There is a large body of research that shows children from non-intact homes show higher rates of juvenile delinquency than children from intact homes, partially due to weaker parental control and supervision in non-intact homes. What has not been adequately addressed in the research is the influence of changes in family structure among individual adolescents over time on delinquent offending. Using the first and third waves of the National Youth Study, we assess the effect of family structure changes on changes in delinquent offending between waves through the intermediate process of changes in family time and parental attachment. Although prior research has documented adolescents in broken homes are more delinquent than youth in intact homes, the process of family dissolution is not associated with concurrent increases in offending. In contrast, family formation through marriage or cohabitation is associated with simultaneous increases in offending. Changes in family time and parental attachment account for a portion of the family formation effect on delinquency, and prior parental attachment and juvenile offending significantly condition the effect of family formation on offending.

Introduction

Family structure in the United States has changed dramatically over the last several decades. High rates of divorce, increases in single-parent households, rising rates of teen pregnancy, the propagation of stepfamilies and non-parent families (e.g., grandparent’s acting as parents, non-parent guardians, foster parents), and an explosion in cohabitation (Kennedy and Bumpass 2008) have come to characterize contemporary American family life. Research has shown that most children will spend some time in a single-parent family during their lives (McLanahan and Sandefur 1994), and about two-thirds of divorced women and three-fourths of divorced men eventually remarry (Casper and Bianchi 2002) suggesting that for many children multiple family transitions are likely. Furthermore, children are spending fewer years in married families (Bumpass and Lu 2000) and most children can expect to
experience multiple living arrangements during childhood (Bumpass and Lu 2000). Family structure transitions can be detrimental to children’s well-being and family functioning (Wu 1996), and have the potential to contribute to juvenile delinquency.

A wide body of criminological research has documented a connection between family structure and delinquency (Canter 1982; Cookston 1999; Demuth and Brown 2004; Franke 2000; Griffin et al. 2000; Heck and Walsh 2000; LeFlore 1988; Lynskey et al. 2000; Mackey and Coney 2000; Manning and Lamb 2003; O’Brien and Stockard 2003; Osgood and Chambers 2000; Rebellon 2002), with children from non-intact families more likely to engage in delinquent activities than children from intact families (Wells and Rankin 1991). Nearly all of the prior research on family structure and delinquency, however, has operationalized family structure as a static condition, mainly due to limitations imposed by available data. Resulting family structure, however, is part of an ongoing dynamic process with numerous family difficulties apparent prior to a family structure transition. In contrast to much of the previous research on the family structure-delinquency link that has, perhaps mistakenly, attributed the associated behavioral problems to the family break-up itself, Cherlin (1992) suggests that the long-term effect of a family break-up on children is weak once pre-divorce characteristics are controlled (see also Amato and Keith 1991). Although research has firmly established that delinquent offending is higher among adolescents residing in non-intact households, and many elements of family functioning (including parental attachment and supervision) are deficient in such families, the degree to which such factors are amplified by family transition processes has not been well established. Furthermore, while family dissolution has received a considerable amount of attention in the family literature, research assessing the transition from a one-parent family to a two-parent family is lacking, especially in criminological research (see Apel and Kaukinen 2008).

Previous research on family structure has tended to conflate family statuses and transitions, and it is possible that family transitions exert a unique influence on outcomes for the adolescents exposed to such shifts in living arrangements. Research has indicated that most adolescents will experience a family structure transition before reaching adulthood (Bumpass and Lu 2000), and for those adolescents who experience one-family transition, subsequent transitions are likely (Hetherington 1989; Wu 1996). Because of the high degree of family instability in our contemporary society, an investigation of the impact of such transitions on delinquent offending, and the associated changes in family functioning responsible for such an effect, is necessary. In the current project, we use two waves of the National Youth Survey (NYS) to assess the influence of family dissolution and formation on juvenile
delinquency through the intermediate process of changes in parental attachment and/or family time.

**Family Structure and Delinquency**

As noted above, family structure has been identified in the criminological literature as a noteworthy contributor to juvenile offending. Youth from broken homes are at significantly higher risk of delinquency than youth from “intact” homes. Accordingly, Wells and Rankin (1991) estimate that the prevalence rate of juvenile offending is approximately 10–15 percent higher among youth from broken homes than intact homes. Nearly all studies conducted on this topic have found that family dissolution is associated with juvenile delinquency, ranging from minor property crime, substance abuse (Anderson 2002; Apel and Kaukinen 2008; Juby and Farrington 2001), and status offenses to interpersonal violence (Rebellon 2002) and homicide (Schwartz 2007). Children in households where at least one biological parent is absent, show significantly higher rates of juvenile offending than children from two-biological parent households.

Recent research in the study of family structure and juvenile delinquency has moved beyond the broken/intact family dichotomy and investigated the impact of more specific family structures on juvenile offending. For instance, Demuth and Brown (2004) suggest that although single-parenthood is a key contributor to juvenile offending, single-father headed households show significantly higher rates of juvenile crime than single-mother headed households. Further, children from blended families tend to be the most delinquent of any family structure (Flewelling and Bauman 1990; McCarthy, Gersten, and Langer 1982; Rankin 1983) and recent work has shown that youth who reside in cohabiting families are more likely to show a range of behavioral problems than children in other two-parent family forms (Manning and Lamb 2003). More recently, Apel and Kaukinen (2008) reinforce the traditional view that youth in traditional nuclear households show the lowest level of delinquency, but add that youth from blended and intact cohabiting families are more antisocial than youth from two-biological-parent married households. The impact of cohabitation on delinquency is particularly pronounced when the residential biological parent is the father.

In addition to family structure, family processes and environment are also central factors in the development of criminal behavior among youth (Cernkovich and Giordano 1987; Patterson and Dishion 1985) and such family processes are strongly correlated with family structure (Rankin and Wells 1990). Furthermore, there is evidence that family process measures mediate the influence of family structure on delinquency. For example, Van Voorhis et al. (1988) show that the impact of family structure on juvenile offending is
largely mediated by parental supervision, closeness, and monitoring. Similarly, research shows that parents from non-intact families have difficulty fostering emotional attachments with their children (Bank et al. 1993; Laub and Sampson 1988) and setting, maintaining, and enforcing rules (Hetherington and Clingempeel 1992). A key part of the social bonding process is direct control and supervision from parents (Gottfredson and Hirschi 1990) that requires a significant amount of time from parents, time that many single parents struggle to find given the competing demands that single parenthood presents (Hetherington and Clingempeel 1992; Rankin and Wells 1990). Parents in non-intact homes, therefore, experience many challenges and struggles that hinder their ability to maintain a strong affective bond with their children.

With cohabiting and blended families, patterns of family processes are less clear. For instance, prior work has shown that married intact and stepparent families show similar financial circumstances, parental resources, and positive parenting practices that contribute to healthy adolescent outcomes (Brown 2004; Manning and Lamb 2003). In contrast, however, McLanahan (1995) claims, “in most instances, remarriage does not diminish the negative consequences associated with single parenthood, and in some cases it exacerbates problems” (p. 232). Research has documented that the presence of an additional adult in a household is associated with increased supervision of children (Thomson, McLanahan, and Braun-Curtin 1992), but other research suggests that new partners reduce time spent parenting among biological mothers (Hetherington and Jodl 1994). Similarly, Manning and Lamb (2003) report that parenting practices are more negative, on average, in cohabiting families due to the ambiguous nature of the relationship between cohabiting parents. The parent–child bond is a key force in deterring criminal behavior among youth (Hirschi 1969) that is lacking in many non-intact homes (Bank et al. 1993; Laub and Sampson 1988), but the processes linking family structure to delinquency in cohabiting and blended families are not as clear.

Overall, there is a large body of research that has established youth from intact homes are less delinquent than youth from non-intact homes. The assumption that can be gleamed from these findings is that divorce or other family transitions, as distinct events, detrimentally impact life course outcomes for adolescents. Cherlin (1992), on the other hand, claims that divorce has few long-term effects on children. Most of the prior research connecting family structure and delinquency has employed between-group comparisons in cross-sectional designs, mainly due to data limitations, but this design might promote inaccurate assumptions related to impact of family dissolutions; static cross-sectional comparisons between children in intact and non-intact homes miss the important individual and family dynamics that occur following a
family transition. Work assessing the dynamic nature of outcomes following family transitions for individual adolescents is limited, the topic we address in this study.

**Family Transitions and Delinquency**

Prior work has clearly established that family structure influences juvenile delinquency. In these prior studies, however, family structure is treated as a static condition, but family structure is commonly a fluid condition subject to change throughout the life course (Raley and Wildsmith 2004). As Bumpass and Lu (2000) have documented, most children in the United States will experience at least one family transition before reaching adulthood. With two notable exceptions (Brown 2006; Rebellon 2002), however, previous research on the relationship between family structure and juvenile offending has neglected this important dynamic.

Research has documented family transitions that influence the well-being of children and adolescents (Cherlin et al. 1991; Hao and Xie 2002; Seltzer 1994; Wu and Thomson 2001), including poorer life course outcomes (i.e., educational and occupational outcomes) (Brown 2006; Manning and Lamb 2003), higher levels of depressive symptoms (Brown 2006), lower levels of school engagement (Brown 2006), and higher occurrences of sexual encounters (McKnight and Loper 2002). Addressing delinquency, Brown (2006) shows that experiencing a family transition is associated with higher levels of delinquency across the first two waves of the National Longitudinal Study of Adolescent Health (Add Health) data compared with those who live with two biological parents. Specifically, transitioning from a single-mother family into either a cohabiting or married step-family is associated with higher levels of delinquency, but interestingly transitioning from a two-biological-parent home into a single-mother family is not associated with delinquent outcomes (Brown 2006). Through an analysis of the National Youth Study data, Rebellon (2002) finds that divorce early in life (divorce that occurred before data collection began) is associated with high levels of status, property, and violent offending, but recent parental divorce or separation (family dissolution that occurred between waves of data) is not related to any of the three forms of offending. Furthermore, the formation of a married stepfamily early in life is associated with violent offending but the recent addition of a step-parent is associated with status offending only (Rebellon 2002). Neither study, however, directly documents the changes in offending that follow family structure transitions. This distinction is particularly important given the multitude of exogenous factors associated with both family structure transitions and delinquency. Assessing changes in offending following family structure transitions introduces a control on such exogenous factors (Johnson
2005) and thus provides a more precise estimate of the impact of such family changes on delinquency.

Family transitions also often alter family processes and these changes are associated with declines in the well-being of children, including delinquency (Amato 2000; Cherlin et al. 1991; Seltzer 1994; Wu 1996). Beyond the shifts in resources, such as money and time, that accompany changes in family forms (Hanson, McLanahan, and Thomson 1998; McLanahan and Sandefur 1994; Sun 2003), family transitions often include changes in family roles and disruptions in family routines that negatively alter parenting practices (Hanson, McLanahan, and Thomson 1998). In accord with this research, Cookston (1999) reports that supervision levels decline when families disrupt, and Demuth and Brown (2004) indicate that levels of parental involvement, monitoring, and closeness are higher, on average, in two-biological-married parent families than in single-parent families. Similarly, Hanson, McLanahan, and Thomson (1998) show that divorce between waves of National Survey of Families and Households data is associated with reduced maternal supervision of children, but the mothers who subsequently remarried or formed a cohabiting relationship report lower levels of supervision than the divorced mothers who remained single. Thomson et al. (2001) further report that forming a new intact romantic partnership (i.e., remarriage or cohabitation) contributes to an improvement in mother–child relationships but does not necessarily lead to greater levels of maternal supervision.

Brown (2006) notes that shifts in economic resources and parental closeness account for a portion of the relationship between family transitions and adolescent offending, but the relationship remains statistically significant and no further explanation or analysis of the mediating role of such factors is provided. Furthermore, Rebellon (2002) investigates the intermediate role of social control, direct control, strain, and social learning factors in the relationship between family structure and juvenile delinquency, finding that social learning variables appear to be the most important factors linking family structure and delinquency. As mentioned above, however, the study employs static intermediate and outcome measures and therefore misses the essential dynamic nature of processes that occur following family transitions. In this study, we provide a specific focus on the intermediate family dynamics that might account for the effect of family transitions on shifts in adolescent offending.

One conditioning factor that has been overlooked in prior research on family transition outcomes is the parent–child bond prior to the family transition. Children from blended and cohabiting families clearly display higher levels of deviant behavior than children from two-biological-parent homes (Apel and Kaukinen 2008), but family processes investigated as possible
explanatory factors for the offending discrepancies between such family forms have shown inconsistent results. Given the strong relationships that single mothers often form with their children (Ganoug and Coleman 1994), it is possible that these bonds condition the impact of future union formation on offending. Crosbie-Burnett and Ahrons (1985) suggest that new partners are often seen by children as competition for their mother’s attention and affection causing increased conflict between children and mothers, but Thomson et al. (2001) report that early mother–child bonds and levels of supervision are key predictors of later relationship quality independent of family transitions. Better relationships between single parents and their children then might buffer the negative effects of a new family formation or separation. In contrast, poor relationships between parents and their children might be worsened by a family dissolution or the addition of a new marital or cohabiting partner.

Overall, it appears that family dissolution negatively influences a variety of adolescent and young adult outcomes, possibly through the intermediate process of decreases in supervision and parental attachment. The family dynamics associated with family formation through marriage/remarriage/cohabitation that contribute to criminal outcomes, however, are not as clear. The social control theory of criminology places central emphasis on the parent–child bond developed through close supervision, consistent discipline, and warm interactions with children as a key force in deterring criminal offending (Hirschi 1969). Emphasizing the importance of social bonding in intact families, Rankin and Kern (1994) report that strong attachment to two parents provides a stronger control on delinquency than a strong attachment to one parent. Similarly, Laub and Sampson (1988) suggest that broken homes inhibit parental attachment, which accounts for the higher level of delinquency among youth in non-intact homes.

As stated above, however, shifts in family time and attachment following family structure transitions have not been well documented in prior research, and no prior study has attempted to connect such shifts in family functioning following a family transition to changes in delinquent offending. When supervision and closeness decline in response to a family transition, the social control theory predicts that parent–child bonds will weaken, thus freeing adolescents to engage in crime and deviance. In contrast, when parental supervision and involvement increase when a single parent marries or forms a cohabiting relationship, the theory suggests that parent–child bonds will increase with a corresponding decrease in juvenile offending. In this project, we assess the degree to which changes in parental attachment and time spent with the family associated with changes in family structure account for the relationship between changes in family form and delinquency.
Hypotheses

Based on the tenets of the social control theory and prior research showing higher rates of offending among children and adolescents from broken homes and the challenges to parenting for residential parents due to family separation, we hypothesize that family dissolution will be associated with increases in juvenile offending through the intermediate processes of decreases in family time and parental attachment. Although there are ambiguities in family formation processes, given the higher offending rates among children from blended and cohabiting families, we expect that the transition from single-parent households to two-parent households will also be associated with increases in juvenile offending through concomitant decreases in family time and attachment. The association between family formation and juvenile offending, however, will be moderated by initial parent–child bonds and parental involvement.

Methods

Data

The data for this study are from the NYS, a continuing longitudinal study of delinquent/criminal behavior and substance use. The sample was selected using a multistage probability sampling of households in the coterminous United States, meaning that the demographic characteristics of the NYS sample generally match those of adolescents in the nation as a whole (for detailed information on the sample, see Elliott, Huizinga, and Ageton 1985). For this study, we rely on the first and third waves of data from the NYS. The initial wave of data collection (1977) contains information from 1,725 adolescents, ages 11–17, in seven birth cohorts (1959–1965). The third wave of the NYS contains information from the 1,626 of the original subjects collected in 1979, where the subjects ranged from 13 to 19 years of age. The attrition rate between data collection periods is 5.7 percent, but as the original researchers note (see Esbensen and Elliot 1989), the data loss rates by age, sex, race, socioeconomic status, place of residence, and reported delinquency of participating and non-participating youths across waves of the NYS were not substantially influenced by sample attrition.

Although the data were collected more than 20 years ago, the NYS continues to be one of the most widely used and important sources of data in studies of juvenile delinquency. The prospective longitudinal research design allows criminologists to examine multiple aspects of criminal offending, including behavioral changes across the life course. Furthermore, the NYS is a variable rich dataset that includes a wide variety of offending items and
adequate family measures and is therefore appropriate to answer the questions concerning changes in family structure and delinquency addressed in this study.

**Dependent Variable**

The dependent variable of interest in this study is change in juvenile delinquency from the first wave to the third wave of the NYS. To create this variable, we began by constructing delinquency measures at each wave of the study. Juvenile delinquency is measured at each wave of the study by a 19-item modified version of the Elliott, Huizinga, and Ageton (1985) self-reported delinquency scale, similar to offending scales used and validated in numerous prior studies of both juvenile (Cernkovich and Giordano 1987) and adult offending (Giordano, Cernkovich, and Rudolph 2002; Giordano, Schroeder, and Cernkovich 2007; Schroeder, Giordano, and Cernkovich 2007). Each offense is assigned a seriousness weight derived from the National Survey of Crime Severity (Wolfgang et al. 1985) and then multiplied by the self-reported frequency of each behavior to create an offending scale that accounts for the frequency of offending as well as the seriousness of each offense (see Cernkovich, Giordano, and Pugh 1985 for a full description of the items in the scale and the derivation of the weights). The items are measured with a nine category frequency response set (1 = never, 9 = more than once a day) and range in seriousness from being loud, rowdy, or unruly in a public place (weight = 1.14) to sexual assault (weight = 25.85). The reference period for each set of offenses is the year prior to the interview. The scale shows a high degree of reliability with a Cronbach alpha score of .94 at the first wave of the study and .70 at the third wave.²

*Change in delinquency* represents the difference in offending scores between the first and third waves of the NYS. Several outliers on both the positive and negative ends of the scale, however, caused high degrees of skewness and kurtosis on this measure thus violating the assumption of normality in ordinary least squares (OLS) regression. Consistent with Tabachnick and Fidell’s (1996) suggestion for correcting non-normal distributions due to outliers, we recoded all values below −2.50 to equal −2.50 (N = 33) and all values above 2.50 to equal 2.50 (N = 16). The recoded offending change scale has a mean of −.055 and a standard deviation of .749, with negative values indicating a decrease in offending over the two waves and positive values indicating increases in offending.³

**Independent Measures**

*Change in Family Structure.* The key independent variable in this study is the change in family structure. To construct this measure, we begin
by identifying the living conditions of each subject at the first and third waves of the NYS. At the first wave of the NYS, one parent of each respondent was given a questionnaire that asked about their current marital status. Each respondent whose parents were married at the first wave of the study was classified as living in a two-parent home during that data collection period. At the third wave of the study, the respondents themselves were asked to indicate their current living arrangements. Those subjects who reported living with both of their biological parents or one biological parent and a stepparent are classified as living in a two-parent home at the third wave of the NYS. The subjects living outside their family of orientation at the third wave of the study were removed from the current study ($N = 352; 21.6$ percent).

Across the two waves of data, four possible family structure patterns are possible. The first family structure pattern is stable two-parent household, where the adolescent resides in a two-parent family at both waves of the study ($N = 1,073; 62.2$ percent). The second pattern is stable one-parent household, where the subject resides with only one parent at both waves ($N = 189; 11.0$ percent). The third possible pattern is family dissolution, where the subject lived with two married parental figures at the first wave but lived with only one parent at the second wave ($N = 60; 3.5$ percent), caused by parental divorce in most cases. The fourth pattern is family formation, where the subject resided with only one parent at the first wave but lived with two parental figures at the second ($N = 38; 2.2$ percent), representing the addition of a stepparent to the household in the majority of situations.$^4$

**Family Time and Family Attachment.** Change in time spent with family and attachment to the family are two potential mediators investigated in the relationship between changes in family structure and changes in offending in the current study. At the first and third waves of the NYS, identical measures of both family time and family attachment were first calculated. Family time is measured as the average of three items that assess the amount of time spent with family on weekdays, weeknights, and weekends. Each item measured with a 5-category response set (1 = very little, 5 = a great deal). Family attachment is assessed with Rebellon’s (2002) attachment scale that reflects the average of four variables that level of parental influence, closeness to family, comfort received from family, and talking with parents about problems. Each item is measured with a 5-point response set with higher values representing stronger family attachment. Change in family time and attachment is calculated as the difference in each measure between the first and third waves of the NYS. Change in family time shows a mean of $-0.47$ and a standard deviation of $0.79$ with positive values representing an increase in family time across the two waves and negative values representing a
decrease in family time. Change in family attachment shows a mean of $-0.26$ and a standard deviation of $1.28$ with positive values reflecting an increase in family attachment and negative values reflecting a decrease.

**Control Variables.** Age, race (minority = 1, whites = 0), and gender (females = 1, males = 0) have been implicated as factors that contribute to juvenile offending (Elliott 1994; Gottfredson and Hirschi 1990; Loeber and LeBlanc 1990; Moore and M Hagedorn 1999) and are therefore used as control variables in this study. Family income, measured with a 10-point integral variable (1 = $0–$6,000, with the remaining nine categories reflecting increments of $4,000), is also controlled.

**Analytic Strategy**

We rely on change score models in this study to assess the relationship between shifts in family structure, changes in family processes, and changes in offending between two waves of NYS data. A recent comparison of two-wave panel data analysis techniques indicates that change score models are generally preferable to standard lagged endogenous models in assessing the effect of transitions on outcomes when there is a possibility that exogenous factors influence both the transitions and the outcomes (Johnson 2005). In the following analyses, we control for prior levels of family time and parental attachment, as well as initial levels of delinquency, but due to the complexity of the family transition process and data limitations, change score models provide a more precise estimate of the impact of family transitions on delinquency than is available with other analytic models.

**Findings**

**Bivariate Relationships**

We begin by examining the differences in average values on key measures between the four family structure patterns identified in this study using one-way analysis of variance (ANOVA) techniques. First, examining the sociodemographic background factors, the results shown in Table 1 indicate that the subjects who resided in a stable two-parent household are younger on average than the subjects who resided in a stable one-parent household or experienced a family transition between waves of the study. Further, females are underrepresented among the group of adolescents who experienced a family formation between waves of the study, and racial/ethnic minorities are underrepresented among the group of stable two-parent households and overrepresented among the groups that experienced a family transition. Not surprisingly, the stable one-parent families indicate lower incomes at the first
wave of the study than those family structures that include two parents at
some point during the study period.

Contrary to our original hypotheses, however, no significant differ-
ences in family time, parental attachment, changes in family time or parental

<table>
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<tr>
<th></th>
<th>Stable two-parent</th>
<th>Stable one-parent</th>
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</table>

N

1,073 189 68 38

Note: *p < .05, **p < .01, ***p < .001.
w1 and w3 refer to the wave of the study from which the variable was constructed. w1 variables are taken from Wave 1 and w3 variables are taken from Wave 3 of the study.
attachment, delinquency at the third wave of data, or changes in delinquency exist between the family structure patterns. The only measure that varies significantly by family structure patterns is juvenile offending at the first wave, with those subjects who resided in a two-parent family at the first wave of the study (stable two-parent or divorce/separation) showing lower offending scores at the first wave than the two groups who resided in single-parent households (stable one-parent or marriage/cohabitation). Although these bivariate relationships are noteworthy and raise important questions in the relationship between family structure changes and juvenile offending, these relationships will become more clear in the multivariate analyses, the topic to which we turn next.

Are Family Structure Changes Associated with Changes in Delinquency, Family Time, or Parental Attachment?

Next, we investigate the association between family structure transitions and changes in delinquent offending, family time, and parental attachment using multivariate OLS models. By focusing on the changes in delinquent offending across the two waves of data, we are able to document how variations in family structure over time influence variations in offending over that same period of time. The OLS models presented in Table 2 are concurrent change analyses, predicting change in criminal offending by family structure patterns controlling for baseline levels of offending from the first wave of the study. A recent comparison of two-wave panel data analysis techniques indicates that change score models are generally preferable to standard lagged endogenous models in assessing the effect of transitions on outcomes when there is a possibility that exogenous factors influence both the transitions and the outcomes (Johnson 2005). Change score models yield unbiased estimates of the effects of transitions on outcomes in two-wave panel data when measurement errors and omitted variables are present (Johnson 2005). Short of employing experimental data that is not possible in this type of project, by modeling the impact of changes in family structure on changes in criminal offending, family time, and parental attachment, we are also better able to establish the temporal order of the relationships than is possible with standard logged endogenous models.

The results shown in Table 2 first indicate that none of the demographic background measures significantly influence changes in offending across the two waves of data, but the older subjects report significantly greater decreases in family time over the study period and the minority subjects report greater increases in family time and parental attachment. Consistent with our first hypothesis, the transition from a single-parent-household to a two-parent-household through marriage or cohabitation is associated with significant
increases in criminal offending over the two waves of data. On the contrary, family dissolution through divorce or separation is not associated with a significant increase in offending. Further, no other distinct pattern of association between family structure patterns and changes in delinquency, family time, or parental attachment are evidenced in this study. Transitioning from a single-parent household to a two-parent household through marriage or cohabitation, therefore, appears to exacerbate juvenile offending net of initial

<table>
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</tbody>
</table>

| Early adolescent controls  |                       |                       |                                |
| Juvenile delinquency<sub>w1</sub> | -.375*** | –                   | –                              |
| Family time<sub>w1</sub>   | –                     | -.515***              | –                              |
| Parental attachment<sub>w1</sub> | –           | –                   | -.489***                      |

| Family structure patterns  |                       |                       |                                |
| Stable two-parent (contrast) | –                     |                       |                                |
| Stable single-parent       | -.020                 | -.021                 | .005                           |
| Marriage/cohabitation      | .067**                | .024                  | -.033                          |
| Divorce/separation         | .008                  | -.003                 | -.024                          |

| F                          | 27.837***             | 58.867***             | 52.823***                      |
| R-square                   | .142                  | .259                  | .243                           |
| N                          | 1,360                 | 1,354                 | 1,328                          |

Note: Standardized coefficients reported. *<i>p < .05</i>, **<i>p < .01</i>, ***<i>p < .001</i>.<w1> and <w3> refer to the wave of the study from which the variable was constructed. <w1> variables are taken from Wave 1 and <w3> variables are taken from Wave 3 of the study.
offending levels and the sociodemographic background factors, but family transitions have little impact on family time or parental attachment.

**Do Changes in Family Functioning Mediate the Effect of Family Transitions on Delinquency?**

To test the final aspect of the current project, we introduce measures of changes in family time and parental attachment to the regression model predicting changes in offending across the two waves of the study. The mediating role of the family functioning variables is assessed using Baron and Kenny’s (1986) method that suggests when the effect of an independent variable on a dependent variable decreases to zero with the addition of a mediating variable, complete mediation has occurred, and when the effect of the independent variable on a dependent variable decreases by a non-trivial amount with the addition of a mediating variable, partial mediation has occurred.

The results shown in Table 3 indicate that increases in family time and parental attachment across the two waves of data are both associated with decreases in offending over the same period, independent of baseline levels of family time, parental attachment, and juvenile offending when included in the model singularly (Models 1 and 2). Further, the addition of the family time and parental attachment measures are associated with a 20.9 and 26.9 percent decreases in the magnitude of the family formation effect on changes in offending, respectively. In the combined model (Model 3), increases in family time and parental attachment are associated with significant decreases in offending and the addition of the family process measures also decreases the magnitude of the impact of family formation by 22.4 percent. Family formation, however, remains statistically significant suggesting that changes in family processes partially account for the effect of family formation on increases in offending across the two waves of data.

**Do Initial Levels of Family Time, Parental Attachment, or Delinquency Condition the Effect of Family Transitions on Changes in Delinquency?**

To test the assertion that the impact of family structure transitions on changes in juvenile offending is conditioned by initial levels of problem behavior and family functioning, we add interaction terms between family formation and the baseline measures of family time and parental attachment in Model 4 of Table 3. The interaction between family formation and parental attachment at the first wave of data shows a significant negative effect on changes in criminal offending. This finding indicates that at or above average levels of initial parental attachment, family formation is associated with decreases in offending over the two waves of data. For those
### Table 3
Ordinary Least Squares Regression Predicting Changes in Juvenile Delinquency, w3–w1

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<td>Sociodemographics</td>
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<tr>
<td>Age</td>
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<td>-.003</td>
<td>-.008</td>
<td>-.005</td>
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<tr>
<td>Female</td>
<td>-.097***</td>
<td>-.100***</td>
<td>-.100***</td>
<td>-.101***</td>
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<td>Minority</td>
<td>-.023</td>
<td>-.025</td>
<td>-.018</td>
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<tr>
<td>Income</td>
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<td>.002</td>
<td>.003</td>
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<tr>
<td>Juvenile delinquency, w1</td>
<td>-.519***</td>
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<td>-.524***</td>
<td>-.525***</td>
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<td>Family structure patterns</td>
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<tr>
<td>Stable two-parent (contrast)</td>
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<td>– – –</td>
<td>– – –</td>
<td>– – –</td>
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<td>Remarriage/cohabitation</td>
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<td>.049*</td>
<td>.052*</td>
<td>-.010</td>
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<td>Divorce/separation</td>
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<td>Change in family time, w3–w1</td>
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<td>–</td>
<td>-.070*</td>
<td>-.073*</td>
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<tr>
<td>Parental attachment, w1a</td>
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<td>– – –</td>
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<td>Change in parental attachment, w3–w1</td>
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<td>– – –</td>
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<td>-.084**</td>
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<tr>
<td>F</td>
<td>49.363***</td>
<td>48.727***</td>
<td>41.233***</td>
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<td>R-square</td>
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<td>.270</td>
<td>.273</td>
<td>.280</td>
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<tr>
<td>N</td>
<td>1,354</td>
<td>1,328</td>
<td>1,328</td>
<td>1,328</td>
</tr>
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</table>

**Note:** Standardized coefficients reported. *p < .05, **p < .01, ***p < .001. w1 and w3 refer to the wave of the study from which the variable was constructed. w1 variables are taken from Wave 1 and w3 variables are taken from Wave 3 of the study.
subjects with initial parental attachment below the sample average, family formation is associated with increases in offending. In other words, adolescents who have strong relationship with their single residential parent benefit from the addition of a second parent to the household, either through marriage or a cohabiting relationship. Conversely, behavioral problems associated with family formation are accelerated among those adolescents who had a poor relationship with their single parent prior to the new marriage or cohabiting relationship. Interestingly, the effect of divorce or separation on changes in offending is also dependent on initial levels of parental attachment, where family dissolution is associated with increases in offending for those adolescents who report low levels of attachment with their parents before the divorce or separation (results not shown). The effect of family formation on criminal offending does not, however, depend on initial levels of family time. Overall, the data show that initial levels of parental attachment are central to the process by which family transitions translate into changes in criminal offending.5

Discussion

The current project challenges the popular notion that parents in troubled marriages should stay together for the well-being of their children (Wallerstein, Lewis, and Blakeslee 2000). Divorce is clearly not beneficial for children (Brown 2006; Hess and Camera 1979; Kurdek and Sinclair 1988; McKnight and Loper 2002; Rebellon 2002), and following the large body of research that has established children from non-intact homes show significantly higher levels of delinquent offending than children from intact homes (Canter 1982; Cookston 1999; Demuth and Brown 2004; Franke 2000; Griffin et al. 2000; Heck and Walsh 2000; LeFlore 1988; Lynskey et al. 2000; Mackey and Coney 2000; Manning and Lamb 2003; O’Brien and Stockard 2003; Osgood and Chambers 2000; Rebellon 2002), it is intuitive that parents remain married in the face of marital strain to protect their children from delinquency and other related problems. Longitudinal research, however, has suggested that problematic outcomes following a break-up are not endemic to the family separation process; rather, a substantial portion of the negative outcomes associated with family dissolution are attributed to problems in family functioning prior to a family break-up (Cherlin 1992).

Further complicating the effect of family structure transitions on offending outcomes are cohabitation and remarriage. For single parents, the addition of another adult to the household through cohabitation or remarriage may be perceived as beneficial to the well-being of their children, as the additional parent can improve financial circumstances, parental resources, and positive parenting practices (Brown 2004; Manning and Lamb 2003; Thomson,
McLanahan, and Braun-Curtin 1992). Prior research, however, has shown that children in blended households (either cohabiting families or step-families) exhibit higher levels of delinquency than intact homes or single-parent homes (Apel and Kaukinen 2008; McCarthy, Gersten, and Langer 1982; Rankin 1983). Accordingly, research has suggested that the addition of another adult to the household through cohabitation or remarriage does not reduce the negative consequences of single parenthood for children, but might actually exacerbate those problems (McLanahan 1995).

At issue is that most of the prior work establishing the relationship between non-intact families and poor adolescent outcomes has employed static models, treating family structure transitions as distinct events leading to negative outcomes. Family structure transitions, however, are dynamic processes encompassing a wide range of factors that conflate the relationship between family transitions and delinquency. In the current project, we employed concurrent change score models that assess changes in family functioning and delinquency that occur following a family transition between two waves of the NYS. These models controlled for initial levels of delinquency and family processes, as well as un-identified exogenous factors (Johnson 2005), and therefore better isolated the unique impact of family structure transitions on family and related behavioral outcomes than was possible in prior work.

Drawing on the social control theory and the prior research showing a relationship between non-intact family structure and delinquency, we first hypothesized that transitioning from a two-parent household to a single-parent household would be associated with a significant increase in delinquency, primarily through associated declines in family time and parental attachment. Consistent with previous literature, we found that adolescents who resided in a two-parent household at the first wave of the study (stable two-parent, divorce/separation) show lower levels of offending than adolescents who resided with a single parent during the same wave (stable single-parent, marriage/cohabitation). Consistent with the findings reported by Brown (2006), both the bivariate and multivariate data show, however, that the transition into a single-parent household is not associated with changes in offending or family functioning. Apparently, the higher level of offending shown among the youth from single-parent homes in this study is not due to the process of family dissolution or any corresponding shifts in family time or attachment; rather, it is more likely that family issues present before the family break-up are responsible for the higher level of offending among adolescents in non-intact homes. Future research should systematically address the pre-dissolution family factors that condition the effects of divorce on children.

Second, we considered the impact of family transitions from single-parent families to two-parent families through remarriage or cohabitation. Based on
the work showing higher levels of offending among youth from blended households (Apel and Kaukinen 2008; McCarthy, Gersten, and Langer 1982; Rankin 1983), we hypothesized that the transition from a single-parent household to a two-parent household would be associated with an increase in offending through decreases in family time and parental attachment. Consistent with this hypothesis, the data reveal that experiencing a family formation between waves of data is associated with significant increases in offending. This type of transition does not predict significant shifts in family time or attachment, but the full models do show that shifts in family functioning do mediate a small portion of the positive relationship between family formation and increased offending. Although inconsistent with the social control theory and associated work that shows the addition of another parent to the household improves parental resources (Brown 2004; Manning and Lamb 2003) and improvements in mother–child relationships (Thomson et al. 2001), this finding does contribute to the prior work showing high levels of delinquency among youth in blended families; the data suggest that escalations in offending following a family formation are accounted for by processes other than social bonding. As Rebollon (2002) shows, it is possible that social learning processes better explain the link between family structure transitions and delinquency, and future criminological research should pay considerable more attention to the family formation process. Importantly, our findings reveal that baseline levels of parental attachment condition the impact of family transitions on delinquent offending, suggesting that strong parent–child relationships prior to a family transition can buffer the negative outcomes associated with a family transition.

Ultimately, this research suggests that there is little negative impact of family separation on adolescent behavioral outcomes or family functioning beyond the initial family problems prior to dissolution. Based on the findings of the current research and Cherlin (1992), therefore, parents in troubled marriages who are considering divorce should be advised that family dissolution does not necessarily lead to increases in offending among adolescents in such positions. Although counterintuitive, Cherlin (1992) notes that parental divorce is less traumatic for adolescents, the focus of the current study, than for younger children. This finding is also consistent with research that shows no change in adolescent well-being following parental divorce (Videon 2002). Cherlin et al. (1991) further show that the well-being of adolescents prior to family dissolution is often lower than the well-being of adolescents in stable two-parent homes, suggesting that the negative consequences of family dissolution for adolescents begin before the family separates. Future research should investigate the impact of family conflict and shifts in family functioning prior to a divorce or separation on changes in offending among adolescents.
The transition from a single-parent family to a two-parent blended or cohabiting family appears to exert the most consequential impact on increases in juvenile offending. Following the results of this study and prior work showing higher rates of offending in blended households (Apel and Kaukinen 2008), single parents contemplating cohabitation or remarriage should be aware that a family transition of this type, under certain conditions, can lead to increases in negative behavioral outcomes for their children. In accord with prior work, which has documented that family transitions alter family processes, routines, and parenting (Amato 2000; Cherlin et al. 1991; Coleman, Ganong, and Fine 2000), alterations in family functioning account for a portion of the increases in juvenile delinquency associated with family formations. In line with the social control theory of criminology (Hirschi 1969), shifts in family time and parental attachment are clearly associated with changes in offending. Although no systematic variations in family functioning changes associated with family structure patterns across the two waves of data are evident in this study, future research should assess the intricacies in the process of family transitions that lead to significant alterations in family processes in some instances but not others.

Most importantly to single parents considering remarriage or cohabitation, this study highlights that initial levels of parental attachment are essential predictors of offending outcomes following a family formation. Family formation is beneficial for adolescents who have strong relationships with their residential parent prior to the family transition but detrimental to behavioral outcomes for the adolescents who report poor parental attachment prior to family formation. Parents considering such a family transition should, therefore, focus on building and sustaining positive bonds with their children prior to entering a new cohabitation or marriage. Although the factors that condition the impact of family transitions on offending is an area of study that needs more attention from sociological researchers, this finding is consistent with a wider body of literature that promotes social support, including close relationships with parents, as a significant buffer to the negative outcomes following other traumatic events for adolescents (Kaniasty and Norris 1992; Kessler and McLeod 1985; Kruttschnitt, Ward, and Ann Sheble 1987; Runtz and Schallow 1997). Future research should address other factors that might buffer or exacerbate the problems that follow a family transition, such as religiosity, peer deviance, or even neighborhood disorganization.

There are also some notable limitations in this study that warrant attention in future research on the effects of family transitions on adolescent outcomes. For instance, the measures of family transitions in this study are limited by the data available in the NYS. Although Brown (2006) indicates that the negative effects of family transitions are independent of whether the
family was formed through marriage or cohabitation, it is possible that families formed through marriage rather than cohabitation have unique characteristics not captured in this study or prior research that might contribute to a better understanding of the dynamics involved in family transition processes that lead to delinquent involvement, such as the quality and stability of marital relationships (Brown and Booth 1996; Nock 1995) or partner social support (Thomson et al. 2001). Further, the decision to marry a partner rather than cohabit is partly a function of the degree to which children accept the new partner (Buchanan, Maccoby, and Dornbusch 1996). Future research would benefit from more detailed measures of family structure and family transitions (i.e., the sex of parents, whether parents are biological, adoptive, or step). Additionally, a consideration of the number of total transitions may be beneficial to our understanding of the processes linking family structure transitions and offending, as subsequent transitions might influence offending differently than a primary transition.

Also important in the relationship between family structure transitions and changes in delinquent offending are financial resources. McLanahan (1995) reports that nearly half of the negative consequences of single parenthood on the well-being of children are due to the poor economic conditions faced by single mothers (see also Bank et al. 1993; Bianchi 1999). Apel and Kaukinen (2008) state, “The economic reality of various family forms…is an important component in explaining some of the effect of family structure on child outcomes” (p. 43), and it is possible that economic changes following a family transition are key determinants of changes in outcome measures. Unfortunately, the NYS does not include sufficient information on family finances in subsequent waves of data to assess the influence of increased or diminished financial resources following a family transition. Additionally, non-resident parent interactions with children have been raised as important correlates of behavioral outcomes following a family transition (Kelly and Emery 2003; Maccoby et al. 1993). Future research should thoroughly investigate the conditioning influence of non-resident parent–child interactions in family transitions.

ENDNOTES

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1The second wave of the NYS data was not chosen for the current study because that wave lacks relevant information on family living arrangements.

2Because none of the valid cases at either wave of the NYS was missing information on more than 10 percent of the offending measures, mean substitution is used on the missing items for each individual in the sample.
3 Note that although recoding the outlying values brings the offending change measure within the range of normality, the results of the study are substantively similar to the results of the same analysis using the full non-normally distributed offending variable.

4 Although the measures of family structure transitions lack relevant information on the marital status of the parental figures in the household, Brown (2006) reports that the outcomes of family dissolution are similar across union type (married, cohabiting, or blended). Further, moving into a stepfamily has similar effects on child well-being regardless if the family formation involved marriage or cohabitation (Brown 2006).

5 To ensure that these interactions are not reflecting the potential confounding effect of interaction between baseline levels of juvenile offending and family formation, we also estimated the model with a control for that interaction in Model 4 (results not shown, but available upon request). The interaction between early offending and family formation shows a significant positive effect on changes in criminal offending, again indicating that the exacerbating impact of family formation on increases in offending is strongest for those subjects who were most delinquent at the first wave. The addition of this interaction term, however, did not substantially affect the interaction between family formation and early parental attachment.

REFERENCES


