**Adolescent Relationships as a Mediator Between
Childhood Family Structure Turbulence and Young Adult Union Formation**
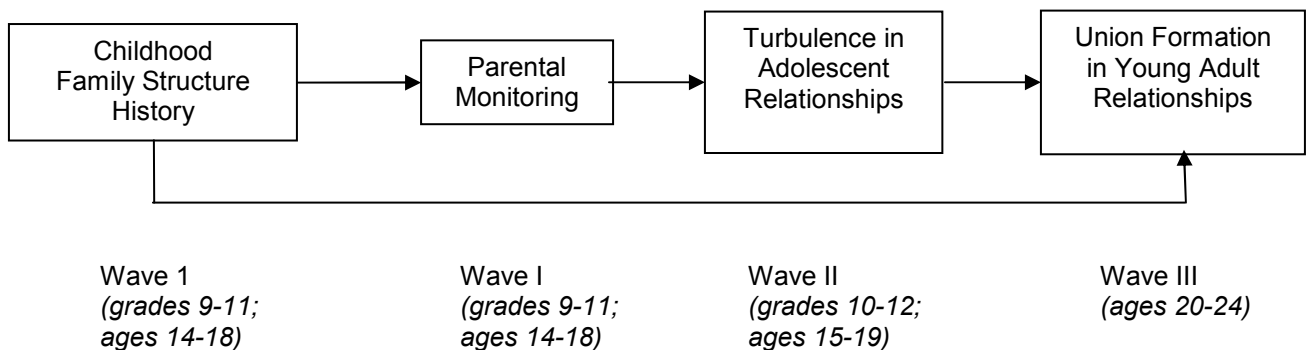
Suzanne Ryan, Kate Perper, and Erin Schelar
Child Trends

Overview of the Study

This study takes a longitudinal approach to understand the intergenerational link between childhood family structure history and the relationships young people form during adolescence and the transition to adulthood. In particular, we examine whether the association between childhood family structure history and young adult union formation is mediated by adolescent relationship turbulence. Secondarily, we also test parental monitoring as a mediator between childhood family structure history and adolescent relationship turbulence.

Figure 1 below provides a conceptual framework to illustrate the intergenerational nature of this study and to guide the analyses for the project. The diagram depicts the expected direct association between childhood family structure history and union formation in young adult relationships. It also shows the expected mediating effects of adolescent relationship turbulence on young adult relationship formation, as well as the hypothesized mediating effect of parental monitoring on adolescent turbulence.

Figure 1. Conceptual Model

| Wave 1 (grades 9-11; ages 14-18) | Wave I (grades 9-11; ages 14-18) | Wave II (grades 10-12; ages 15-19) | Wave III (ages 20-24) |

We use data from three waves of the National Longitudinal Study of Adolescent Health (Add Health), which provide a wealth of retrospective information on relationship turbulence, with detailed information on the respondents' parents' relationship histories as well as relationship histories for the respondents themselves in their adolescent and young adult years. We create full family structure histories by capturing any change in parents' marriage or cohabitation status from the time of a child's birth through adolescence. We explore three critical dimensions of parental family structure history – number and type of transitions and duration of time in specific family statuses. Our outcome measure of early union formation is defined as marriages or cohabitations formed by age 24. Adolescent relationship turbulence captures the total number of

relationships (both sexual and non-sexual) respondents engaged in during adolescence. We use structural equation models (SEM) to examine both direct and indirect (mediating) influences.

This paper contributes to the existing body of research by (a) using longitudinal data on a recent cohort of youth transitioning to adulthood; (b) testing comprehensive measures of parental family structure history from birth through adolescence, (c) focusing on young adult marriages as well as cohabitations; and (d) examining the important mediating influences of adolescent relationships and parental monitoring.

Background

Research has clearly established an intergenerational component of family disruption, with the negative consequences of childhood family structure turbulence continuing to manifest themselves when the children reach adult ages. Experiencing a parent's marital dissolution or ever living in a non-traditional family form have been shown to be associated with a greater likelihood of cohabitation and greater risk of divorce (Amato, 1996; Cherlin, Kiernan, & Chase-Lansdale, 1995; Teachman, 2002, 2003; Thornton, 1991). Children of divorce are more likely than children of stably married parents to marry at an early age, and an early age at marriage is associated with increased risk of divorce (Booth & Edwards, 1985). Also, experiencing a parent's remarriage is linked to greater odds of early union formation, particularly cohabitations (Thornton, 1991). The number of childhood family structure transitions experienced also is associated with an increased risk of marital disruption in adulthood (Wolfinger, 2000) and with forming cohabiting, but not marital, unions (Teachman, 2003).

Relatively few studies, however, have examined a longitudinal view of children's family structure experiences that both includes parents' marriage and cohabitation experiences and explores long-term effects on children's own relationships. One notable exception is a study that examined family structure experiences from multiple dimensions and at multiple time points (Teachman, 2003) which found that youth raised in alternative living arrangements were more likely to choose cohabitations, rather than marriage, in young adulthood. In addition, recent work by our study team (Ryan, Franzetta, Schelar, & Manlove, Under Revision) has shown that the formation of early cohabiting unions is sensitive to multiple dimensions of parental family structure experiences, especially those that include spending time in a single-mother family, whereas experiencing life in a stepfamily during childhood is the primary feature of family structure history associated with increased risk of early marriage during young adulthood.

A life course perspective suggests that adolescent relationship experiences may mediate the association between childhood family structure turbulence and experiences in later, young adult relationships. Attachment theory posits that stable early family life experiences allow youth to feel secure in later relationships and teach them the skills needed to form their own positive relationships in adolescence (Collins & Sroufe, 1999; Hazan & Shaver, 1987). Having a single mother often means that children are exposed to their mother's dating experiences and even cohabital relationships; social modeling of these maternal relationship types (less stable than marriages) is associated with more frequent sexual experiences for youth (Inazu & Fox, 1980). Further, social control theory suggests that disruption in family structure during childhood may

lead to less parental supervision and monitoring (McLanahan & Sandefur, 1994), which is likely associated with riskier adolescent relationships, including earlier and more serious teenage dating and more frequent premarital sex (Thornton & Camburn, 1987). Adolescent relationships then form a foundation for relationships later in the life course by providing training for intimacy and by influencing mate selection (Florsheim, 2003). Thus, theoretical beliefs that adolescence is the time when individual's relationship skills are established (Florsheim, 2003) suggest that early involvement in romantic or sexual relationships may then influence young adult relationships, by encouraging earlier formation of marriages and cohabitations in adulthood (Thornton, 1991).

Although research on adolescent romantic relationships is relatively limited (Giordano, 2003), evidence that childhood family structure turbulence influences these relationships does exist. In particular, a recent study of Cavanagh and colleagues (2008) found that living in stepparent, cohabiting, or single-mother family is associated with a greater likelihood that teens are engaged in romantic relationships. Furthermore, having experienced more family structure instability since birth is linked with greater odds of forming adolescent romantic relationships and with more instability in these relationships.

Moreover, there is currently little empirical research on the link between adolescent relationships and those formed in young adulthood. An important exception is a recent study by Raley and colleagues (2007) in which they find that being involved in adolescent *romantic* relationships positively predicts the chances of marriage in early adulthood, whereas involvement in adolescent *non-romantic* relationships is strongly associated with greater odds of cohabitation in young adulthood.

But, to our knowledge, no study has looked at how adolescent relationships mediate between childhood family structure turbulence and young adult union formation. Building upon theoretical and empirical knowledge, we hypothesize that there are indirect effects of childhood family structure history on early union formation in young adulthood, operating through adolescent relationships and parental monitoring.

Hypotheses

We hypothesize that:

1) Youth who experienced multiple changes in family composition during childhood or who lived in, and spent a greater number of years in, non-traditional family forms will experience more turbulent adolescent relationships.
2) In turn, young people who have a more turbulent record of adolescent relationships (i.e. more relationships, sexual or non-sexual) will be more likely to form marriages or cohabitations at an early age.
3) The effect of childhood family structure turbulence on adolescent relationships will be partially explained through the mediating effect of parental monitoring because disruption in family structure during childhood may lead to less parental supervision, which is likely associated with riskier adolescent relationship formation.

Data and Sample

The project uses data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative, longitudinal study of adolescents in grades 7 through 12 in the United States in the 1994-1995 school year. We use all three waves of in-home interviews and the parent interview to provide a wealth of retrospective information on relationship turbulence, with detailed information on the respondents' parents' relationship histories as well as relationship histories for the respondents themselves in their adolescent and young adult years. For parent histories, we examine three components of relationships, including the number and type of transitions and the duration of time in different family structures.

The detailed retrospective relationship histories gathered from adolescents and parents during the Wave I interview, and from the adolescents/young adults during Waves II and III, form the centerpiece of this paper. For <u>parents</u>, we have start and end dates for marital and cohabiting relationships dating back 18 years. In Waves I and II, the <u>adolescent</u> respondents reported on their romantic and non-romantic relationships. In Wave III, the <u>young adult</u> respondents gave a history of all relationships, including marriages and cohabitations formed since 1995.

We limit our analyses to teens who were in grades 9 through 11 at Wave I. Ninety-nine percent of teens in this analytic sample are aged 14-18 at Wave I, aged 15-19 at Wave II, and aged 20-24 at Wave III. This age restriction allows us to examine outcomes for young adults in the 20- to 24-year-old age group, and thus ensures that analyses are conducted on an age-homogeneous group of respondents who share a similar developmental life stage.

Measures

Our dependent variable measures early union formation in the transition to young adulthood. We use Wave III data to create two dependent variables capturing marriages and cohabitations formed by age 24.

To measure childhood family structure history, we use retrospective relationship data in which mothers reported the start and end dates for all marital and cohabiting relationships. We construct a detailed history of all family structure transitions respondents experienced from birth through age at Wave II, to produce the constructs described below:

- *Number of transitions.* We calculate the total number of transitions experienced, capturing both formation and disruption of mothers' unions.
- *Type of family structure.* We examine if youth ever lived in a cohabiting family, single-parent family, and/or stepfamily. This construct is distinct from number of transitions because children could have arrived in one of these family types either through a transition (i.e. divorce or remarriage), or they could have been born into these family structures and, thus, never experienced any transitions.
- *Duration in various family structures.* We measure the proportion of years spent living outside a two-biological, married parent family (i.e., with a single mother or cohabiting

or remarried parent), as well as the number of years spent living in specific family types (e.g., single-mother family, stepfamily, cohabiting family, married family).

To measure turbulence in adolescent relationships, we use Wave II data to examine the relationships that teens engaged in between Waves I and II. We exclude relationships completed before the Wave I interview in order to avoid time-order problems associated with Wave I measures of family structure change. We measure total number of relationships (both romantic and non-romantic) as well as the number of sexual relationships, with a greater number of relationships indicating more relationship turbulence.

Parental monitoring is measured as an index of whether parents are home at key times of the day (before and after school, at dinner, bedtime) and whether they allow teens to make their own decisions about friends, clothes, TV, what they eat, curfew, and bedtime.

Methods

To explore the mediating effects of adolescent relationship turbulence and parental monitoring, we will use structural equation models (SEM). The endogeneity of early relationships with later relationships leads us to SEM because it allows researchers to examine relationships among highly correlated variables, and interrelations among factors, both direct and indirect, can be tested (Bollen, 1989). This will allow us to identify whether the hypothesized pathways in Figure 1 are statistically significant and, thus, indicate the pathways through which childhood family turbulence influences subsequent relationship turbulence, reflecting the intergenerational transmission of relationship turbulence. We will examine whether childhood family turbulence has a direct effect on young adult relationship formation, or whether it operates in part through adolescent relationship turbulence. Note that in addition to adolescent relationship turbulence, we will also consider *parental monitoring* as a potential mediator that may help explain the association between turbulence in childhood and turbulence in adolescent relationships. In this step, we take advantage of SEM's ability to allow for multiple mediators; since SEM allows paths in the structural model to be freely estimated or constrained, we can test whether a pathway or process proceeds through multiple steps.

In all analyses, we will use the chi-square statistic to assess absolute fit of the model (Satorra & Bentler, 1994); this statistic should be relatively low in comparison with the degrees of freedom (Kline, 1998). We will also assess fit using a cut-off of 0.95 for the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI), and a cut-off of 0.05 for the Root Mean Square Error of Approximation (RMSEA) (Bentler, 1990; Browne & Cudeck, 1993; Hu & Bentler, 1999). These tests have been found to provide reliable assessments of the degree to which models fit data that are not overly sensitive to sample size. All multivariate analyses will be weighted and use procedures to adjust the standard errors and fit indices for the structural models to account for the complex sampling design of the Add Health data. All models also will control for family and individual characteristics.

REFERENCES

Amato, P. (1996). Explaining the intergenerational transmission of divorce. *Journal of Marriage and Family, 58*, 628-640.

Bentler, P. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.

Bollen, K. A. (1989). *Structural Equations with Latent Variables*. New York: John Wiley and Sons.

Booth, A. & Edwards, J. (1985). Age at marriage and marital instability. *Journal of Marriage and the Family, 47*, 67-75.

Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing Structural Equation Models*. Newbury Park, CA: Sage.

Cavanagh, S. E., Crissey, S. R., & Raley, R. K. (2008). Family structure history and adolescent romance. *Journal of Marriage and Family, 70*(3), 698-714.

Cherlin, A. J., Kiernan, K. E., & Chase-Lansdale, P. L. (1995). Parental divorce in childhood and demographic outcomes in young adulthood. *Demography, 32*, 299-318.

Collins, W. A. & Sroufe, L. A. (1999). Capacity for intimate relationships: A developmental construction. In W. Furman, B. B. Brown & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 125-147). New York: Cambridge University Press.

Florsheim, P. (2003). *Adolescent Romantic Relations and Sexual Behavior: Theory, Research, and Practical Implications*. Mahwah, NJ: Lawrence Erlbaum Associates.

Giordano, P. C. (2003). Relationships in adolescence. *Annual Review of Sociology, 29*, 257-281.

Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.

Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.

Inazu, J. K. & Fox, G. L. (1980). Maternal influence on the sexual behavior of teenage daughters. *Journal of Family Issues, 1*, 81-102.

Kline, R. B. (1998). *Principles and practices of structural equation modeling*. New York: Guilford Press.

McLanahan, S. & Sandefur, G. D. (1994). *Growing up with a single parent: What hurts, what helps*. Cambridge, MA: Harvard University Press.

Raley, R. K., Crissey, S., & Muller, C. (2007). Of sex and romance: Late adolescent relationships and young adult union formation. *Journal of Marriage & Family, 69*(5), 1210-1226.

Ryan, S., Franzetta, K., Schelar, E., & Manlove, J. (Under Revision). Family structure history: Links to relationship formation behaviors in young adulthood. *Journal of Marriage and Family*.

Satorra, A. & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. Von Eye & C. Clogg (Eds.), *Latent variable analysis: Applications for developmental research*. Thousand Oaks, CA: Sage.

Teachman, J. (2002). Childhood living arrangements and the intergenerational transmission of divorce. *Journal of Marriage and Family, 64*, 717-729.

Teachman, J. (2003). Childhood living arrangements and the formation of coresidential unions. *Journal of Marriage and Family, 65*, 507-524.

Thornton, A. (1991). Influence of the marital history of parents on the marital and cohabitational experiences of children. *American Journal of Sociology, 96*(4), 868-894.

Thornton, A. & Camburn, D. (1987). The Influence of the Family on Premarital Sexual Attitudes and Behavior. *Demography, 24*, 323-340.

Wolfinger, N. H. (2000). Beyond the intergenerational transmission of divorce: Do people replicate the patterns of marital instability they grew up with? *Journal of Family Issues, 21*, 1061-1086.