

**Bowling Green State University**  
**The Center for Family and Demographic Research**

<http://www.bgsu.edu/organizations/cfdr>

Phone: (419) 372-7279      cfdr@bgsu.edu

*Working Paper Series 2011-02*

**PARENTHOOD AND CRIME: THE ROLE OF WANTEDNESS, RELATIONSHIPS  
WITH PARTNERS, AND SOCIOECONOMIC STATUS**

Peggy C. Giordano<sup>1</sup>, Patrick M. Seffrin<sup>2</sup>, Wendy D. Manning<sup>1</sup>, Monica A. Longmore<sup>1</sup>

<sup>1</sup>Department of Sociology  
and Center for Family and Demographic Research  
Bowling Green State University  
Bowling Green, OH 43403

<sup>2</sup>Department of Criminal Justice  
Marywood University  
Scranton, PA  
pgiorda@bgsu.edu

\*This research was supported by grants from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (HD036223 and HD044206), the Department of Health and Human Services (5APRPA006009), and by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24HD050959-01). Direct correspondence to Peggy C. Giordano, Department of Sociology, Bowling Green State University, Bowling Green, OH 43403 [pgiorda@bgsu.edu](mailto:pgiorda@bgsu.edu)

**PARENTHOOD AND CRIME: THE ROLE OF WANTEDNESS, RELATIONSHIPS WITH PARTNERS, AND SOCIOECONOMIC STATUS**

**ABSTRACT**

Parenthood may play a pivotal role in the criminal desistance process, but few studies have examined the conditions under which becoming a mother or father is most likely to lead to reductions in criminal behavior. The current longitudinal study draws on four waves of adolescent and young adult interview data (N = 1,066) to examine the impact of parenthood on criminal trajectories, as well as the degree to which the prosocial potential of parenthood is modified by socioeconomic factors, the nature of the relationship between the biological parents, and pregnancy wantedness. The influence of gender on these relationships is also examined. Results from HLM longitudinal regression models indicate that highly disadvantaged young men and women do not report lower average levels of criminal behavior after becoming parents, although young men and women from more advantaged backgrounds do report lower average levels of crime after making these transitions. Pregnancies that were described as wanted reduced female involvement in crime regardless of socioeconomic status, while status of the relationship (married or cohabiting and single) was in general not a strong predictor. In-depth qualitative data are used to further elucidate the conditional nature of the parenthood-crime relationship.

## **PARENTHOOD AND CRIME: THE ROLE OF WANTEDNESS, RELATIONSHIPS WITH PARTNERS, AND SOCIOECONOMIC STATUS**

Marriage and employment have been studied extensively as factors associated with desistance from crime, (Duncan et al., 2006; King et al., 2007; Laub and Sampson, 2003; Uggen, 2000), but becoming a parent is another key transition event that may be an important catalyst for making significant life changes. It is important to explore the linkages between parenting and crime not only because this experience may have an impact on the individual's own movement away from a criminal lifestyle, but because continued involvement can have significant negative effects on the next generation (Giordano, 2010; Hay and Evans, 2006; Western and McClanahan, 2000; Murray and Farrington, 2005; Roettger et al., 2011; Wildeman, 2009).

Prior research on the role of parenting in the desistance process has produced mixed results, (Hope, et al., 2003; Hunt et al., 2005), and some studies have suggested gendered effects. For example, while Laub and Sampson (2003) did not find an effect of having children for male offenders, Moore and Hagedorn (1999) found that young women with gang affiliations often quit once they had become mothers. Fleisher and Krienert (2004) found that a majority of their sample of female gang members focused on pregnancy and an associated need to "settle down" as influencing their inactivity as gang members or reducing their levels of involvement. Graham and Bowling (1996) studied the desistance process in a British sample of male and female offenders, and also found that childbearing was linked to women's desistance, which they suggested arose "out of the practical and emotional consequences of motherhood" (p. 73). More recently, Kreager, Matsueda, and Erosheva (2010) relied on Denver Youth survey data to study within individual changes in young adult women's criminal behavior in this sample of disadvantaged respondents, and found significant effects of becoming a parent on subsequent reductions in self-reported involvement.

While the above studies suggest an important role for parenthood, particularly for women, other researchers have not documented uniformly strong effects. For example, relying on a quantitative assessment, Varriale (2008) did not find that pregnancy was associated with girls' exits from gang

involvement. Similarly, Giordano found that neither having children nor number of children were systematically related to desistance in a long-term follow-up of delinquent girls (Giordano et al., 2002; see also Kohm, 2006; Miller, 1986). A European sample of the general population similarly concludes that the transition to parenthood is not associated with criminal desistance (Blokland and Nieuwbeerta, 2005). Indeed, current statistics indicating that a majority of women (and men) incarcerated in state and local facilities have minor children (Glaze and Maruschak, 2008) themselves suggest a more conditional approach to understanding the dynamic relationships between parenting and crime.

The current analyses rely on data derived from a longitudinal study of a large, diverse sample of 1,066 women and men interviewed four times, first in adolescence, and later across the transition to adulthood (Toledo Adolescent Relationships Study-TARS). The analysis is similar to that of Kreager et al. (2010) in its focus on within-individual changes, but contributes beyond prior work by including male and female respondents across a broader range of socioeconomic levels. Our approach will allow more systematic exploration of the ways in which socioeconomic status influences the parenthood-crime relationship. We further contextualize the parenthood experience and effects on criminal involvement by considering the influence of cognitive processes, specifically the wantedness of the pregnancy (Joyce et al., 2000), and whether parenting occurs within the context of a cohabiting or marital relationship. These analyses will thus allow us to specify not only the overall influence of parenting on crime patterns, but the ways in which gender, social capital/resources (SES), cognitive processes (attitudes toward the pregnancy), and relationship context (single, cohabiting, or marital relationship) affect parenthood's prosocial potential. The analysis also draws on narrative life history accounts elicited from a subset of these respondents (22 women and men who had become parents) to further explore the role of parenthood as a catalyst for making and sustaining positive life changes. In the process, we hope to make a contribution to more general theorizing about the dynamics underlying behavior change, as we explore the promise and limitations of conceptualizing transition events such as parenthood (along with marriage and employment) as the central dynamics fostering criminal desistance.

## BACKGROUND

Although marriage and employment have long been considered cornerstones in explanations of the desistance process, (Laub and Sampson, 2003), becoming a parent also has much potential as a life altering transition event (Graham and Bowling, 1996). From shifting routine activities (Horney et al., 1995) to assuming a new identity (Giordano et al., 2002; Maruna, 2001; Matsueda and Heimer, 1997; Paternoster and Bushway, 2009), profound life changes potentially connect to parenthood. Importantly, many of these same dynamics have figured heavily in discussions of the desistance process (Kazemian, 2007). Fundamental to theorizing about desistance, becoming a parent may provide strong feelings of attachment and obligation to another that act as a form of informal social control (Laub and Sampson, 2003), and consistent with differential association emphases, foster reduced association with “bad companions” (Giordano et al., 2003; Warr, 1998).

Prior theory and research on gendered aspects of family formation has also suggested that parenthood may be particularly life altering for women, who continue to be heavily involved in day to day tasks associated with childrearing (Casper and Bianchi, 2009), and whose roles as mothers and connections to family are believed to be central to their adult identities (Broidy and Cauffman, 2006; Brubaker and Wright, 2006; Graham and Bowling, 1996). However, as family and gender scholars have noted, in the contemporary context this idea of fundamentally distinct identity portfolios for adult women and men undoubtedly overemphasizes the ubiquity and centrality of the childbearing experience for some women, and underemphasizes the heavy focus of many men on the fatherhood role (Day and Lamb, 2004; Gerson, 2009; Kimmel, 1987; Mason and Jensen, 2003). MacLeod (1995), for example, in a follow-up study of disadvantaged boys described fatherhood as “prompting many Hallway Hangers to rethink what manhood is all about” and suggested that embracing fatherhood “means turning your life around” (p. 190-191). Laub and Sampson (2003), while focusing quantitative analyses primarily on the importance of ‘the good marriage effect,’ noted that a number of male desisters in the Glueck sample emphasized their love for their children as they discussed the changes they had made to their lives. The above brief review and mixed pattern of results highlights the need for additional research on parenthood and crime connections,

with a particular focus on the role of gender and other factors that may influence the nature of this relationship.

## CONCEPTUALIZING MECHANISMS UNDERLYING THE DESISTANCE PROCESS: A CONDITIONAL APPROACH

As researchers have attempted to integrate the broader tradition of life course studies with criminological concerns, the emphasis has most often been placed on the impact of a small roster of transition events. Although the current focus on the transition to parenthood follows generally in this tradition, prior critiques of the event-based perspective on behavior change and the life course perspective more generally provide a potentially useful conceptual backdrop for the current investigation (see e.g., Giordano et al., 2007). Focusing almost exclusively on transition events such as marriage can be limiting for several reasons. First, numerous cultural and economic forces have altered the character of marriage and employment, and the experience of transitioning to adulthood itself (Settersten, 2008). For example, it is more common today than in previous generations for women as well as men to delay childbearing and marriage in order to pursue higher levels of educational achievement. These changes, which may reflect demands of the marketplace for more educated and highly skilled employees, have been accompanied by a growing acceptance of non-marital childbearing and cohabitation (i.e., the “second demographic transition” in the United States—see Lesthaeghe and Neidert, 2006). Secondly, and more fundamentally, focusing heavily on events such as marriage places the primary emphasis on the actions of the change agent (what spouses do, what the marital bond offers). This contrasts with a view of desistance that incorporates to a greater extent the actor’s own subjective changes and associated agentic moves, which are theorized as an essential aspect of the change process (Giordano et al., 2002; Haigh, 2009; Healy, 2010; Maruna, 2001). This cognitive emphasis provides a more conditional perspective on change, and on the prosocial impact of specific change agents. This is an especially important consideration given our focus here on having children, since children, particularly in the early years, cannot literally provide informal social control or force an individual to limit contacts with antisocial

companions. This suggests the utility of exploring not only whether parenthood is associated with reductions in crime, but specific conditions under which a prosocial impact is observed. Based on prior research and theorizing, a basic working hypothesis is that gender moderates the parenthood-crime relationship (i.e., has a stronger effect on women's involvement – see e.g., Thompson and Petrovic, 2009). However, below we outline several other conditional factors that, along with gender, warrant further investigation.

## WANTEDNESS

Scholars and practitioners alike have focused attention on “readiness to change” as a basic cognitive position and set of attitudes that primes the individual for making successful moves away from crime, and other problem behaviors such as drug and alcohol abuse (e.g., McIntosh and McKeganey, 2001). While this cognitive transformation is generally considered necessary for breaking habits (see especially Healy, 2010) and discarding old lifestyles, we have also emphasized that specific “hooks” for change play an important role in allowing the individual to craft a satisfying and achievable replacement self (Giordano et al., 2002). Further, such hooks undoubtedly vary in their transformative potential. For example, a period of incarceration often acts as a preliminary catalyst for making life changes, but offers little direction about how to move forward to develop a more prosocial lifestyle. The individual's receptivity to specific hooks for change also varies, and these subjective attitudes or orientations may influence the reach/promise of these potentially beneficial catalysts. For example, interventions with offenders may include a spiritual component, but unless individuals resonate with religion and spirituality, such well-intended efforts may not have the desired effect (Giordano et al., 2008), or the individual may need to draw on other catalysts for affecting sustained behavior change.

In the present context, then, a positive attitude toward becoming pregnant and having a child (or becoming a father) should increase the prosocial potential of transitioning into the parent role. Our interest in the individual's subjective stance toward childbearing extends to the criminological realm an extensive broader literature on the negative consequences of unintended pregnancies. Pregnancy

intentions are generally assessed based on responses to retrospective questions about a mother's feelings at the time she became pregnant. Women are asked whether a focal child was wanted, where other possible responses include those that were either mistimed (may have wanted, but not at that time) or unwanted. The latter two categories are often considered together as "unintended." Research has shown that unintended pregnancies are related to negative child outcomes (Hellerstedt et al., 1998; Joyce et al., 2000; Korenman et al., 2002), but also, where research has focused on the parents themselves, have been linked to poor psychological and physical well-being, more negative attitudes toward parenting, and a lower quality of relationship with one's spouse/romantic partner (Bronte-Tinkew et al., 2007; Logan et al., 2007). Thus, an intuitive hypothesis is that wanted relative to mistimed or unwanted pregnancies should have a greater prosocial impact on subsequent involvement in crime. This follows from a) the idea that those experiencing a wanted pregnancy may be more likely to actively engage with and embrace the new role and adjust their new lifestyle accordingly, and b) the results of prior research that documents a range of negative consequences of unintended births (e.g., lower psychological well-being) that may work together to limit the prosocial potential of this transition event. While we have conceptualized this attitude toward pregnancy/childbearing as a cognitive stance or orientation, clearly feelings and emotions also figure into both the development of assessments of wantedness, and associated behavioral choices (see e.g., Santelli et al., 2003). An emerging literature in the sociology of emotions tradition has highlighted that emotions unfold in concert with cognitive processes (as against the notion of oppositions between the cognitive and affective realms of experience), and also that emotions have motivational significance, potentially providing energy for new lines of action (Giordano et al., 2007).

## RELATIONSHIP WITH PARTNER

Unlike some other hooks for change, childbearing inevitably connects on some level (at least initially) to another social relationship—that with the other biological parent. The nature of the relationship may range from a brief liaison to a marital relationship (Tach et al., 2010). Researchers have documented that cohabitation has become an increasingly accepted union that exceeds dating in its level of seriousness and



interdependence, and is especially common during the young adult period we focus on in the current investigation (Hofferth and Goldscheider, 2010; National Center for Family and Marriage Research, 2010; Raley, 2001). Although prior research on parenthood effects controls for marital or cohabiting status (see e.g., Kreager et al., 2010), we move beyond this approach by specifically locating the parenting experience within a union or relationship context. To the degree that the individual is involved in a relatively more serious and interdependent relationship (cohabiting or married) with the other parent of the child, this could act as a stabilizing influence that may be associated with reduced criminal involvement. Conversely, if parenthood does not occur as a “package deal,” following from the logic of control theory, it may fail to act as a significant form of informal social control. Many other features of this relationship with the other biological parent warrant further scrutiny (ranging from degree of conflict with the partner to the partner’s level of criminal involvement), but this initial investigation will allow us to determine whether relationship status (residing with the other biological parent) provides a prosocial benefit relative to involvement in a less serious relationship or no relationship with the other biological parent.

## SOCIOECONOMIC STATUS

The broader socioeconomic context within which childbearing occurs may influence the parenthood-crime relationship directly, or indirectly by differentially affecting the cognitive (wantedness) and social (relationship with partner) dynamics outlined above. Individuals transitioning from adolescence to young adulthood do so within the context of widely varying resources, normative climates, and opportunities (e.g., Kohn, 1959; McLanahan, 2004; Oppenheimer, 2003; Wilson, 1987). These basic variations in life circumstances may influence the character and meaning of parenthood, and by extension the potential impact of this transition on involvement in criminal behavior. For example, in an exploration of social class differences in the experience of motherhood, McMahon (1995) found that for the middle class respondents in her sample, motherhood was viewed as a time of life enhancing personal growth. Women she interviewed often described being overwhelmed by their emotions... and indicated that they were

“totally absorbed by their children... as though they had fallen in love” (p. 135). Respondents across the range of SES levels saw motherhood as generally rewarding, but lower SES women were more likely to describe the transition in terms of new obligations and as part of the process of settling down. The idea that motherhood may represent a more distinct all-encompassing role for middle class women is also suggested by research on parenting practices, as scholars in this tradition have depicted the hands-on, activity oriented parenting styles of middle class parents that contrasts with the less intense, conformity emphasis of lower SES parents (Kohn, 1959; Lareau, 2003). Although either orientation toward parenthood and childrearing could well be associated with reduced criminal involvement, the idea of a more all-encompassing identity transformation in the case of middle class women may position more advantaged young adults to benefit to a greater extent from a ‘parenthood effect.’ In addition, the greater access to resources of those with advantaged backgrounds (from adequate housing and income, to social and tangible support from families of origin) can provide the necessary scaffolding for comfort and success in adapting to this new role.

Although the above considerations lead to the hypothesis that parenthood should have a more strongly prosocial effect on levels of criminal involvement of middle class respondents, other research provides a somewhat different portrait. For example, Edin and Kefalas (2005) argue that motherhood is one of the most important *available* social roles for poor women, who often cannot count on intimate relationships or success within the realms of education and the labor force as positive sources of adult identity. Brown and Bloom (2009), in a study of female offenders, noted that women released from prison often cited motherhood as a key motivation for reconnecting with family members and re-establishing conventional roles in the community. In a qualitative study of lower SES males, Moloney et al. (2009) found that becoming a father appeared to improve the odds of desisting from crime and gang activity. Finally, Kreager et al.’s (2010) recent analysis, while restricted to a lower SES sample, did document that within this context motherhood was associated with reduced levels of involvement in criminal activity. These somewhat contradictory portraits highlight the need for additional research that explores patterns of criminal involvement of young adults across the full range of SES levels. We assess

general and SES-specific effects of transitioning to parenthood, as well as gendered and SES specific effects of variations in the wantedness of the pregnancy and the role of cohabitation/marriage in connection with the parenting experience.

### **THE CURRENT STUDY**

Based on prior research, we hypothesize that parenthood should have a more strongly prosocial effect on female respondents, and advantaged relative to disadvantaged respondents. Wantedness of the child and co-residence with the other biological parent (cohabiting/married) should also condition the parenthood-crime relationship, as these are indicators of a positive orientation toward the pregnancy and a level of social imbeddedness that should facilitate a stronger emphasis on and impact of this new role. The analyses will also explore whether the latter cognitive and social factors operate similarly according to social location (SES levels) although we do not offer specific a priori hypotheses in this regard.

Our approach to the analyses involves within-individual models of behavioral change. The cross-sectional or between-individual approach to studying crime would not allow answers to questions about the effect of lifestyle changes on subsequent criminal behavior. Another complicating issue is that early childbearing itself is associated with juvenile delinquency. Indeed, delinquency, drug use and early sexual involvement have long been viewed as examples of a general underlying potential for risky problem behavior (e.g., Gottfredson and Hirschi, 1990; Jessor and Jessor, 1977). Although prior research has not clearly documented that a specific stable trait accounts for variations in criminal desistance, a thorough assessment of the effects of parenthood on crime nevertheless requires the introduction of controls for between-individual differences so that the effects of change can be studied independently. The within-individual model is described in more detail in the analytic strategy section (see below). These quantitative analyses are supplemented with excerpts from in-depth qualitative interviews that further illustrate the conditional nature of a parenthood effect.

DATA

This research draws on four waves of panel data from the Toledo Adolescent Relationships Study (TARS), which is based on a stratified random sample of 1,321 adolescents and their parents/guardians. The TARS data were collected in the years 2001, 2002, 2004, and 2006.<sup>1</sup> The sampling frame of the TARS study encompassed 62 schools across seven school districts. The initial sample was drawn from enrollment records for 7th, 9th, and 11<sup>th</sup> grades, but school attendance was not a requirement for inclusion in the study. The stratified, random sample was devised by the National Opinion Research Center and includes over-samples of Black and Hispanic adolescents.<sup>2</sup> The initial sample included 1,321 respondents and wave 4 retained 1,088 valid respondents, or 83% of wave 1. The respondents' average age is 15 years in wave 1, 16 in wave 2, 18 in wave 3, and 21 years in wave 4. The average time interval separating the second wave from the first is about 14 months, approximately 21 months (on average) separate the third wave of interviews from the second, and approximately 25 months (on average) separate the fourth wave of interviews from the third wave. The total time of the study ranges from 0 to 75 months, although the average study length is 61 months. The analytic sample (N= 1,066) is based on respondents who participated in all four waves. The TARS data are unique in that unlike much of the prior research on parenthood and crime, information was collected over four waves of interviews from an economically and racially diverse sample of young women and men who, in addition to reporting on the timing of childbearing, also provided information about the nature of their relationship with the biological parent and the wantedness of the pregnancy. Furthermore, at wave 4 a subset of respondents (n = 100 at each wave) were selected to participate in-depth qualitative interviews.<sup>3</sup> These are semi-structured interviews conducted face-face between one respondent and one interviewer. Interviews were taped recorded and later transcribed. Information provided in the structured interview indicated that twenty two respondents who participated in the qualitative component reported that they had least one biological child.

## MEASURES

*Crime and Delinquency.* Self-reported crime and drug use are measured at each wave with an 8-item scale that references theft, property damage, burglary, violence, drug trafficking, and drug use in the past

12 months. The items in this scale are adapted from the earlier scale development work of Elliott, Huizinga, and Ageton (1985). Responses to these items are coded (0) never, to (8) more than once a day.

*Parenthood, Wantedness, and Relationship Status.* Parenthood, the wantedness of the pregnancy, and relationship status were assessed at each wave of data collection. Pregnancies that ended in a live birth were recorded with a time-varying dummy variable coded (1) parent or (0) not a parent. The majority of parents in the sample report becoming first-time mothers and fathers between the third and fourth waves of data collection, however, a small number (25) of respondents reported having children before wave 1.

The wantedness of the birth was assessed by asking respondents, in reference to a previous live birth, if they a) wanted to get pregnant, b) wanted to, but not at that time, or c) did not want to get pregnant. For purposes of these analyses, the latter two responses (mistimed and unwanted) were combined and coded as unwanted. Analysis of wantedness focuses on time-varying dummy variables indicating the birth was wanted, and the reference group indicated the respondent was not a parent. Thus, the contrast category is “not a parent.”

Relationship status with the biological parent was assessed by asking respondents if they were married to or cohabiting with the biological parent. These two items were combined and coded cohabiting/married (to the biological parent) and “single parent” for analysis of the conditional effect of parenthood.<sup>4</sup> All other regression analyses (as shown in Tables 2 and 3) include a time-varying dummy variable for cohabiting/marital status that was assessed at each wave independently of parenthood status. In these models, the effect of the time-varying relationship status variable (cohabiting/marital) is compared to single.

*Socioeconomic Disadvantage.* Socioeconomic disadvantage was assessed at wave 1 as part of the parent survey. Parents of the youth respondents were asked if they had earned less than twelve years of education, received government assistance for needy families (e.g., TANF, food stamps, or a housing subsidy), had trouble earning enough money to make a meal in the past 12 months, and if unemployment is a problem in their neighborhood. The content of these items is consistent with previous work that suggests measuring social class with education, economic, and neighborhood indicators (Krieger et al.,

1997). Responses to these four items were summed into a disadvantage index ranging from 0 to 4. We also reestimated models relying on census tract measures of socioeconomic disadvantage, and as noted below, the results are similar.

*Demographic Indicators.* Similar to parenthood and cohabiting/marital status, high school graduation and full-time employment were measured with time-varying dichotomous indicators at each wave. Family structure at wave 1 is measured with four dummy variables: two bio-parents, step parent, single parent, and other family form with two-parents as the reference category. Race/Ethnicity is represented with three dummy variables: White, Black, and non-White Hispanic, with White as the reference category. Age is measured in years as a continuous variable.

*Time.* The longitudinal design of current study requires that time-varying observations are demarcated in terms of the length of time that has elapsed between waves. Time is clocked by the number of *months* since the first interview. All respondents have a value of zero for time at first interview and then vary from one another for the three follow-up interviews.

## ANALYTIC STRATEGY

We use a multiple-level or longitudinal HLM regression model and four waves of panel data to estimate the influence of parenthood on crime trajectories (e.g., Raudenbush and Bryk, 2002; Singer and Willett, 2003).<sup>5</sup> The parenthood variables and beta estimates are decomposed into between-individual and within-individual components; between-individual components represent the estimated average differences in crime (across the four waves), and within-individual components represent the estimated impact of becoming a parent on these average differences. The parenthood variables and beta estimates are further decomposed in analyses that examine the wantedness of the pregnancy (wanted and unwanted) and the relationship status of the biological parents (marriage/cohabiting and single parent). These within-individual parenthood components are represented in the models with time-varying dummy variables, which indicate the estimated impact of becoming a parent on crime trajectories. Models are estimated separately for male and female respondents given prior research and theory that has emphasized

the differential meaning and impact of parenthood for women and men. Interaction terms between wave 1 disadvantage and within-individual parenthood variables are used to examine the degree to which socioeconomic disadvantage influences or modifies the effects of these changes on crime trajectories. These interactions allow us to estimate the impact of parenthood across variations in socioeconomic background. Lastly, interactions between age and crime are used to model the potential for age-graded differences in crime trajectories. While the focus of this study is on parenthood, statistical models incorporate other lifestyle factors that are often associated with criminal involvement, specifically educational achievement (dropped out of high school versus graduated) and employment status (full-time job versus unemployed or part-time employment). Social demographic variables (race/ethnicity and family structure at wave 1) are also included in the multivariate models.

## **RESULTS**

### **DESCRIPTIVE STATISTICS**

Table 1 shows that about 20 percent of the sample experienced a pregnancy that ended in a live birth. One-hundred and forty-six of these births (65.4%) were to female respondents while seventy-seven were to male respondents. However, when these distributions are separated by levels of socioeconomic disadvantage, we observe that 39 percent of male and 49 percent of female highly disadvantaged youths are young parents in contrast to only 7 percent of male and 12 percent of female advantaged youths. Age at first birth ranges in the sample from 13 to 24 years however the mean is between 19 and 20 years of age and does not vary substantially according to levels of socioeconomic disadvantage. The majority of live births (73%) were reported as unwanted, with high levels among disadvantaged youth. Among parents, about two-fifths (43% of females and 42% of males) lived with the other biological parent. However, this varies by socioeconomic status with more advantaged youth more often than their disadvantaged counterparts living with the biological father (e.g., 46% versus 26.5%). Black and Hispanic respondents are over-represented as disadvantaged youths in the sample. The indicator of relationship status (not tied to parenthood status as above) showcases that more disadvantaged youth more

often experience cohabitation or marriage than their more advantaged counterparts. Employment status is similar across disadvantage with males more often working full time than females. Disadvantaged youth more often have not graduated relative to their more advantaged peers.

{Table 1 about here}

#### WITHIN-INDIVIDUAL ANALYSES

Regression models in Table 2 examine the within-individuals effect of parenthood on the crime trajectories of male and female respondents. Between-individual effects are controlled for, but not shown in the models. Models also include controls for education, employment, and cohabiting/marital status (in Tables 2 and 3), family structure at wave 1, race and age. The unconditioned within-individual effects in Model 1 indicate little change in the crime trajectories of respondents who became parents. While the beta coefficients are negative for both men and women, only women experience marginally significant declines in criminal involvement after becoming mothers. Controls for changes in relationship status, employment and education are non-significant for women; however men who drop out of high school are at risk of escalating levels of criminal involvement. The lack of a significant relationship effect for cohabitation and marriage is not completely unexpected given the youthful age structure of the sample. These control variables are included in subsequent models but are not presented.

{Table 2 about here}

Model 2 introduces a two-way interaction that evaluates the conditional effects of parenthood according to one's socioeconomic status. For females as well as males, there is a positive and significant interaction with parenthood status and the level of disadvantage reported at wave 1, which indicates that parenthood is less likely to produce prosocial changes among youths from highly disadvantaged backgrounds. Indeed, the conditioned within-individual effects reveal that highly disadvantaged men and women experience no significant change in criminal involvement after becoming parents, whereas lower crime trajectories among the least disadvantaged respondents are evidenced after making these transitions. These results suggest that parenthood may indeed influence criminal desistance; however this prosocial benefit is most likely to occur among parents whose lives do not include the additional



challenges of limited family resources and lack of access to various forms of social capital.<sup>6</sup> The significant random variance components for the intercept and months indicate variation between and within individuals that is unexplained by the model.

Next, we examine the wantedness of the pregnancy and its connection with subsequent changes in crime trajectories—in general, and based on the socioeconomic background of male and female respondents. Table 3 presents results of analyses in which we examine differences in the effect of parenthood for men and women who wanted the pregnancy and those who did not. Model 1 indicates that regardless of socioeconomic background, women who wanted their pregnancy experience subsequent declines in criminal involvement. This general effect of having a wanted birth was not observed for men in the sample. Further, having an unwanted pregnancy was not significantly related to reductions in self-reported criminal behavior for either male or female respondents. In a subsequent examination of the influence of reporting either a wanted or unwanted birth by level of disadvantage, the non-significant interaction coefficient for wanted by disadvantage indicates that this effect is similar across variations in socioeconomic status. However, differential effects are observed among respondents who report an unwanted pregnancy. When a pregnancy is described as mistimed or unwanted, there is nevertheless an observed decline in criminal involvement among the least disadvantaged respondents.

{Table 3 about here}

Finally, we examine the relationship contexts associated with parenting as a potentially important condition that may influence parenthood's prosocial potential. Regression analyses in Table 4 examining within-individual effects show that living with the biological parent is associated with little change in crime trajectories. Model 1 suggests that women who are married or cohabiting with the biological father experience marginally significant declines in criminal involvement, while men experience no significant change. Becoming a single parent is not in general associated with declines in self-reported crime. It is possible, however, that the effect of the relationship between the biological parents is itself conditioned by broader socioeconomic influences; thus in Model 2 we examine the relationship status of parents at high and low levels of the disadvantage index. The effect of cohabitation does not vary by socioeconomic

levels for female respondents. However, the interaction terms between wave 1 disadvantage and the relationship status variables are positive and significant in the other three sets of analyses. Advantaged male and female respondents experience crime declines after becoming single parents, and advantaged males who are cohabiting with or married to the biological partner also report lower levels of criminal activity. Taken together, these findings suggest that regardless of their relationship with the other biological parent, advantaged respondents appear to benefit to a greater degree (from a crime standpoint) from the transition to parenthood.

{Table 4 about here}

In summary, our hypotheses received partial support from analyses of these longitudinal data. Women were marginally more likely than men to desist from crime after becoming a parent, particularly to the extent that the pregnancy was wanted. This finding is generally consistent with prior theorizing about desistance, which has highlighted that a favorable attitude toward specific hooks for change should be associated with a greater likelihood of observing a prosocial benefit (Giordano et al., 2002). However, socioeconomic background appeared to play an even more central role in determining whether parenthood was associated with significant temporal shifts in self-reported criminal behavior. In general, young adults from highly disadvantaged families were less likely than their more advantaged peers to experience subsequent declines in criminal involvement after becoming parents. These findings are potentially important, because criminal involvement and the experience of incarceration disproportionately affect lower status individuals, and lower SES is associated with greater likelihood of experiencing an unwanted pregnancy. These findings point to the long reach of socioeconomic status not only as a direct influence on crime patterns, but as potentially compromising the ability of major transition events to function smoothly as turning points in the desistance process.

#### A QUALITATIVE LENS ON THE PARENTHOOD AND CRIME RELATIONSHIP

The content of the life history narratives provided by a subset of the respondents with at least one child accords with the conditional perspective developed through our analyses of the quantitative data. It is

interesting and potentially important to note, however, that a relatively large number of respondents do focus heavily on changes that they tie to assumption of the parent role. Approximately 44 percent of the narratives of respondents with at least one child make specific mention of effects of parenthood on their levels of involvement in behaviors that could “get them in trouble with the law.” Further, male respondents were actually more likely to mention this than their female counterparts (61% of males; 29% of females).<sup>7</sup> In addition, it is important to underscore that these parenthood-has-changed-me narratives were not elicited in response to questions about how having a child had influenced their lives, but to a more general line of inquiry about whether their involvement in illegal behavior and substance use had increased, decreased or stayed about the same since high school days. For example, Jessica, aged 21, said that she had become pregnant after she had been raped by an acquaintance of her sister’s boyfriend. Although the experience was very traumatic, and the pregnancy hardly could be called ‘wanted,’ she nevertheless develops the idea that having a child had changed her life in critical ways:

But I got my son out of it, which is the greatest thing that I’ve ever had. I mean he changed my life around insanely... that’s what made me get my life together. I tell everyone that my son is God’s way of giving me a good kick in the butt and telling me to get my life together. He’s like I’m done playing with you, get it together. So I think that’s why I turned my life around because now all of sudden I had to be responsible for him. I had to provide for him, I had to show him how things worked and I couldn’t do ... everything else I was doing. I’m really worried about screwing it up. It’s kind of one of those things I don’t want to mess up.

I’m more in transition right now...trying to transition from the way that I was in high school to the way I need to be. I’m getting there.

Daniella sounds a similar theme, and is even more definitive about her shift in priorities:

Because I have a child now and I’m a parent now and I’m older and my mind is elsewhere. I’m trying to get money now, I’m not thinking about going out and partying, none of that. I’m trying to live every day and get by and take care of my daughter.

As indicated above, this type of narrative was found even more often among the male respondents. The custody arrangements of the male respondents’ children did present a broader range (consistent with national figures indicating that a majority of U.S. children live with their biological mother—Swartz, 2009), but references to children and responsibilities as a parent often emerged, even where fathers did not have physical custody of their biological child. At the time of the in-depth interview, for example,

Jason was cohabiting with a new girlfriend and her child, yet he referenced responsibilities for his son Connor in combination with these relatively new living circumstances: “Decreased. Just grown up. Got a kid now, got a house.... girl, her kid. You know, got stuff to [take] care of.”

Adam, a 23 year old truck driver, had married his girlfriend Katie, but nevertheless within his narrative placed more emphasis on the idea that changes in his behavior stemmed from his children as well as his work: “Oh totally decreased...Because I got kids...There’s more responsibilities, a lot more responsibilities.” In response to a question about Katie’s role in these life changes, he replied:

Um, not much because she’s like, she likes to drink a little bit with me every now and then but she was a partier too. So she’s never really stopped me. She doesn’t like me hanging out with certain friends because they could get me in trouble, but, so, other than that, it’s not really nothing. It’s more my kids and have to pay the bills. You can’t go to work drunk...especially on a truck. My career, I would say is big thing too but I’ve only been doing this a year, so. It has to be taking care of kids, you know there are responsibilities of a parent that keep me from partying.

Indeed, these assertions are sufficiently common within the narratives of respondents with children that those who did not stress these themes present a striking contrast. Marta, while employed, indicated that she did not have a problem with her boyfriend’s drug dealing, and when asked about her own level of involvement in things that could get her into trouble replied “The same. Yea. A lot. I don’t know, I just always stay the same. I rarely ever change what I do. The only thing that has changed around me is having a baby. That’s about it.” When asked about her future in the next three to five years, Marta indicated that she “probably won’t be going out no more. My clubbing days might be over because I’ve been clubbing ever since I was fourteen and I’m 24 now. By that time I’ve probably been there and done everything.” Thus, while she can envision a decrease in ‘partying’ in the future, Marta does not connect this to her parenting responsibilities but rather to the idea that over time, such activities may no longer hold the excitement they once did (see e.g., Giordano et al., 2007; Paternoster and Bushway, 2009).

Colleen’s in-depth narrative provides an even stronger contrast to those who describe parenthood as a life changing transition event. In response to a follow-up question about how she liked being a mother, Colleen responded, “I don’t like it.... I don’t know... because I am a little scatter-brained. There is a lot to remember...” This respondent was also emphatic about not wanting additional children (“this is it, we

don't believe in children but we don't believe in abortion"). The sections of her narrative focused on her boyfriend Andy were much more detailed and impassioned, even though their relationship had been "on and off for the past five years" ("I think our lives have been intertwined in past lives...I felt that we just were meant to be together"), and even though neither believed in traditional notions of marriage ("so if we do get married we will get married in Las Vegas by a midget Chinese Elvis"). Her narrative was similarly candid about prior and current substance use, ultimately reflecting a mixed portrait of behavior change. For example, when asked about levels of marijuana use, Colleen replied that it had increased since high school ("I have a job and I can afford it now").

Another striking example of the lack of an automatic parenthood effect is provided by Jennifer, who described herself as having a record "three inches thick." She indicated that her son "got taken away...when he was four months old... She admitted to the interviewer that she was on drugs at the time: "this place was horrible...there was feces everywhere...Dog feces, cat feces everywhere, and I didn't, I wasn't motivated to clean." Currently, Jennifer's son resides with her mother:

They said that you can't have your baby till you stop smoking marijuana and till you get the place cleaned up. If I wanted to right now I could go back and file for custody. But I know for a fact that I'm not ready. I don't think I could handle the responsibilities... it's hard for me to concentrate.

Jennifer told the interviewer that she has made significant efforts to change. For example, she now takes medication for bipolar disorder, has replaced the flooring and treated surfaces with chemicals to reduce odor, and no longer uses marijuana; nevertheless the interviewer observed that several walls looked as if they have been punched, and party house rules were posted by the front door.<sup>8</sup> Although Jennifer indicates that these rules have been helpful, this also provides an indication that she has not completely abandoned the party lifestyle ("I'll drink Jose Cuervo if anybody brings it around"). In addition, Jennifer and her husband "kinda sorta" want a second child, and have not been using birth control, even though she admits that she feels stressed during visits with her son, due to his moods and demands.

Jeff's narrative highlights to a greater extent the potential of parenthood to operate as catalyst for making more comprehensive life changes; yet this example illustrates that the effects do not necessarily

take hold at the time of this transition event. Jeff recounted previous problems with the law (“then when I got into that fight down here at the trailer park I got that assault charge...”) and his difficulties did not end when his daughter was born. Consistent with this timeline, he notes that at first he “ducked and dodged” when it came to child support. However, over time, Jeff experienced what appears to be a cognitive transformation, indicating that he “finally got tired of it, and realized that he would always need to pay out until she’s 18 and all the rest of my life, because she’s still my kid.” Jeff also stressed that he had much support and encouragement from his family of origin (he recalls his father’s words, “Son I love you with all my heart I think you can do better”), and at the time of the interview was in a stable relationship, albeit not with the mother of his child:

And then its like okay I got all these people that are willing to help me and give me this, you know this strongness, give me this push, I might as well take the chance. And I did and look at me now. Eight months later, shiiiit, brand new man. It feels good knowing that I aint got the government looking over... or we’re going to put you in prison. Nobody gonna categorize me with these deadbeats, because I’m not, you know...I pay mine. I may not get to see her much you know, and I, I deal with that. I cope with that. But I know when she gets old enough and she understands, okay my daddy always paid what he had to do, he worked hard for me, you know. ...basically I do what a lot of kids my age don’t do.

Jeff indicated that he no longer resorts to violence as a way to solve conflicts, and has given up alcohol and other drugs. His story of change focused heavily on his responsibilities as a parent to reorganize his priorities, and a “feared self” (deadbeat dad—see Paternoster and Bushway (2009) for a discussion of the feared self and desistance processes) he found repugnant, but it is important to point out that this cognitive transformation did not occur until his daughter was almost three years old. Further, even though he was intent on changing his life, economic resources appear to be critical to the success of his self-improvement project. Thus, Jeff was able to secure and keep a job on a maintenance crew at a discount department store, and this allowed him to focus on his role as a good father and provider, while distancing further from the party lifestyle. In addition, encouragement from others in his network, including his parents and new wife, may have played a role in the initial development and reinforcement of this shift in perspective.<sup>9</sup> These forms of network support may be particularly important when we consider children as a hook for change since, as mentioned above, at least initially the children themselves

cannot offer direct social control or provide a clear blueprint for pursuing a more prosocial way of life. This observation appears consistent with the quantitative results, which documented that more advantaged respondents were more likely than their disadvantaged counterparts to experience a ‘parenthood benefit.’ As a contrast, Damien, whose narrative reflects much affection for his son, feels that drug dealing is nevertheless “working for him” at this time in his life.

The qualitative data indicate that it is relatively common for respondents to focus on their childbearing experiences, but the in-depth life history narrative data are useful in suggesting a range of variations in adaptations to the parenthood role that tend to be obscured by an examination of the overall patterns found within the quantitative data. Narrative content ranges from references to dramatic shifts in lifestyle respondents tie to their parenting experiences to essentially no change (“I just always stay the same”). Many accounts, however reflect partial adjustments (e.g., Julie gave up hard drugs, but still smokes marijuana; Damien indicated that he had dropped out of gang life because he did not want his son to be exposed to it; yet he nevertheless still sells drugs in order to make ends meet). In other instances, change only took place after a significant period of time, and indeed may have been so recent that it would not have been picked up by the structured delinquency index, which references the past twelve months. For example, Jeff, quoted above, described a total turnaround, but had only been on this prosocial pathway for about eight months. Even more illustrative of this point, James, quoted at the outset, developed a relatively straightforward narrative about staying out of trouble due to his family responsibilities (“got a kid now, got a house...”), but this respondent had only been out of jail a week when we contacted him to set up the interview. This reveals that many respondents have accessed the parenthood-as-change-agent narrative, but this is not necessarily reflected in a pattern of sustained desistance from all forms of offending.

## **DISCUSSION**

Relying on the structured data, we explored conditional effects at the individual, social and structural levels. At the individual level, we hypothesized that a positive attitude toward the pregnancy

(wantedness) should influence the likelihood that parenthood would prove beneficial to the desistance process. The results of the analyses support this view; yet basic descriptive data presented in Table 1 reveal that a majority of births were unwanted. Further complicating this portrait, an examination of conditional effects showed that even an unwanted birth was associated with reduced crime among more advantaged respondents. The qualitative data also suggest the need move beyond this general orientation toward the pregnancy to capture the centrality/place of parenthood in the individual's 'hierarchy of salience' (Stryker, 2008), and the degree to which individuals come to make a particular sort of cognitive connection--namely that parenthood is fundamentally incompatible with the partying, drug dealing or other actions that are linked to continued legal problems. Many narratives contain descriptions of deep affection for and enjoyment of their children, but not all of the respondents have, at this point in the life course, forged this specific connection.

We also included attention to the relationship domain (whether the individual cohabited with/was married to the other biological parent). In general, relationship status did not emerge as a significant conditional factor; however mothers living with the biological father experience marginally significant reductions in criminal activity, as did similarly situated advantaged male respondents. Narratives of these young adults make clear that there is still considerable relationship instability and other complications that may limit the prosocial potential of such romantic/sexual involvements. Some of the references to the respondent's relationship with the biological parent suggest that these liaisons would be unlikely to provide a solid prosocial anchor. For example, Jake told the interviewer that his baby was the result of a "two night stand," and Donna indicated that she typically does not have sex with male partners, but believes she got pregnant while passed out at a party. Others describe longer term relationships, but also discord and conflict that may contribute to instability and in some instances even lead directly to further legal difficulties (e.g., Daniel noted that he and his baby's mother "got arrested a few times together... just stupid, like stupid, fighting out in the street...")

The quantitative results revealed significant effects of SES on the parenthood-crime relationship. Having children was not strongly linked with changes in the criminal trajectories of disadvantaged



respondents. This differential pattern by SES was found for young women as well as young men in this large, heterogeneous sample. These respondents were also more likely to report unwanted births, and less likely than their more advantaged counterparts to live with/marry the biological father of their child. However, both the structured and qualitative data highlight an array of additional disadvantages tied to structural location that may further compromise parenthood's prosocial potential. For example, supplemental analyses revealed that lower SES respondents scored lower than their more advantaged counterparts on scales indexing perceived parental support and attachment. Because the qualitative data are person-centered, however, they may better highlight the tendency of these other disadvantages to cluster within the life course experiences of particular individuals (e.g., the high school dropout who has unstable housing arrangements, is unable to find employment and also has a boyfriend who "goes through jobs a lot") (see especially Arditti et al. (2010) for a recent discussion of the notion of a 'cascade' of disadvantages). Those with a background of delinquency and substance use often report these disadvantages as well as an array of other negative life circumstances tied to their involvement and incarceration (Nurse, 2002; Pager, 2003). Together these constitute formidable obstacles to affecting a complete turnaround, even when respondents have expressed a strong desire to change their lives and even when having a child has provided additional inspiration for doing so.

Devon, for example, expressed great affection for his son Alex, but described ongoing battles with his baby's mother and with the criminal justice system. He indicated that he was always available to care for his son, but had recently stopped paying child support due to the loss of his job. This was creating drama with his baby's mother, and he was also being hassled by his landlord because some friends who come to visit him in his subsidized apartment have felony records. Although he has a reasonably stable relationship with his current girlfriend, they fight when he smokes marijuana to cope with the above stresses. A further complication is that he has outstanding warrants for his arrest ("I didn't kill nobody or nothing"), and thus Devon is considering a move to Florida to escape these legal consequences. In spite of relatively prosocial plans associated with the move (to gain employment experience in a restaurant, and

someday return to Ohio to open his own), this exit strategy will make it difficult to focus actively and primarily on the fatherhood role in a way that maximizes its conventionalizing potential.

One limitation of the current study is the relative youthfulness of the TARS sample; thus it is possible that births that occur later on in the life course will be more likely to exert a positive influence.<sup>10</sup> For example, Uggen (2000) found that work programs offered to older offenders were more likely to have a prosocial impact on desistance, although this same benefit was not observed for younger offenders. In addition, although the sample is diverse, its regional nature limits the generalizability of these results. Another limitation is that we examined relationship context primarily by relying on indicators of relationship status (i.e. whether married or cohabiting). Thus, it is possible that other indicators may better distinguish those unions that serve to maximize parenthood's desistance potential. For example, the stress that parenthood places on these early unions may trigger episodes of domestic violence as well as relationship infidelity which, in turn, could undermine the potential of even a 'wanted' pregnancy to act as an effective catalyst for making behavioral changes. Furthermore, recent research has shown that the character of young adult relationships with the family of origin is significantly related to levels of criminal involvement during this period of life (Johnson et al., in press; see also Schroeder et al., 2010). Thus, ties to family members, and the ways that parenthood influences these forms of attachment and support may also be important "conditions" that influence the degree to which parenthood operates in a prosocial fashion, or alternatively adds to the stressors that make the desistance process more precarious.

The current study contributed to the literature on desistance by showing that the prosocial potential of parenthood is influenced to a large extent by parental levels of socioeconomic disadvantage as well as the respondent's attitude toward the pregnancy; that is, whether it was wanted or unwanted. The findings suggest that, similar to Kreager et al. (2010), motherhood may lead to reductions in criminal offending even for women who are highly disadvantaged; yet our findings indicate this is likely only if the pregnancy was wanted. Pregnancies that were unwanted did provide a prosocial benefit for mothers and fathers, but only among parents with relatively advantaged socioeconomic backgrounds. Our finding that the effect of parenthood on crime is conditioned not only by socioeconomic status but also cognitive

factors suggests, then, that the transition has the potential to be an identity altering experience with implications for criminal desistance, but this is certainly not inevitable. The arrival of a new child may provide an initial impetus for the development of a “replacement self” or new identity that is less accepting of deviant lifestyles and more concerned with economic responsibilities (e.g., Graham and Bowling, 1996; Healy, 2011), but the quantitative and qualitative evidence presented here suggest the utility of a more conditional perspective. Sustaining this new self may prove difficult for young adults who are struggling to maintain a stable and monogamous relationship with a member of the opposite sex, coping with effects of economic marginality, or who are imbedded in networks which do not fully support the individual’s change in lifestyle.

## END NOTES

1. Based on Census data, the socio-demographic characteristics of the Toledo metropolitan area closely parallel those of the nation in terms of race (13% in the Toledo MSA and 12% in the U.S. are Black); education (80% in the Toledo MSA and 84% in the U.S. are high school graduates); median family income (\$50,046 in the Toledo MSA and \$50,287 in the U.S.); and marital status (73.5% in the Toledo MSA and 75.9% in the U.S. are married couple families). Structured interviews were conducted for all four waves, using laptop computers and software that contained the survey items. Parent reports from the first wave of data collection are used in this paper to gauge the levels of socioeconomic status and family structure.
2. There are 1,088 respondents who participated in the first and fourth waves of the TARS study. Logistic regression revealed that age at wave 1 is positively related to the likelihood of missing data in subsequent waves however the strength of this relationship is not substantial ( $\text{logit}:(\exp)^b 0.37 = 1.45, p < .05, r\text{-square} = .023$ ). Twenty-two respondents who identified as a minority other than Black or Hispanic were deleted because of the statistical and theoretical difficulties in comparing this small subset of respondents to the rest of the sample. Of the remaining 1,066 respondents in the analytic sample, over 94 percent also participated in all waves 2 and 3; however these missing cases represent less than 2 percent of the total number of person-period observations in the study.
3. The respondents who completed qualitative interviews were not chosen randomly, and were selected, consistent with original study objectives, because they reported an earlier history of sexual risk-taking (larger than average number of sexual partners), and either continued or desisted from this pattern at wave four. As delinquency is generally a significant correlate of sexual risk-taking we expected and found that these respondents also reported higher levels of delinquency than the sample as a whole. Our view is that the resulting sample is preferable to a randomly selected subset of TARS respondents, since the latter group would consist largely of individuals who have never been involved in problem behaviors, and thus would have had little to say about their involvement in

delinquency, or about the desistance process. Yet this selection criterion could have influenced the narrative content we elicited from these respondents; thus our objective here is to illustrate concepts via the narratives that could potentially be followed up more systematically using other qualitative or larger survey samples.

4. A subgroup of parents has had more than one birth in our analyses. The time varying indicators account for changes in reports of wantedness and relationship status.
5. Within-individual measures are created by subtracting each respondent's overall average on X (across the four waves) from each time-ordered observation of X. Within and between-individual components are then included in the regression equation. The variable representing time (months into study), and the intercept are modeled as fixed effects with a random variance component. By allowing the intercept to have a random variance component, we model the differences in the estimate of error between-individuals (i.e., heterogeneity), and by allowing time to have a random variance component, we model the differences in the estimate of error within-individuals (i.e. over time). This statistical method improves upon ordinary-least-squares estimates and cross-sectional designs by modeling the serially correlated and heteroscedastic error structure that underlies panel data. Multivariate data formats are converted in individual-period formats by repeating each individual-level id for all variables, across all longitudinal data waves (see Singer, 1998 for more detailed instructions).
6. The results from the HLM models were compared to results from fixed effects models. In order to incorporate wave 1 socioeconomic status into the fixed effects models the sample was divided into four homogenous subsets consisting of male and female respondents with either high (3 or 4) or low (0 or 1) levels of disadvantage. Results from the fixed effects models are similar to the HLM models in that both show positive and significance decreases in offending following the birth of a child; however these significant results were restricted to the subsets of more advantaged male and female respondents. The current indicator of socioeconomic disadvantage was compared to a geo-coded version (census block-groups) consisting of % poverty, % single mother-headed households, % male

unemployment, % female unemployment, and % with less than twelve years of education.

Regardless of which socioeconomic measure was used, results were similar.

7. These percentages should be viewed with caution, since the sample of respondents was not chosen randomly; further, prior research has documented male underreporting of births; thus these men are distinguished by recognizing their status as parents, which could affect to an unknown degree the character of their narratives.
8. 1) don't piss off Jennifer; 2) sex on floors-on your blankie only; 3) respect my house.
9. Additional analyses (not shown) indicate that middle class respondents scored higher on scales measuring perceived parental support and attachment relative to their lower SES young adult counterparts.
10. The relative youth of the TARS sample may be one factor that helps to explain the differences between our results focusing on parenting and disadvantage and those obtained by Kreager et al. (2010). The DYS data also contains a mix of race/ethnic groups (e.g., 40% Hispanic, low percentage of whites) that is also significantly different from the composition of the TARS sample.

## REFERENCES

- Arditti, Joyce, Linda Burton, and Sara Neeves-Botelho. 2010. Maternal distress and parenting in the context of cumulative disadvantage. *Family Process* 49(2):142-164.
- Blokland, Arjan A. J., and Paul Nieuwbeerta. 2005. The effects of life circumstances on longitudinal trajectories of offending. *Criminology* 43:1203-1240.
- Broidy, Lisa M., and Elizabeth E. Cauffman. 2006. Understanding the female offender. U.S. Department of Justice Grant 2001-IJ-CX-0034.
- Bronte-Tinkew, Jacinta, Suzanne Ryan, Jennifer Carrano, and Kristen A. Moore. 2007. Resident fathers' pregnancy intentions, prenatal behaviors, and links to involvement with infants. *Journal of Marriage and Family* 69(4):977-990.
- Brown, Marilyn, and Barbara Bloom. 2009. Reentry and renegotiating motherhood. *Crime and Delinquency* 55(2):313-336.
- Brubaker, Sarah J., and Christie Wright. 2006. Identity transformation and family caregiving: Narratives of African American teen mothers. *Journal of Marriage and Family* 68(5):1214-1228.
- Casper, L. M., and Suzanne M. Bianchi. 2009. *The Stalled Revolution: Gender and Time Allocation in the United States*. New York: Palgrave Macmillan.
- Day, Randal D., and Michael E. Lamb (Eds.). 2004. *Conceptualizing and Measuring Father Involvement*. Mahwah, NJ: Lawrence Erlbaum.
- Duncan, Greg J., Bessie Wilkerson, and Paula England. 2006. Cleaning up their act: The effects of marriage and cohabitation on licit and illicit drug use. *Demography* 43(4):691-710.
- Edin, Kathryn, and Maria Kefalas. 2005. *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. Berkeley: University of California Press.
- Elliott, Delbert S., David Huizinga, and Suzanne S. Ageton. 1985. *Explaining Delinquency and Drug Use*. Beverly Hills, Calif.: Sage Publications.

- Fleisher, Mark S., and Jessie L. Krienert, J. 2004. Life-course events, social networks, and the emergence of violence among female gang members. *Journal of Community Psychology* 32:607- 622.
- Gerson, Kathleen. 2009. Changing lives, resistant institutions: A new generation negotiates gender, work, and family change. *Sociological Forum* 24:735-753.
- Glaze, Lauren E., and Laura M. Maruschak. 2008. Parents in prison and their minor children. *Bureau of Justice Statistics Special Report (NCJ 222984)*. Washington, DC: U.S. Department of Justice, Office of Justice Programs.
- Giordano, Peggy C. 2010. *Legacies of Crime: A Follow-Up of the Children of Highly Delinquent Girls and Boys*. Cambridge University Press: New York.
- Giordano, Peggy C., Monica A. Longmore, Ryan D. Schroeder, and Patrick M. Seffrin. 2008. a life-course perspective on spirituality and desistance from crime. *Criminology* 46(1):99-132.
- Giordano, Peggy C., Ryan D. Schroeder, and Stephen A. Cernkovich. 2007. Emotions and crime over the life course: A neo-Meadian perspective on criminal continuity and change. *American Journal of Sociology* 112(6):1603-1661.
- Giordano, Peggy C., Stephen A. Cernkovich, and Donna Holland. 2003. Changes in friendship relationships over the life-course: Implications for desistance from crime. *Criminology* 41:293-327.
- Giordano, Peggy C., Stephen A. Cernkovich, and Jennifer L. Rudolph. 2002. Gender, crime, and desistance: Toward a theory of cognitive transformation. *American Journal of Sociology* 107:990-1064.
- Gottfredson, Michael R., and Travis Hirschi. 1990. *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Graham, John, and Benjamin Bowling. 1996. *Young People and Crime*. London: Home Office Research Study 145.
- Haigh, Yvonne. 2009. Desistance from crime: Reflections on the transitional experiences of young people with a history of offending. *Journal of Youth Studies* 12:307-322.



- Hay, Carter, and Michele M. Evans. 2006. Has Roe v. Wade reduced U.S. crime rates?: Examining the link between mothers' pregnancy intentions and children's later involvement in law-violating behavior. *Journal of Research in Crime and Delinquency* 43(1):36-66.
- Healy, Deidre. 2010. Betwixt and between: The role of psychosocial factors in the early stages of desistance. *Journal of Research in Crime and Delinquency* 47:419-438.
- Hellerstedt, Wendy L., Phyllis L. Pirie, Harry A. Lando, Susan J. Curry, Colleen M. McBride, Louis C. Grothaus, and Jennifer C. Nelson. 1998. Differences in preconceptional and prenatal behaviors in women with intended and unintended pregnancies. *American Journal of Public Health* 88(4):663-666.
- Hofferth, Sandra L., and Frances Goldscheider. 2010. Family structure and the transition to early parenthood. *Demography* 47(2):415-437.
- Hope, Trina L., Esther I. Wilder, and Toni T. Watt. 2003. The relationships among adolescent pregnancy, pregnancy resolution, and juvenile delinquency. *Sociological Quarterly* 44(4):555-576.
- Horney, Julie, D. Wayne Osgood, and Ineke H. Marshall. 1995. Criminal careers in the short-term: Intra-individual variability in crime and its relation to local life circumstances. *American Sociological Review* 60(5):655-673.
- Hunt, Geoffrey, Karen Joe-Laidler, and Kathleen MacKenzie. 2005. Moving into motherhood: Gangs, girls and controlled risk. *Youth and Society* 36(3):333-373.
- Jessor, Richard, and Shirley Jessor. 1977. *Problem Behavior and Psychosocial Development*. New York: Academic Press.
- Joyce, Theodore J., Robert Kaestner, and Sanders Korenman. 2000. The effect of pregnancy intention on child development. *Demography* 37(1):83-94.
- Johnson, Wendi L., Peggy C. Giordano, Wendy D. Manning, Monica A. Longmore. In Press. Parent-child relations and offending during young adulthood. *Journal of Youth and Adolescence*.
- Kazemian, Lila. 2007. Desistance from crime: Theoretical, empirical, methodological, and policy considerations. *Journal of Contemporary Criminal Justice* 23:5-27.

- Kimmel, Michael S., ed. 1987. *Changing Men: New Directions in Research on Men and Masculinity*. Newbury Park, CA: Sage.
- King, Ryan D., Michael Massoglia, and Ross MacMillan. 2007. The context of marriage and crime: Gender, the propensity to marry, and offending in early adulthood. *Criminology* 45:33-66.
- Kohm, Lynne M. 2006. Women as perpetrators: Does motherhood have a reformatory effect on prostitution? *Fordham Urban Law Journal* 33:407-435.
- Kohn, Melvin L. 1959. Social class and parental values. *American Journal of Sociology* 64:337-351.
- Korenman, Sanders, Robert Kaestner, and Ted Joyce. 2002. Consequences for infants of parental disagreement in pregnancy intention. *Perspectives on Sexual and Reproductive Health* 34(4):198-205.
- Kreager, Derek A., Ross L. Matsueda, and Elena A. Erosheva. 2010. Motherhood and criminal desistance in disadvantaged neighborhoods. 48(1):221-258.
- Krieger, Nancy, David R. Williams, and N. E. Moss. 1997. Measuring social class in U.S. public health research: Concepts, methodologies, and guidelines. *Annual Review of Public Health* 18:341-378.
- Lareau, Annette. 2003. *Unequal Childhoods: Class, Race, and Family Life*. Berkeley, CA: University of California Press.
- Laub, John H., and Robert J. Sampson. 2003. *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70*. Cambridge, MA: University of Harvard Press.
- Lesthaeghe, Ron J., and Lisa Neidert. 2006. The 'second demographic transition' in the U.S.: Exception or textbook example? *Population and Development Review* 32 (4):669-698.
- Logan, Cassandra, Emily Holcombe, Jennifer Manlove, and Suzanne Ryan. 2007. The consequences of unintended childbearing: A white paper. *Child Trends*. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy.
- Macleod, Jay. 1995. *Ain't no Makin It: Aspirations and Attainment in a Low-Income Neighborhood*. Boulder, CO: Westview Press.

- Maruna, Shaun. 2001. *Making Good: How Ex-Convicts Reform and Rebuild Their Lives*. Washington, DC: American Psychological Association.
- Mason, Karen O., and An-Magritt Jensen. 2003. *Gender and Families in Industrialized Countries*. New York: Oxford University Press.
- Matsueda, Ross, and Karen Heimer. 1997. A Symbolic Interactionist Theory of Role-Transitions, Role-Commitment, and Delinquency.” In *Developmental Theories of Crime and Delinquency*, ed. Terence P. Thornberry. New Brunswick, NJ: Transaction Publishers.
- McIntosh, James, and Neil McKeganey. 2001. Identity and recovery from dependent drug use: The addict's perspective. *Drugs: Education, Prevention and Policy* 8:47-59.
- Mclanahan, Sara. 2004. Diverging destinies: How children are faring under the second demographic transition. *Demography* 41:607-627.
- McMahon, Martha. 1995. *Engendering Motherhood: Identity and Self-Transformation in Women's Lives*. New York: Guilford Press.
- Miller, Eleanor M. 1986. *Street Woman*. Philadelphia, PA: Temple University
- Moloney, Molly, Kathleen Mackenzie, Geoffrey Hunt, and Karen Joe-Laidler. 2009. The path and promise of fatherhood for gang members. *British Journal of Criminology* 49(3):305-325.
- Moore, Joan W., and John M. Hagedorn. 1999. What happens to girls in the gang? In *Female Gangs in America*, eds. Meda Chesney-Lind and John M. Hagedorn. Chicago: Lake View Press.
- Murray, Joseph, and David P. Farrington. 2005. Parental imprisonment: Effects on boys' antisocial behaviour and delinquency through the life-course. *Journal of Child Psychology and Psychiatry*, 46(12):1269-1278.
- National Center for Family and Marriage Research. 2010. *Trends in Cohabitation: Twenty Years of Change, 1987-2008*. Family Profiles, FP-10-07  
[http://ncfmr.bgsu.edu/pdf/family\\_profiles/file87411.pdf](http://ncfmr.bgsu.edu/pdf/family_profiles/file87411.pdf)
- Nurse, Anne M. 2002. *Fatherhood Arrested; Parenting from Within the Juvenile Justice System*. Nashville, TN: Vanderbilt University Press.

- Oppenheimer, Valerie K. 2003. Cohabiting and marriage during young men's career-development process. *Demography* 40(1):127.
- Pager, Devah. 2003. The mark of a criminal record. *American Journal of Sociology* 108:937-975.
- Paternoster, Ray, and Shawn Bushway. 2009. Desistance and the "feared self": Toward an identity theory of criminal desistance. *Journal of Criminal Law and Criminology* 99(4):1103-1156.
- Raley, R. Kelly. 2001. Increasing fertility in cohabiting unions: Evidence for the second demographic transition in the United States. *Demography* 38:59-66.
- Raudenbush, Stephen W., and Anthony S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage.
- Roettger, Michael E., Raymond R. Swisher, Danielle C. Kuhl, and Jorge Chavez. 2011. Paternal incarceration and trajectories of marijuana and other illegal drug use from adolescence into young adulthood: Evidence from longitudinal panels of males and females in the United States. *Addiction* 106(1):121-132.
- Santelli, John, Roger Rochat, Kendra Hatfield-Timajchy, Brenda C. Gilbert, Kathryn Curtis, Rebecca Cabral, Jennifer S. Hirsch, Laura Schieve. 2003. The measurement and meaning of unintended pregnancy. *Perspectives on Sexual and Reproductive Health* 35:94-101.
- Schroeder, Ryan D., Peggy C. Giordano, and Stephen A. Cernkovich. 2010. Adult child-parent bonds and life course criminality. *Journal of Criminal Justice* 38(4):562-571.
- Settersten Jr., Richard A. 2008. Navigating the New Adulthood. *The Futurist*. Mar/Apr:21-28.
- Singer, Judith D. 1998. Using SAS PROC MIXED to fit multilevel models, hierarchical models, and individual growth models. *Journal of Educational and Behavioral Statistics* 24:323-355.
- Singer, Judith D., and John B. Willett. 2003. *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence*. New York: Oxford Press Publishing.
- Stryker, Sheldon. 2008. From Mead to a structural symbolic interactionism and beyond. *Annual Review of Sociology* 34(1):15-31.

- Swartz, Teresa T. 2009. Intergenerational family relations in adulthood: Patterns, variations, and implications in the contemporary United States. *Annual Review of Sociology* 35(1):191-212.
- Tach, Laura, Ronald Mincy, and Kathryn Edin. 2010. Parenting as a “package deal”: Relationships, fertility, and nonresident father involvement among unmarried parents. *Demography* 47(1):181–204.
- Thompson, Melissa, and Milena Petrovic. 2009. Gendered transitions: Within-person changes in employment, family, and illicit drug use. *Journal of Research in Crime and Delinquency* 46(3):377-408.
- Uggen, Christopher. 2000. Work as a turning point in the life course of criminals: a duration model of age, employment, and recidivism. *American Sociological Review* 65(4):529-546.
- Varriale, Jennifer A. 2008. Female gang members and desistance: Pregnancy as a possible exit strategy? *Journal of Gang Research* 15:35-64.
- Warr, Mark. 1998. Life-course transitions and desistance from crime. *Criminology* 36:183-216.
- Western, Bruce, and Sara McLanahan. 2000. Fathers behind bars: The impact of incarceration on family formation. *Contemporary Perspectives in Family Research* 2:307–322.
- Wildeman, Christopher. 2009. Parental imprisonment, the prison boom, and the concentration of childhood disadvantage. *Demography* 46(2):265-280.
- Wilson, William J. 1987. *The Truly Disadvantaged: The Inner City, Underclass, and Public Policy*. Chicago: University of Chicago Press.



Table 1. Descriptive Statistics

	Level of Disadvantage					
	Females (n = 566)	Males (n = 500)	Females (n = 319)	Males (n = 312)	Females (n = 123)	Males (n = 94)
% Parent	25.8 (n = 146)	15.4 (n = 77)	11.6 (n = 37)	7.1 (n = 22)	48.8 (n = 60)	39.4 (n = 37)
Avg. Age First Birth (13-24)	M = 19.5, S.D. = 2.0	M = 19.6, S.D. = 2.2	M = 20.1, S.D. = 3.3	M = 20.1, S.D. = 1.9	M = 19.3, S.D. = 2.0	M = 19.3, S.D. = 2.0
Wantedness						
% Wanted Pregnancy	6.2 (n = 35)	4.8 (n = 24)	3.8 (n = 12)	2.2 (n = 7)	10.6 (n = 13)	11.7 (n = 11)
% Unwanted Pregnancy	19.6 (n = 111)	10.6 (n = 53)	7.8 (n = 25)	4.8 (n = 15)	38.2 (n = 47)	27.7 (n = 26)
Relationship Status (with the bio-parent)						
% Cohabiting/Married	10.8 (n = 61)	6.4 (n = 32)	5.3 (n = 17)	3.9 (n = 12)	13.0 (n = 16)	13.8 (n = 13)
% Single Parent	15.0 (n = 85)	9.0 (n = 45)	6.3 (n = 20)	3.2 (n = 10)	35.8 (n = 44)	25.5 (n = 24)
Relationships, Work, and Education						

(wave 4)

% Cohabiting/Married (with or without children)	21.4 (n = 121)	14.2 (n = 71)	17.9 (n = 57)	9.6 (n = 30)	22.8 (n = 28)	24.5 (n = 23)
% Working Full-Time	27.5 (n = 156)	38.2 (n = 191)	29.2 (n = 93)	40.4 (n = 126)	23.6 (n = 29)	36.2 (n = 34)
% Did Not Graduate High School	11.8 (n = 67)	14.8 (n = 74)	4.7 (n = 15)	7.4 (n = 23)	19.5 (n = 24)	32.9 (n = 31)
Race/Ethnicity						
% White	65.5	64.4	84.0	80.0	32.5	34.0
% Black	23.3	24.8	10.0	12.2	48.0	49.0
% Hispanic	11.1	11.0	6.0	8.0	19.5	17.0

---

Notes: D.I. = Disadvantage Index, range [0-4]. Higher scores reflect greater disadvantage



Table 2. Parenthood and Criminal Involvement

	Females (n = 566)				Males (n = 500)			
	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>
Within-Individual Effects:								
Parenthood	-0.487†	0.278	----	----	-0.486	0.648	----	----
Cohabiting/Married	-0.185	0.296	-0.136	0.216	0.652	0.512	0.680	0.509
Working Full-Time	-0.240	0.196	-0.264	0.195	-0.633†	0.426	-0.622†	0.345
Did Not Graduate High School	-0.232	0.179	-0.270	0.279	1.084*	0.525	0.976†	0.524
Between-Individual Effects:								
Disadvantage Index (D.I.)	0.030	0.090	----	----	-0.022	0.165	----	----
Interactions with Within-Individual Effects:								
D.I. x Parenthood			0.666**	0.228			1.700***	0.507
Conditioned Within-Individual Effects:								
Parenthood when D.I. = 1			-1.320**	0.397			-2.518**	0.884
Parenthood when D.I. = 3			0.012	0.326			0.971	0.760
Random Variance Components:								
Intercept			4.473***	0.451			10.245***	1.270

Months	0.001***	0.000	0.004***	0.000
R-square	0.039		0.055	

---

Notes: Models are run separately for males and females. Conditioned effects for parenthood are estimated in separate models. Conditioned effects for disadvantage are estimated but are not shown. Models control for age, race, family structure (wave 1), and the interaction between age and time (months into the study). Intercepts and between-individual effects are estimated in each model but are not shown.  $p < .10$  \* $<.05$ , \*\* $<.01$ , \*\*\* $<.001$ .

Table 3. Wantedness and Crime

	Females (n = 566)				Males (n = 500)			
	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>
Within-Individual Effects:								
Wanted Pregnancy	-1.276**	0.462	----	----	0.553	0.922	----	----
Unwanted Pregnancy	-0.014	0.270	----	----	-0.309	0.636	----	----
Between-Individual Effects:								
Disadvantage Index (D.I.)	0.0175	0.265	----	----	-0.056	0.166	----	----
Interactions with Within-Individual Effects:								
D.I. x Wanted Pregnancy			0.115	0.375			0.095	0.827
D.I. x Unwanted Pregnancy			0.793***	0.238			1.510**	0.553
Conditioned Within-Individual Effects:								
Unwanted Pregnancy when D.I. = 1			-1.043**	0.376			-2.074*	0.956
Unwanted Pregnancy when D.I. = 3			0.494	0.328			0.598	0.794
Random Variance Components:								
Intercept			4.047***	0.446			9.811***	1.260
Months			0.001***	0.000			0.003***	0.000

R-square

0.043

0.058

---

Notes: Models are run separately for males and females. Conditioned effects for unwanted pregnancy are estimated in separate models. Conditioned effects for disadvantage and non-significant interactions are estimated but are not shown. Models control for age, race, family structure (wave 1), relationship status (cohabiting/married), education and employment status, and the interaction between age and time (months into the study). Intercepts and between-individual effects are estimated in each model but are not shown. p.†<.10 \*<.05, \*\*<.01, \*\*\*<.001.

Table 4. Relationship Status with the Biological Parent and Criminal Involvement

	Females (n = 566)				Males (n = 500)			
	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>	<u>b</u>	<u>S.E.</u>
Within-Individual Effects:								
Cohabiting/Married to Biological Parent	-0.616†	0.332	----	----	-0.997	0.808	----	----
Single Parent	-0.186	0.300	----	----	-0.454	0.677	----	----
Between-Individual Effects:								
Disadvantage Index (D.I.)	0.034	0.094	----	----	-0.022	0.166	----	----
Interactions with Within-Individual Effects:								
D.I. x Cohabiting/Married to Biological Parent			-0.150	0.271			1.372*	0.677
D.I. x Single Parent			1.080**	0.273			1.636*	0.688
Conditioned Within-Individual Effects:								
Cohabiting/Married to Biological Parent when D.I. = 1							-3.102*	1.203
Cohabiting/Married to Biological Parent when D.I. = 3							-0.359	1.066
Conditioned Within-Individual Effects:								
Single Parent when D.I. = 1			-1.601***	0.482			-2.632*	1.243
Single Parent when D.I. = 3			0.477	0.340			0.608	0.810

Random Variance Components:

Intercept	4.370***	0.445	9.855***	1.265
Months	0.001***	0.000	0.003***	0.007
R-square	0.040		0.059	

Notes: Models are run separately for males and females. Conditioned effects for the relationship status variables are estimated in separate models. Conditioned effects for disadvantage and non-significant interactions are estimated but are not shown. Models control for age, race, family structure (wave 1), education and employment status, and the interaction between age and time (months into the study). Intercepts and between-individual effects are estimated in each model but are not shown.  $p < .10$  \* $< .05$ , \*\* $< .01$ , \*\*\* $< .001$ .