, and a sense of well being predict post-divorce father-adolescent closeness. The overall pattern is that offspring who have strong family and extra-familial ties, along with a robust sense of well-being, report a decline in father-adolescent closeness. On the other hand, those not doing as well with respect to these dimensions are more likely to report maintaining and increasing father-adolescent closeness. We conclude that father's departure from the household creates barriers to returning to pre-divorce levels of father-adolescent closeness. The drop in interpersonal contact within the privacy of the home leads to an erosion of the relationship that requires considerable effort to prevent. Unless offspring have a strong need to maintain the relationship because they are disadvantaged with respect to interpersonal or individual attributes, the erosion in closeness is likely to unfold. Fathers may also have such needs but the data did not allow us to explore them.

We are mindful that troubled marriages often discourage father-child closeness, especially when parental conflict involves the children in some way. Once the divorce is over, factors that constrained father-adolescent closeness may disappear and allow fathers and children to re-establish or build a new relationship (Booth and Amato 2001). Our findings lend support to this hypothesis, showing that adolescents whose mothers reported lower quality marriages were more likely to experience an increase in father-child closeness following divorce.

Adolescent's age and gender are systematically related to post divorce father-adolescent closeness. Older youth (16 and older) were more likely to maintain or increase father-youth closeness. We speculate that older youth have developed to the point where they have greater skills in creating and maintaining interpersonal relationships both within and outside the home. Combined with their greater freedom and mobility, it makes it easier for them to continue or enhance their relationship with their father. Lacking these skills and opportunities younger children may be much more dependent upon their mother to define and control father-offspring relationships.

Female adolescents also tended to have closer post divorce ties with their father. Years of research have shown that females are expected to maintain relationships within the family as well as in other arenas and are indeed more active and skilled in doing so (e.g., Booth 1972). Notwithstanding the tendency for female youth to bond with their mother following divorce (Booth and Amato 2001), female adolescent's greater interpersonal skills and obligations are consistent with the finding that daughters are more likely to maintain or build relationships with their fathers following divorce than sons.

Hetherington proposed three paths that define the course father-adolescent closeness takes following divorce, consistent, divorce activated, and divorce deactivated. Our data suggest that an increase in closeness (divorced activated) following divorce is quite rare, occurring in only 16 percent of father-adolescent relationships. Even maintaining pre-divorce relationship closeness only involved one third of the cases. By far the most pronounced path, involving the majority of adolescents, was a decline in father-child closeness. This finding is not surprising given the momentous changes invoked by the father leaving the household.

We examined a number of other variables that had potential for explaining father-adolescent closeness following divorce. Parents' education and income are positively associated with parent-child relationship quality (Amato and Booth 1997) but we did not find either of these associated with the course of father-offspring closeness following divorce. Problem behavior such as depressive symptoms and risky or antisocial behavior have reciprocal links to parent-child relationship quality, but there was no indication that they influenced the course of father-adolescent closeness following divorce. We thought that the child's health or disabilities could influence father's feelings of obligation to help care for the child or, alternatively, a tendency to escape the demands associated with poor health and disability. No association was discerned. Finally, because religion is a pro-family institution we thought mother's religiosity might be linked to father-adolescent closeness, but it was not. There was no information on father's religiosity that perhaps would be the more relevant variable. King (2003) finds that religious fathers (divorced and married) report they are more involved and have higher quality relationships with their offspring than less religious fathers. We also explored the possibility that offspring's post-divorce achievements (marriage, parenthood, education and occupation) might kindle father's or offspring's interest in establishing a closer relationship, but they did not. However, most of youth in this study were too young to have firmly established achievements in these areas.

The study would have benefited from a larger sample that might have revealed links with the variables listed above or other influential pre-divorce variables that are linked to post divorce father-offspring closeness. A larger sample and another interview might have revealed other trajectories of closeness (e.g., ones involving multiple

changes) that may influence long-term levels of closeness. The study would have also benefited from information on precisely when the divorce occurred relative to the time closeness data were collected. Closeness measures just before or just after divorce are likely to be different than those obtained after a longer interval. We approximated such an analysis by creating an interaction term reflecting the timing of divorce (occurred between first and second wave/after the second wave X by closeness) but it was not statistically significant in any of the analyses. It is the long-term path of the father-adolescent relationship in which we are interested because of its implications for social integration and its consequences for wellbeing. A more precise measure of when the divorce occurred is needed. Finally, the study would have benefited from information obtained directly from the father with respect to his evaluation of father-child closeness, his perceptions of the importance of the father-offspring link, and his views of the opportunities and constraints that affected pre- and post-divorce closeness.

To our knowledge this is the first large sample longitudinal study to examine pre-divorce influences on the course of father-adolescent closeness associated with divorce. The study identifies familial, extra-familial, and individual attributes that influence the course of father-offspring relationship closeness. The findings indicate that offspring with high social and individual resources allow the erosion embedded into their fathers' departure from the household to occur, whereas those with few resources attempt to prevent the decline from occurring and invest in enhancing the relationship. While the majority of father-child relationships appear to decline following divorce, a significant number of adolescents experience continuity in the quality of their relationships with their fathers before and after divorce, and some may even develop stronger relationships

with their fathers following divorce. Our study clarifies several pre-divorce interpersonal and individual antecedents that motivate certain adolescents to maintain or improve pre-divorce levels of closeness with their fathers.

References

- Ahrons, C., & Tanner, J. 2003. Adult children and their fathers' relationship changes 20 years after paternal divorce. *Family Relations*, 52, 340-351.
- Allison, P. (2001). *Missing data*. Thousand Oaks, CA: Sage.
- Amato, P., & Booth, A. (1996). A prospective study of parental divorce and parent-child relationships. *Journal of Marriage and Family*, 58, 356-365.
- Amato, P., & Booth, A. 1997. *Generation at Risk: Growing up in a Era of Family Upheaval*. Cambridge MA: Harvard University Press.
- Amato, P., and Sobolewski, J. (2004). The effects of divorce on fathers and children: Nonresidential fathers and stepfathers. In M. Lamb (Ed). *The role of the father in child development*. (pp. 341-367). Hoboken, NJ: John Wiley and Sons.
- Booth, A. (1972). Sex and social participation. *American Sociological Review*, 32, 183-192.
- Booth, A., & Amato, P. 2001. Parental pre-divorce relations and offspring post-divorce wellbeing. *Journal of Marriage and Family*, 63, 197-212.
- Brickman, P., Coates, D., & Janoff-Bulman, R. 1978. Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 36, 917-927.
- Caspi, A., and Moffitt, T. 1991. Individual differences are accentuated during periods of social change: The sample Case of girls at puberty. *Journal of Personality and Social Psychology*, 61, 157-168.

- Chantala, K., & Tabor, J. 1999. *Natioinal Longitudinal Study of Adolescent Health: Strategies to Perform a Design_based Analysis Using the Add Health Data*. Chapel Hill, NC: Carolina Population Center.
- Cherlin, A. J., et al. 1991. Longitudinal studies of effects of divorce on children in Great Britain and the United States. *Science*, 252, 1386-1389.
- Dornbush, S., Erickson, K., Laird, J., & Wong, C. 2001. The relation of family and school attachment to adolescent deviance in diverse groups and communities. *Journal of Adolescent Research*, 16, 396-422.
- Furstenberg, F., & Harris, K. (1992). The disappearing American father? Divorce and the waning significance of biological parenthood. Pp. 197-124 in S. South and S. Tolnay (Eds.). Boulder CO: Westview Press.
- Graubard, B., & Korn, E. (1994). Regression analysis with cluster data. *Statistics and Medicine*, 13, 509-522.
- Hetherington, E., & Kelly, J. 2002. *For Better or For Worse: Divorce Reconsidered*. New York: W.W.Norton.
- Jaffee, S. 2002. Pathways to adversity in young adulthood among early childbearers, *Journal of Family Psychology*, 16, 38-49.
- Kelly, J. (2000). Children's adjustment in conflicted marriage and divorce: A decade review of research. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 963-973.
- King, V. 1994. Nonresident father involvement and child well-being: Can dads make a difference?, *Journal of Family Issues*, 15, 78-96.

- King, V. 2003. The influence of religion on fathers' relationships with their children. *Journal of Marriage and Family* 65, 382-395.
- Lamb, M. (1999). Non-custodial fathers and their impact on children of divorce. In R. Thompson & P. Amato (Eds.), *The post-divorce family: Research and policy issues* (pp. 105-125). Thousand Oaks, CA: Sage.
- Lamb, M. (2004). The role of the father: An introduction. In M. Lamb (Ed). *The role of the father in child development*. (pp. 1-31). Hoboken, NJ: John Wiley and Sons.
- Lucas, R., A. Clark, Y. Georgellis, and E. Diener. 2003. Reexamining adaptation and the set point model of happiness: reactions to changes in marital status. *Journal of Personality and Social Psychology*, 84, 5277-539.
- Manning, W., & Smock, P. (1999). New families and nonresident father-child visitation. *Social Forces*, 78, 87-116.
- Orbuch, T. L., Thornton, A. & Cancio, J. 2000. The impact of marital quality, divorce and remarriage on the relationship between parents and their children. *Marriage and Family Review*, 29, 221-237.
- Parke, R. D., & Buriel, R. 1998. Socialization in the family: Ecological & ethnic perspectives. In W. Damon (Series Ed.) N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology* (Vol. 3, pp. 463-552). New York: Wiley.
- Pleck, J.H., Sonenstein, F.L., & Ku, L.C. 1991. Adolescent males' condom use: Relationships between perceived cost-benefits and consistency. *Journal of Marriage and the Family*, 53, 733-745.
- Pruett, M., Williams, T., Insabella, G., & Little, T. 2003. *Journal of Family Psychology*, 17, 169-180.

- Seltzer, J.A. & Bianchi, S.M. 1988. Children's contact with absent parents, *Journal of Marriage and the Family*, 50, 663-677.
- Shapiro, A., & Lambert, J. 1999. Longitudinal effects of divorce on the quality of the father-child relationship and on fathers' Psychological Well-being. *Journal of Marriage and Family*, 61, 397-408.
- Stata Corporation. 2003. STATA reference manual, release 8. College Station, TX: Stata Press.
- Steinberg, L., & Silk, J. 2002. Parenting Adolescents. In Borstein (Ed.), *Handbook of parenting: Vol. 1. Children's parenting* (2nd ed., pp. 103-133). Mahwah, NJ: Lawrence Erlbaum.
- Wallerstein, J., Lewis, J. & Blakeslee, S. 2000. *The Unexpected Legacy of Divorce: A 25 Year Landmark Study*. New York: Hyperion.
- Wentzel K. 2002. Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73, 287-301.
- Wu, L. & Martinson, B. 1993. Family structure and the risk of pre-marital birth. *American Sociological Review*, 58, 210-232.

Table 1. Change in Offspring's Closeness to Their Father Following Divorce Obtained by Subtracting Pre-divorce Value From Post Divorce Value

	Value	unweighted <i>n</i>	%
Largest increase	3	5	1
	2	20	4
	1	53	11
Constantly Low	0	24	5
Constantly High	0	135	28
	-1	109	23
	-2	77	16
	-3	32	6
Largest decrease	-4	28	6

Table 2. Correlation Matrix of Variables Used in the Analysis (N=483)

Variables	1	2	3	4	5	6	7	8
1. Change in closeness	–							
2. Adolescent age ^a	.16***	–						
3. Adolescent gender ^b	.18***	.04	–					
4. Pre-divorce parental marital quality	-.11*	.10*	.09*	–				
5. Mother affect	-.25**	-.20**	-.06	.13**	–			
6. Want to leave home	.22***	.25***	.04	-.17***	-.40***	–		
7. Involvement in group activities	-.19***	-.17***	-.16***	-.09*	.12**	-.16***	–	
8. Dislikes school	.17***	.14**	-.11**	-.13**	-.32***	.27***	-.27***	–
9. Adolescent Well-Being	-.19***	-.16***	-.14***	.02	.50***	-.33***	.29***	-.42***

^a Adolescent age: 0 = 13, 14 and 15 year olds, 1=16, 17 and 18 year olds. ^b Adolescent gender: 0=male, 1 = female.

+ $p < 1.0$. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 3. Summary of Ordered Logit Analyses for Family and Individual Factors Predicting Change in Closeness to Fathers Before and After Parental Divorce (Unstandardized Regression Coefficients; Weighted).

Predictors	1	2	3	4	5	6	7
Adolescent age ^a	.62**	.49*	.42+	.48*	.52*	.52*	.40
Adolescent gender ^b	.67**	.61**	.61**	.54*	.70**	.59**	.63**
Pre-divorce parental marital quality	-.11*						-.09
Mother affect							-1.34+
Want to leave home			.26**				.12
Involvement in group activities				-.12*			-.10+
Dislikes school					.33*		.14
Adolescent Well-Being						-.36*	.13
unweighted <i>n</i>	483	483	483	483	483	483	483
<i>F</i>	5.47**	6.73***	6.73***	7.13***	5.67**	5.04**	3.75***

^a Adolescent age: 0 = 13, 14 and 15 year olds, 1=16, 17 and 18 year olds. ^b Adolescent gender: 0=male, 1 = female.

+ $p < 1.0$. * $p < .05$. ** $p < .01$. *** $p < .001$

Table 4. Summary of Subgroup Analyses for Family and Extra-Familial Factors Predicting Change in Closeness to Fathers Before and After Parental Divorce (Unstandardized Regression Coefficients; Weighted).

Controls	1	2	3
Age	.53*	.45*	.41+
Female	.65**	.61**	.55*
<i>Familial Variables</i>			
Pre-divorce marital quality	-.08		
Want to leave home	.16		
Mother Affect	-1.35*		-1.75*
<i>Extra-familial Variables</i>			
Adolescent Well-being		-.12	
Dislikes school		.22	
Involvement in group activities		-.10+	-.11*
unweighted <i>n</i>	483	483	483
<i>F</i>	4.54***	4.68***	6.87***

^a Adolescent age: 0 = 13, 14 and 15 year olds, 1=16, 17 and 18 year olds. ^b Adolescent gender: 0=male, 1 = female.

+ $p < 1.0$. * $p < .05$. ** $p < .01$. *** $p < .001$