Family Structure, Family Dinners, and Adolescent Well-Being

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ABSTRACT

Numerous studies report the positive effects of the "family dinner" on children. Contemporary families are characterized as hurried and even frazzled, and even under the best of circumstances substantial proportions of children do not eat dinner with their parents. A complicating factor is that nearly half of U.S. children live in "nontraditional" families (families that do not contain two biological parents). This study uses the National Longitudinal Study of Adolescent Health to examine the relationship between family structure, family dinners, and adolescent outcomes. Adolescents in nontraditional families were found to eat dinner with their families less frequently than children with two biological parents and there is significant variation in frequency of family dinners among children in nontraditional families. Analyses will test whether the effect of family dinners on adolescent well-being varies by family structure, addressing the question of whether the positive effects of family dinners hold for children in nontraditional family forms.

INTRODUCTION

A great deal has been made of the importance of the "family dinner," generally described as parents and children sitting down together to share their evening meal. Stories about the positive effects of family dinners appear regularly in magazines, the "lifestyle" section of newspapers, and parenting websites (e.g., Gibbs, 2006). Numerous studies find a positive relationship between frequency of family dinners and a range of child outcomes (e.g., Hofferth & Sandberg, 2001; Patrick & Nicklas, 2005). For adolescents in particular, family meals have been found to be associated with less meal skipping, consumption of more nutritious foods such as fruits, vegetables, and dairy, less disordered eating, lower BMI, and better psychosocial well-being including higher self-esteem, less depression, better grades, and less smoking, drug use, and alcohol consumption (Eisenberg et al., 2004; National Center on Addiction and Substance Abuse at Columbia University, 2007; Neumark-Sztainer et al., 2004; Price, Day, & Yorgason, 2009; Videon & Manning, 2003).

Modern families are frequently characterized as hurried and even "frazzled," and even under the best of circumstances substantial proportions of children do not eat dinner with their parents (Child Trends, 2009; Videon & Manning, 2003). A complicating factor is that adolescents live in a variety of family forms with different types of caretakers. Data from the 2001 Survey of Income and Program Participation indicates that two in five children under age 18 (40%) live a so-called "nontraditional" family. In other words, they do not live with two married, biological parents. One in four children (26%) lives with a single parent, 3% live with a parent and his or her cohabiting partner, 7% of children live with one biological parent and one stepparent, and 4% reside with neither of their parents (Krieder & Fields, 2005).

The extent to which a family dinner can be accomplished in these family forms has not been examined in any detail. For example, a recent study shows less healthy eating habits (e.g., skipping meals, consumption fewer vegetables and more fast food) among children who do not live with two biological parents (Stewart & Menning, 2009). Single mothers and fathers are generally solely responsible for juggling work, meals, housework, children's activities, and visitation schedules. In stepfamilies, despite the presence of an extra parent, the majority of these tasks may fall to the children's biological parent. For example, it has been found that stepparents make fewer investments in their children's health than biological parents and this could include the preparation and organization of nightly family dinners. Children with resident stepmothers are significantly less likely to have routine doctor and dentist visits and to have a place for regular medical care, they are less likely to wear seatbelts, and are more likely to be living with a cigarette smoker than children living with a biological mother (Case & Paxson, 2001). Teenagers in stepfamilies have been found to do significantly more routine housework (cooking, cleaning, and laundry) than teens in biological two-parent families (Gager, Cooney, & Call, 1999) so the likelihood of a family dinner under these circumstances may be less.

Research on the relationship between family dinners and family structure is sparse and provides mixed results. A report by Child Trends (2009) based on the 2003 National Survey of Children's Health found very little variation in family meals by family type. For example, similar proportions of adolescents in two biological parent, stepparent, and single parent families reported eating 6 to 7 meals with their families (41%, 41%, and 44%, respectively). Results for younger children were similar, with children living in single mother families reported a slightly higher frequency of family meals. No explanation for these findings was offered. Another study found that adolescents in single mother families had fewer "family routines" (an index that

includes housework, recreational and religious activities, and eating dinner together) than children in families with two biological parents or stepfamilies (Jones-Sanpei, Day, & Holmes, 2009).

With respect to adolescent well-being, it is unclear the whether the positive effects of family dinners would hold across family structures. One study based on the Adolescent Health Study found regular family meals to be associated with positive outcomes (academics, socioemotional adjustment, sexual behavior, suicide, and drug and alcohol use) in both single and two-parent families (Council of Economic Advisers to the President, 2000). A study of 228 sixth-graders found that family dinners were associated with less delinquency in single parent families (Griffin et al., 2000). Researchers have suggested that family mealtimes are indicative of a more organized and structured home environment that is good for children. Shared meals may provide children with the opportunity to talk to their parents about worries and concerns and/or share positive events with family members.

However, the positive effect of traditional family routines like family dinners may be less powerful (or absent) in nontraditional families. Rhee (2008) suggests that family meals may be stressful for families experiencing difficulties, health or financial crises, and/or communication problems. Such instances may be more prevalent in nontraditional families. Family meals might be sad and lonely for parents and children in single parent families who had been used to eating meals with now-absent family members. Children's relationships with stepparents and parents' cohabiting partners are complicated and can be strained, especially during adolescences (Stewart, 2007). Rather than providing a context for emotional bonding, the family coming together to share a meal together may exacerbate problems and provide opportunities for conflict.

Previous research does not provide detailed comparisons of frequency of family dinners for children in different family types, nor have studies examined the effect of family dinners on children's well-being in the full range of families within which children live. This study uses the National Longitudinal Study of Adolescent Health (Add Health) to examine the relationship between family structure (two parents, single parent, cohabiting partner, stepparent, and no parent), frequency of family dinners, and adolescent outcomes (academic achievement, emotional distress, and delinquent behaviors) and addresses two research questions. First, does the frequency of family meals vary across family structures? Second, do family meals have similar effects on adolescents living in different family structures, or are they more important to the well-being of adolescents in some family types compared to others?

METHOD

Data

Data for this study come from the first wave of National Longitudinal Study of Adolescent Health (Add Health), which surveyed adolescents in grades 7–12 in 1994–1995. The data contain extensive information on adolescent's daily activities, health and well-being, parental involvement, and school and community. Data were primarily drawn from adolescents' responses to questions from the in-home questionnaires, although information about parents was drawn from the resident parent questionnaire.

Analytic Sample

The sample is comprised of 20,225 adolescents who are not missing information on frequency of family dinners (2.5% of the sample). Respondents missing data on other key variables (such as adolescent outcomes) will be removed in the final analysis. Sociodemographic variables, used as

controls in multivariate analyses, will be coded to the mean or mode except in the case of substantial missing data.

Variables

Family dinners. Add Health assesses the frequency of family dinners with the following question, "On how many of the past 7 days was at least one of your parents in the room with you while you ate your evening meal?" Responses ranged from 0 to 7 days. Although an imperfect measure of family meals (i.e., "in the room" may or may not indicate eating together and/or sitting at a common dinner table), previous research based on this same item (e.g., Videon & Manning, 2003) shows similar correlations with children's eating habits and outcomes as studies that utilize different and/or more specific measures (e.g., Eisenberg et al., 2004; Gillman, Rifas-Shiman, & Frazier, 2000; Neumark-Sztainer et al., 2000). In any event, the Add Health measure provides a more conservative estimate.

Family structure. Children are categorized as living in the following family forms: (a) two biological or adoptive parents (reference category), (b) resident mother and stepfather, (c) resident mother and mother's partner, (d) resident father and stepmother, (e) resident father and father's partner, (f) single mother (i.e., unmarried/unpartnered), (g) single father, and (h) no biological or adoptive parents in the household. A small number of children who have been adopted by a stepparent are categorized as living with a stepparent.

Adolescent well-being. Three sets of variables are to be used as indicators of adolescent well-being. The first adjustment measure is the adolescent's level of emotional distress. A 4-point scale was derived from a set of 19 items in which the child reported her frequency of having had each of the following feelings during the past week, from 0 (never or rarely) to 3 (most of the time or all of the time): (1) Was bothered by things that usually don't bother you; (2) Didn't feel

like eating, your appetite was poor; (3) Felt that you could not shake off the blues, even with help from your family and your friends; (4) Felt that you were just as good as other people; (5) Had trouble keeping your mind on what you were doing; (6) Felt depressed; (7) Felt that you were too tired to do things; (8) Felt hopeful about the future; (9) Thought your life had been a failure; (10) Felt fearful; (11) Were happy; (12) Talked less than usual; (13) Felt lonely; (14) People were unfriendly to you; (15) Enjoyed life; (16) Felt sad; (17) Felt that people disliked you; (18) It was hard to get started doing things; and, (19) Felt like life was not worth living. Items 4, 8, 11, and 15 were reverse coded such that negative feelings received higher scores.

The second adjustment measure is an indicator of the child's self-reported level of participation in delinquent behaviors. Self-reports are preferable to parental reports and official court records, which both seriously underrepresent children's involvement in delinquent activity. Responses range on a 4-point scale from 0 (never) to 3 (5 or more times). The children were asked how often they engaged in the following 15 acts of delinquent or undesirable behaviors in the past 12 months: (1) Paint graffiti or signs on someone else's property or in a public place; (2) Deliberately damage property that didn't belong to you; (3) Lie to your parents or guardians about where you had been or who you were with; (4) Take something from a store without paying for it; (5) Get into a serious physical fight; (6) Hurt someone bad enough to need bandages or care from a doctor or nurse; (7) Run away from home; (8) Drive a car without its owner's permission; (9) Steal something worth more than $50; (10) Go into a house or building to steal something; (11) Use or threaten to use a weapon to get something from someone; (12) Sell marijuana or other drugs; (13) Steal something worth less than $50; (14) Take part in a fight where a group of your friends was against another group; (15) Were loud, rowdy, or unruly in a public place.

The final measure of adjustment is academic achievement, as indicated by the child's overall grade point average (GPA) in the most recent marking period, computed from the child's report of their grades in four areas: English/Language Arts, Mathematics, History/Social Studies, and Science. Responses range from 'A' (4.0), 'B' (3.0), 'C' (2.0) and 'D or F' (1.0).

These three indices have been established as having a high degree of reliability with similar samples (Stewart, 2003). Additional outcomes may be explored such as smoking drinking alcohol and sexual behavior.

Control variables. Sociodemographic variables associated with family structure, family dinners, and adolescent well-being will be included in multivariate analysis as controls. At minimum these variables will include the child's sex, age, race/ethnicity, number of siblings, parents' level of education, and household income. Previous studies have identified a range of variables that are associated with frequency of family meals (Child Trends, 2009; Hofferth & Sandberg, 2001). Additional potentially mediating variables such as parent-child closeness and/or conflict will be explored.

Analytic strategy

First, relationships between variables will be explored in a bivariate context. Second, I will use multiple regression to analyze the relationship between family structure and frequency of family dinners using either OLS or logistic regression (depending on the distribution of the dependent variable). Third, I will estimate models predicting the effect of frequency of family dinners on adolescents' emotional distress, delinquency, and academic performance for children in different family structures (using interaction terms or separate models for each family type). OLS regression will be used for the analysis of emotional distress and academic performance. Delinquency will likely be analyzed using a tobit regression model, as the distribution may be

skewed (i.e., with a large percentages of adolescents reporting not engaging in any delinquent activities). Under such conditions, OLS would produce biased and inconsistent estimates (Long, 1997). The interpretation of the tobit regression coefficients is similar to that of OLS regression.

Given the over-sampling of certain groups (e.g., high-income African Americans) in Add Health and other features of the survey's sample design, all analyses take account of sample weights, clustering, and strata using survey commands in Stata 8.2. For further details regarding compensation for survey design effects in Add Health, see Chantala and Tabor (1999).

RESULTS

Descriptive Findings

Table 1 provides the distribution of adolescents with respect to the structure of their resident family. A little over half (53%) of adolescents live with both of their biological or adoptive parents. Nearly half of adolescents live in a "nontraditional" family. That is, a family that does not contain two biological or adoptive parents. The next most common family form in this sample of adolescents is a single mother family (22%), followed by resident mother and stepfather (11%). About 2% live with a resident mother and her cohabiting partner, 3% live with a resident father and stepmother, and less than 1% reside with a resident father and his cohabiting partner. About 3% of adolescents live with a single father and 5% reside with neither of their parents.

Table 2 shows the distribution of adolescents with respect to their frequency of family dinners. Over a third of adolescents (34%) reported eating their evening meal with at least one parent between 0 and 3 times in the last week. About one in five (21%) ate with their families 4 to 5 times in the last week, and 45% of adolescents ate their evening meal with a parent 6 or 7

times. These percentages are very similar to previous studies (e.g., Child Trends, 2009; Videon & Manning, 2003).

Table 3 shows the bivariate relationship between family dinners and adolescent family structure. Adolescents with two biological parents ate their evening meal with their families the most frequently. They ate, on average, 4.9 meals with a parent, which is significantly higher than children living with a mother and stepfather (4.3), mother and partner (4.0), father and stepmother (4.4), single mother (4.1), single father (3.9), and no parent (4.3). Children with two parents were not statistically different from children living with a father and his cohabiting partner (4.6), but the number of children in this living situation is small (n = 64). About half of children with two parents ate their evening meal with their families 6 or 7 times in the last week and adolescents with two biological parents had the lowest percentage eating only 0 to 3 meals with a parent. Adolescents living with a single parent (mother or father) ate their evening meal with a parent the least often compared to adolescents in other family groups.

Adolescents living with a mother and stepfather were not significantly different from adolescents living with a mother and her cohabiting partner. Nor were adolescents living with a father and stepmother significantly different from adolescents living with a father and his cohabiting partner. Adolescents living with a mother and stepfather had a significantly higher frequency of eating their evening meal with a parent than adolescents in single mother families. Similarly, adolescents living with a father and stepmother ate significantly more family meals than children living with a single father. Adolescents living with single mothers and single fathers had similar frequencies of eating their evening meal with a parent. Adolescents living with a biological mother and stepfather ate family dinners with the same frequency as adolescents living with a biological father and stepmother.

Multivariate Findings

[This is a work in progress to be completed before PAA.]

CONCLUSION

The results reported thus far are not surprising in that adolescents from "traditional" families (i.e., two biological or adoptive parents) have significantly more family dinners per week than adolescents in nontraditional families, even among those in families that contain two adults. Among adolescents in nontraditional families, those with two parents (i.e., stepparents or cohabiting partners) have more frequent family dinners than adolescents living with a single parent. Somewhat surprising is the fact that adolescents living with single mothers and single fathers have similar frequencies of family dinners because women are generally more involved in meal preparation than men. Also surprising is the fact that adolescents who live with a biological mother and stepfather and those who live with a biological father and stepmothers ate a family dinner with the same frequency, given research indicating that stepmothers provide less routine care to children than biological mothers (Case & Paxson, 2001). Adolescents who reside with neither parent may be living with grandparents, relatives, or other caretaker—adolescents in these families are as likely to eat a family dinner as adolescents who reside with a stepparent or a parent's cohabiting partner. [Conclusions regarding the effect of family dinners on adolescent well-being will be discussed here.]

Similar to previous work (e.g., Eisenberg et al., 2004; Videon & Manning, 2003), this study is cross-sectional and therefore can not address causal mechanisms or fully account for selectivity of parents and children. Future work is planned utilizing longitudinal data from Add Health to address these issues and assess the long-term effects of family dinners on children's health and well-being as they move into adulthood.

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Table 1. Distribution of Adolescents by Family Structure

	N	Percent
Two biological or adoptive parents	10,794	53.4
Resident mother, stepfather	2,231	11.0
Resident mother, mother's partner	464	2.3
Resident father, stepmother	556	2.8
Resident father, father's partner	64	0.3
Single mom	4,460	22.1
Single dad	613	3.0
No parent	1,043	5.2
Total	20,225	100.0

Note: Analyses are currently unweighted.

Table 2. Frequency of Family Dinners in the Past Week

	N	Percent
0 to 3	6,814	33.7
4 to 5	4,308	21.3
6 to 7	9,103	45.0
Total	20,225	100.0

Note: All analyses are currently unweighted.

Table 3. Frequency of Family Dinners in the Past Week by Family Structure

	Two parents	Mother and stepfather	Mother and partner	Father and stepmother	Father and partner	Single mother	Single father	No parent
0 to 3	27.9	38.1	41.2	38.1	31.3	41.6	43.0	38.8
4 to 5	21.7	20.8	24.6	18.4	23.4	21.2	21.4	18.4
6 to 7	50.4	41.1	34.3	43.5	45.3	34.8	34.8	42.8
Mean score	4.9[b,c,e,d,f,g]	4.3[a,e,g]	4.0[a]	4.4[a,g]	4.6	4.1[a,c]	3.9[a,b,c]	4.3[a]
N	10,794	2,231	464	556	64	4,460	613	1,043

Note: Analyses are currently unweighted. Analyses are based on 20,225 adolescents.

[a]Significantly different from two parents at $p < .05$. [b]Significantly different from father and stepmother at $p < .05$.

[c]Significantly different from mother and stepfather at $p < 05$. [d]Significantly different from no parent at $p < .05$.

[e]Significantly different from single mother at $p < .05$. [f]Significantly different from mother and partner at $p < .05$.

[g]Significantly different from single dads.