Unintended Fertility and Maladaptive Coping Strategies:

Changes in Alcohol and Substance Use among Young Adult Parents

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Abstract

A small but robust literature finds consequences exist for parents experiencing unintended fertility, but most studies are cross-sectional and ignore fathers' experiences. Furthermore, researchers have not looked at substance use as a possible consequence of unintended fertility. Utilizing aspects of strain theory and family stress theory, we assessed whether having an unintended first child predicted change in drug and alcohol use, after accounting for pre-birth substance use and key correlates. We drew on the Toledo Adolescent Relationships Study, a population-based longitudinal data set with detailed information on substance use and the intendedness of births. In this preliminary draft, we examined whether change over time in substance use varied across parents and nonparents (N = 1,003) and, among parents (N = 302), whether change in substance use varied by intendedness. Although parents had lower drug and alcohol use than non-parents, there was no variation by birth intendedness.

Given its link to deleterious health outcomes for children (Gipson, Koenig, & Hindin, 2008), unintended fertility is an important public health issue. It is also an indicator of social disparities, with ties to race and ethnicity (Chandra et al. 2005; Mosher et al. 2012; Wildsmith et al. 2010), disadvantaged socioeconomic status (Musick et al. 2009), early age of parenthood (Barber & Emens 2006), and nonmarital relationship status (Guzman et al 2010).

Unintended fertility also likely has consequences for parental well-being, with a small yet robust body of research noting its association with mothers' unmet educational attainment, depression and declines in mental health and well-being (Gipson, Koenig, & Hindin 2008), an elevated risk of future unintended births (Rajan, Morgan, Harris, Guilkey, Hayford, & Guzzo 2011), and greater exposure to domestic violence (Barber, Kusunoki, Gatny, & Budnick 2018). These studies, however, are primarily cross-sectional in nature so the evidence is correlational, and they typically do not measure the effects of unintended fertility for both mothers and fathers. Although researchers have found associations between unintended fertility and depression, anxiety, and lower well-being in women (Barber, Axinn, & Thornton 1999; Kavanaugh, Kost, Frohwirth, Maddow-Zimet, & Gor 201; Iranfar, Shakeri, Ranjibar, NazhadJafar, & Razaie 2005; Orr 1997), it remains to be seen how unintended fertility may translate into specific behaviors, and whether relationships are similar for mothers and fathers. Furthermore, Alcohol and drug use, on average, peak in the young adult years, at the same time that young men and women are entering parenthood (Johnson, Gruenwald, Treno, & Gaff 1998, Loeber & Farrington 2014).

We draw on a population-based longitudinal data (Toledo Adolescent Relationships Study, n=1316) that includes measures of substance use in adolescence and through young adulthood along with detailed measures of unintended fertility. In the current study, we seek to understand the relationship between experiencing an unintended first birth and subsequent

maladaptive coping mechanisms, specifically changes in alcohol or substance use. We do so by bridging research regarding unintended fertility based in demographic and family research with insights from general strain theory from criminology. Drawing on strain theory, we expect that experiencing an unintended first birth could increase drug and alcohol use as compared to parents experiencing intended first birth. We further consider whether mothers and fathers engage in these coping strategies differently. In this preliminary draft, we present select findings about change over time in depressive symptoms and substance use according to birth intendedness. Although our literature review and hypotheses focuses on substance use, we will provide a more detailed elaboration in the full paper. The findings from this work will provide new insights into the implications of unintended fertility for well-being.

Background

Most of the empirical literature examining the consequences of unintended fertility have focused on specific health outcomes for children, such as whether and how long mothers breastfed (e.g., Taylor & Cabral 2002). Although certainly important, we argue that attention to the ways that an unintended birth may impact other behaviors that are consequential for effective parenting is also merited. Mothers with unintended births report higher levels of anxiety, depression, and lower well-being (Iranfar, Shakeri, Ranjibar, NazhadJafar, & Razaie 2005; Orr 1997; Su 2012). Yet, how mothers as well as fathers may cope with such births is unclear. Certain maladaptive coping strategies associated with having an unintended child may, potentially, have long-lasting effects on parent-child attachment, a parent's relationship status, and child development. We turn to family stress theory and general strain theory to conceptualize ways in which an unintended birth may affect two maladaptive coping strategies: alcohol and drug use.

Stress and Coping Strategies of New Parents: Family Stress Theory and General Strain Theory

Family stress theory examines ways in which families undergoing stressful experiences rise to the occasion or struggle (Friedman 1998; McCubbin 1993). Hill's (1958) original family stress theory and ABC-X model argued that experiencing unexpected or unplanned events are usually perceived as stressful. In response to such stress, Hill argued that assigned meanings and resources can work in tandem to alleviate stress associated with unanticipated events. However, an absence of meaning and resources can lead to a crisis. Boss (2001) further expands on this with the contextual model of family stress and coping, which emphasizes the significant influence that family structure and life course development may have on the ability for families to cope with stress effectively. Although less attention is given to *how* couples and individuals deal with stress, a birth resulting from an unintended pregnancy is likely to be a significant stressor.

General strain theory (Agnew 1992, Merton 1938), in comparison, proposes that incongruence between aspired goals and outcomes leads to deviant coping strategies. Agnew (1992) hypothesized three sources of stress: (1) "strain as the actual or anticipated failure to achieve positively valued goals", (2) "strain as the actual or anticipated removal of positively valued stimuli", and (3) "strain as the actual or anticipated presentation of negatively valued stimuli" (74). In response to these stressors, individuals engage in a vast number of coping strategies (Agnew 1992). The ability to cope with such incongruencies, argued Agnew, is related strongly to situational and structural factors within an individual's life. Having an unintended birth, essentially, represents an inability to match behaviors goals. Within the framework of strain theory, alcohol and substance use reflect a "retreatist" coping strategy adopted by those who face incongruent goals and outcomes (Merton 1938).

Alcohol and Drug Use

Alcohol and drug use, on average, peak in the young adult years, at the same time that young men and women are entering parenthood (Johnson, Gruenwald, Treno, & Gaff 1998, Loeber & Farrington 2014). New parents can face a multitude of stressors in their daily lives (Anthony et al., 2005; Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009). Expectations and time associated with work, expenses, social lives, romantic relationships, and other needs, while competing with each other, now must compete with the domains of childrearing, further budgeting for children, and arranging childcare during work hours. It is widely recognized that parenting is a physically and mentally challenging endeavor despite the intangible rewards (Nomaguchi & Milkie 2003, Umberson & Gove, 1989); as such parents often report higher levels of depression than those without children (Evenson & Simon, 2005). Although one coping strategy associated with individuals' attempts to alleviate stress is drug and alcohol use, new parents likely have few opportunities to engage in such activities given the intensive demands of parenting.

Additionally, new parents may be selective of those who are ready to move beyond such activities, and there is even some evidence that parenthood provides individuals reasons to desist from delinquent or risky behaviors (Edin & Kefalas, 2005; Edin & Nelson, 2013). Early parenthood can provide an avenue to a possible "expedited pathway to adulthood" (DeLuca, Clampert-Lundquiest, & Edin 2016). Qualitative interviews with respondents of the Moving to Opportunities study in Baltimore made note of the positive impact that the new role of "parent" had for their identity and goals about their future (DeLuca et al. 2016). One young father reported that he "had something to live for" when he talked about the future of his child and that he was "taking work much more seriously" now that he had lives depending on him (DeLuca et

al. 2016). Another respondent, a male drug dealer, noted that after having his first child, he decided to "go straight" and cut down on selling (DeLuca et al. 2016). In turn, these and other respondents' reports on childbearing point to an attenuation of behavior associated with young parenting that falls in line with previous hypotheses surrounding "hooks for change" (Giordano, Cernkovich, & Rudolph 2002), where certain events could be the catalyst for change regarding behaviors, attitudes, and future goals. This line of reasoning, leads to the following hypothesis:

Hypothesis 1: Parents, as compared to non-parents, exhibit lower levels of increased drug and alcohol use during the transition to adulthood, and this would be true regardless of birth intendedness.

Although the transition to parenthood could be a positive force for behavioral change, it may be the case that unintended births are more problematic than beneficial. Stress – and the need for coping mechanisms – could be higher for unintended births, as parents are likely less prepared for the intensity of parenting duties. For instance, parents may have less time to invest in learning about effective parenting strategies. For younger parents, who face higher risk of unintended fertility, having a child may derail many occupational and educational goals and affect coping strategies available to allay such stressors (Boss 2001). Qualitative interviews with economically disadvantaged fathers further suggest that some put educational aspirations, which could lead to more stable job prospects, on hold or make money in illegitimate ways, such as selling drugs (DeLuca, Clampert-Lundquiest, & Edin 201; Edin & Tach 2012). Disagreements between prospective parents over time, money, job prospects, housing, and other associated factors may add stress atop of already stressful lives. In response to these new stressors, new parents with unintended births may engage in coping strategies, like alcohol and substance use. This leads to the following hypothesis:

Hypothesis 2: Post-birth alcohol and drug use is higher among those with an unintended first birth compared to those with an intended first birth.

It is also possible there is no direct association between alcohol and substance use and unintended fertility. Previous research has shown that certain individuals are much more likely to experience an unintended pregnancy and, by extension, an unintended birth, specifically younger, disadvantaged women of color (Hasstedt 2017). In addition, research in the realm of criminology has found a possible age-gradient effect of average delinquent behavior, including substance and alcohol use (Hirshi & Gottfredson 1983). Further, the effect of unintended fertility on alcohol and substance use could be a product of associated levels of depression faced by those who experience an unintended birth. The use of maladaptive coping strategies may include intimate partner violence, which could fully mediate the association of an unintended birth and substance use. Therefore, it is possible that unintended fertility could be a result of a "selection" process or other factors and the relationship between alcohol and substance use and unintended fertility could be spurious.

Gender Differences

The association between experiencing an unintended birth and alcohol and substance use may have differing effects between mothers and fathers. Researchers have found that different coping strategies emerge early in the life course, where girls are more likely to seek support or internalize stress while men engage in avoidant coping strategies (Eschenbeck, Kohlmann, & Lohaus 2007). Studies using adult populations further support these findings, particularly with alcohol (Hilton 1987; Horwitz & White 1987; Cooper et al. 1992), and drug use (Preston 2006). Current research on coping strategies related to unintended fertility further confirm these findings, where women report higher levels of stress, anxiety, and depression (Gipson et al.

2008) while fathers are more likely to engage in domestic violence (Goodwin et al. 2000; Lau 2005) and lower engagement with childrearing (Goto et al. 2005). However, such literature has not situated these gender coping strategies within the realm of alcohol and drug abuse, which in turn has strong implications for family dynamics and health (Mallett, Rosenthal, & Keys 2005; Marsh et al. 2006; Windle & Windle 2018). Further, this body of work has not considered levels of substance use prior to the birth of the child.

It is also the case that unintended fertility is associated with unstable relationships (Guzzo & Hayford, 2012). When parenting relationships end – especially among young and unmarried couples – mothers often retain physical custody (Grall, 2018). Although research shows that fathers often remain in contact with their child after union dissolution (Augustine, Nelson, & Edin 2009), a gendered effect of unintended fertility on coping with stress would operate through which parent lives with the child. Having responsibility for day-to-day needs may elevate stress among mothers, which could increase drug and alcohol use among mothers more than fathers. Conversely, having a child present in the house may provide concrete reminders of the reason to abstain from substance use, and, logistically, it may inhibit opportunities for drug and alcohol use to due childrearing responsibilities; if these mechanisms occur, drug and alcohol use would be less common for mother than fathers. Because both evidence and theory suggest competing links between unintended fertility and alcohol and substance use by gender, we explore gender differences but do not formulate explicit hypotheses.

Current Study

In the current study, we attempt to understand the relationship between unintended fertility and alcohol/substance use. Specifically, we assessed whether having an unintended first child predicts drugs and alcohol use, after accounting for prior substance use as well as key

correlates (depressive symptoms, relational indicators, and sociodemographic characteristics). Our work focuses on young adult as this life course stage represents the peak use of alcohol and drugs as well as the entry into parenthood. Drawing on a population-based longitudinal data set (Toledo Adolescent Relationships Study) provides a unique opportunity to assess substance use preceding and following entry into parenthood. Further, these data provide a portrait of young adult life following the Great Recession.

First, drawing strain theory (Agnew 1992) and aspects of the family stress theory (Boss 2001), we expect parents who experience an unintended first birth will be more likely to report higher levels of alcohol and substance use than parents who report an intended first birth. Second, consistent with research on the selection process into unintended fertility, we anticipate there is no effect of an unintended first birth on changes in alcohol and drug use. Throughout we contrast young adults who had an unintended first birth to those who did not become parents and those who had an intended first birth. Finally, we consider the possibility of gender differences in the link between unintended fertility and drug and alcohol use but make no *a priori* hypotheses.

Data

Our study uses population-based longitudinal data from the Toledo Adolescent Relationships Study. This stratified random sample initially was drawn from registered students in the 7^{th}, 9^{th}, and 11^{th} grades in Lucas County, Ohio with oversampling of African-American and Hispanic youths. There are five waves of data are collected as individuals transition to adulthood. The data were collected in the years 2000-2012. The area from which the sample was drawn, the Toledo area, closely follows the sociodemographic characteristics of the United States. Of the total 1,321 respondents with data from the first interview, we will restrict the data to parents who have reported a first birth by the time of the fifth interview (respondents ages 22-

29xx). To control for lagged measures, we further restrict the data to respondents whose first birth is reported after the first interview. Our analytic sample consists of 302 respondents.

Measures

Alcohol and Substance Use is the dependent variable. At each wave of analysis, respondents were asked: "In the last 12 months, how often have you: drunk alcohol?" and " In the last 12 months, how often have you: used drugs to get high (not because you were sick)?" with responses ranging from never (1) to more than once a day (9). These items were summed to create two measures of frequency, one for alcohol use and one for substance use, for all respondents. To situate changes in alcohol and substance use around the first birth, we created a difference score between the frequency measures reported during the wave of data preceding and after the first birth.

First Birth and *Intendedness* are combined as the key independent variable. To situate the timing of the first birth within our study, responses pertaining to the month and year of the birth of the first child were recoded to reflect between what waves of data the child was born. At the fifth wave of data collection, respondents were asked about the intended nature of their first child: "Thinking back to the beginning of this [first] pregnancy…at the time you found out you were pregnant with [your first child], would you say that you wanted to get pregnant?". Responses include: "did not want to be pregnant," "wanted to get pregnant," "had not thought about whether you wanted to get pregnant," "did not care either way," or "refused". Due to small cell sizes, we have recoded this into one dichotomous measure, combining the measures of "hadn't thought about it…, didn't care, and didn't want to become pregnant". Consistent with the age of our sample, the majority of births are considered unintended.

Depression was measured as a summed scale of a six-item set of questions which derive from the CES-D scale. These questions asked: (1) ‘‘you felt you just couldn’t get going;’’ (2) ‘‘you felt that you could not shake off the blues;’’ (3) ‘‘you had trouble keeping your mind on what you were doing;’’ (4) ‘‘you felt lonely;’’ (5) ‘‘you felt sad;’’ and (6) ‘‘you had trouble getting to sleep or staying asleep.’’ Responses ranged from 1 (never) to 8 (every day). Depression is measured at the same wave as substance and alcohol use to test the possible mediating process mentioned above.

Intimate Partner Violence referred to the frequency of any physical victimization in the relationship which corresponds to a respondent’s first birth. The scale used is based on the twelve items from the Revised Conflict Tactics Scale (CTS2) (Straus et al., 1996). The questions were asked as such: ‘‘During this relationship, how often has/did [partner]: throw something at you, pushed, shoved, or grabbed you, twisted your arm or hair, used a weapon on you, punched or hit you, choked you, slammed you against the wall, burned/scalded you on purpose, kicked you, slapped you, or hit you with something that could hurt?”. Responses ranged from *never* (1) to very often (5).

Gainful Activity was recorded at the first interview following the reported first birth. Respondents were asked if they were working at least 10 hours a week in paid employment and, if so, whether the job was full-time or part-time or if they were attending school. We operationalize time spent at work by creating a set of dichotomous indicators that indicate: employed, current student, or unemployed and not attending school. Further, I will create these indicators for both pre- and post-birth waves of data to analyze the change in work status across time.

Residence of Child is an indicator variable, which takes into account the living situation of the respondent with the first child at the first wave after birth. Respondents were asked "Where does [the first child] live?" with responses including: with me and [the father/mother], just me, just the [father/mother], shared custody, with another family member, and [the child died]; we excluded the last case from our study. These responses were recoded into one dichotomous indicator reflecting two biological parents or with only one biological parent.

Pregnancy Relationship Status is measured at each wave of data collection. Respondents were asked, "At the start of this pregnancy, how would you describe your relationship with [the parent]?" Responses include: "my husband/wife," "my boy/girlfriend who I was living with", "my boy/girlfriend who I was not living with," "other," and "refused". I created a categorical variable with four possible responses: single, dating, cohabiting, and married. For the purposes of the preliminary analyses, we have combined the "single" and "dating" responses into one.

Early Adolescent Delinquency is measured at the time of the first interview to control for early adolescent delinquent behavior. The seven questions asked the respondent how often they "carried a hidden weapon", "stolen (or tried to steal) things worth $5 or less", "damaged or destroyed property", "stolen (or tried to steal) things worth more than $50", "attacked someone with the idea of seriously hurting him/her", "sold drugs", , and "broke into a building or vehicle to steal something or just to look around". These measures were then summed to create an early adolescent delinquency score.

Individual-level background characteristics were included in this analysis. *Race* was measured at the time of the first interview. Responses include "white", "black/African American", "Hispanic", and "other". Due to small cell sizes and issues with generalizability, respondents were dropped from the study if they reported "other". *Sex* is measured at the first

interview. Respondents report either “male” or “female”. *Age* is measured as a continuous variable with respect to the date of birth of the respondent. The majority of births in the sample occurred between the time of the fourth (mean respondent age 22) and fifth interview (mean respondent age 25) with a minority of births occurring at earlier ages. *Parent’s Education* is measured at the time of the first interview as a proxy for social class, with responses including: “less than high school,” “high school graduate,” “some college,” or “college graduate or more,” with high school graduate as the reference category.

Preliminary Findings

Descriptive statistics are presented in Table 1. Preliminary analyses were run to analyze differences between those reporting an unintended and intended pregnancy at the time of the fifth interview. The majority of the sample had not become parents. Of the 369 respondents reporting a first birth after the time of the first interview, 34% reported a clear intention to have a child, 29% reported not wanting to have a child and 37% reported not considering an intention or being ambivalent. We then dichotomized this measure for subsequent analyses, combining the latter two sets of responses into a single variable of wanted vs. unwanted.

Comparisons of parents and non-parent are presented in Table 2, to measure changes in alcohol and drug use from the time of the first interview to the fifth interview. From adolescence to early adulthood, non-parents had a significantly larger increase in drug and alcohol use than parents. This supports part of the first hypothesis, suggesting that becoming a parent can act as a pathway to adulthood and reduction in maladaptive coping strategies to life stress.

Table 3 includes the planning status of the first birth. Both parents with an unintended first birth and non-parents experienced an increase in mean drug and alcohol use from early adolescence to early adulthood. However, the mean increase in non-parent substance use from

the time of the first to the fifth interview was significantly higher than those who have experienced an unintended first birth. Comparison of the average increase in alcohol and drug use for parents with an intended first birth to non-parents. Parents with an intended first birth showed, on average, a slight decrease in drug use from early adolescence to early adulthood, which does not mirror that of unintended first birth parents or non-parents. Even though it appears that intended and unintended entry into parenthood differs, the levels are not significantly different. It appears that early entry into parenthood and not the intentions matter with regard to substance use.

Using a subsample of parents, we regressed alcohol change on intendedness, predictors, and control variables in Table 4. In all models, intendedness of the first birth was not a significant predictor for increase or decrease in alcohol use by parents. Our measure of single parenthood (*Living with Child*) was a significant predictor for increased alcohol consumption for parents regardless of intendedness. Furthermore, older respondents significantly reduced their alcohol consumption after experiencing a first birth. Early adolescent delinquency was significantly related to reduced levels of post-birth drinking. Finally, intentions appear to operate in the same manner for men and women (results not shown). These preliminary results will be further refined in the final paper.

Preliminary analyses (not shown) were also run separating parents by gender. For mothers and fathers, having an unintended first birth was not associated with changes in alcohol consumption. This provides further support against our second hypothesis, as fertility intentions do not seem to affect post-birth changes in alcohol use for parents.

Discussion and next steps

Having a child can be a stressful life event. Having an unintended child can add further strain on parents, especially when more unintended pregnancies are had by younger women and couples. While research has pointed to a clear link between unintended pregnancy and negative mental health outcomes, very little research has attempted to understand how such stress can manifest maladaptive coping strategies, which can have long-reaching impacts on child development. Furthermore, little data and research has included measures from fathers, who are also affected by childbearing. The current study addresses both of these gaps in the literature by examining the link between unintended first births and maladaptive coping strategies of alcohol and substance use. Our preliminary findings suggest that all parents exhibit a decline in drug and alcohol use and that parents have lower usage than non-parents. We, however, did not observe differences by the intendedness of the first birth.

We plan to analyze the full sample to examine how parents compare to non-parents. We will run multivariate analysis via OLS regression, regressing substance use on our key independent variables and sociodemographic controls to further explore the nature of selection and gender differences in post-birth change alcohol and drug use. We also plan to run this analysis with a consistent sample of parents across all measures. In addition, we plan use multivariate analyses to further explore changes in pre/post-birth drug use. Furthermore, we plan to include important correlates of unintended fertility in our future models, including intimate partner violence. The present analyses also combine pregnancy relationship status of "single" and "dating" together into one measure. Future analyses will further separate pregnancy relationship status into 4 variables: single, dating, cohabiting, and married. We finally note that our proportion of parents with an unintended first birth (66%) is higher than other samples, notably Wave 3 (59%) and Wave 4 (51%) measures of Add Health and recent studies using

NSFG data (Finer & Zolna 2016). In this preliminary analysis, we combined multiple categories with unwanted, which may obscure the differences that may exist between true unintended fertility behavior and ambivalent fertility behavior. Subsequent analyses will further partition the key independent variable into a 3-level category variable, including a measure of ambivalence (responses including: “hadn’t thought about it” and “didn’t care one way or another”). The findings from this study will provide new insights into the implications of early parenthood and unintended fertility on young adult well-being.

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Table 1: Descriptive Statistics

	Full			Intended			Unintended		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Independent Variables									
Unintended First Birth	0.66								
Post-Birth Depression Score	14.41	8.23	340	13.66	8.06	114	14.79	8.31	226
Post-Birth Gainful Activity			352			117			235
Unemployed	0.29		102	0.28		33	0.29		69
In School	0.12		41	0.09		11	0.13		30
Employed	0.59		209	0.62		73	0.58		136
Lives w/ child but not child's other parent	0.29	0.45	367	0.20	0.40	125	0.33**	0.47	242
Pregnancy Relationship Status			334			120			214
Single/Dating	0.24		79	0.13		15	0.30***		64
Cohabitation	0.47		158	0.40		48	0.51*		110
Married	0.29		97	0.78***		57	0.19		40
W1 Delinquency	0.67	1.38	365	0.67	1.53	125	0.66	1.29	240
Race			369						
White	0.53		194	0.64**		81	0.47		113
Black	0.31		115	0.21		26	0.37**		89
Hispanic	0.16		60	0.15		19	0.17		41
Female	0.62		369	0.60		75	0.63		154
Age (W1)	15.47	1.67	369	15.75*	1.64	126	15.32	1.68	243
Parent's Education			369						
Less than HS	0.18		67	0.19		24	0.18		43
HS Graduate (ref)	0.38		142	0.37		46	0.40		96
Some College	0.34		124	0.33		42	0.34		82
College or More	9.76		36	0.11		14	0.09		22

*Source: Toledo Adolescent Relationship Study; N = 369**

Table 2: Substance Use Change Scores in Non-Parents and Parents

	Non-Parent	N	Parent	N
W5-W1 Alcohol Use	2.82	606	1.49[a]	391
W5-W1 Drug Use	0.52	606	0.04[a]	391

Source: Toledo Adolescent Relationship Study
[a] Significantly different from Non-Parents

Table 3: Substance Use Change Scores in Non-Parents and Parents, Disaggregated by Intendedness

	Non-Parent	N	Unintended First Birth	N	Intended First Birth	N
W5-W1 Alcohol Use	2.82	606	1.58[a]	257	1.32[a]	135
W5-W1 Drug Use	0.52	606	0.11[a]	257	-0.10[a]	135

Source: Toledo Adolescent Relationship Study
[a] Significantly different from Non-Parents

Table 4: Pre/Post-Birth Alcohol Change for Parents

	Zero-Order Model		Model 1		Model 2	
	b	se	b	se	b	se
Unintended First Birth	0.34	0.27	0.25	0.28	0.15	0.28
Post-Birth Depression Score	0.00	0.02	-0.00	0.02	-0.00	0.02
Post-Birth Gainful Activity						
Unemployed (Ref)						
In School	0.31	0.46	0.30	0.46	0.46	0.46
Employed	-0.16	0.30	0.02	0.31	0.08	0.32
Lives w/ child but not child's other parent	0.76	0.28**	0.71	0.32*	0.72	0.35*
(ref: living with both parents)						
Pregnancy Relationship Status						
Single/Dating	0.46	0.35	-0.01	0.40	-0.29	0.42
Cohabitation	0.08	0.30	-0.12	0.32	-0.32	0.32
Married (ref)						
W1 Delinquency	-0.26	0.10**	-0.25	0.10*	-0.27	0.10**
Race						
White (ref)						
Black	0.44	0.28			0.28	0.32
Hispanic	0.31	0.34			0.67	0.38^
Female	0.10	0.26			-0.18	0.29
Age (W1)	-0.22	0.07**			-0.19	0.08*
Mother's Education						
Less than HS	0.13	0.33			-0.08	0.38
High School (ref)						
Some College	-0.05	0.27			-0.13	0.31
College or More	-0.67	0.40			-0.61	0.44

Source: Toledo Adolescent Relationship Study; N = 302