

## Introduction

There has been a substantial increase in nonmarital fertility in the U.S. over the last 50 years (Bachu 1999, Brown 2004). According to the most recent statistics, nearly 4 in 10 U.S. births were to unmarried women in 2007 (CDC 2009), with mothers far less likely to marry after a first birth than in the past (Bianchi and Casper 2000). Explanations for the growth in nonmarital births include an increase in nonmarital cohabitation, marital separation and divorce, and proportion of mothers without partners (National Marriage Resource Center 2009). Nevertheless, single mothers most often suffer from significant socioeconomic disadvantage, largely as a result of being the sole wage earner in the household (Brown 2004, McLanahan and Booth 1989). Thus, many single mothers shoulder multiple burdens: they assume all or most of the responsibility for their children, while frequently living in poverty while maintaining a job.

Nonmarital fertility has been the focus of intense public policy and public health concern for decades due to its impact on family structure and the economic security of children. However, with 90% of women serving as the resident parent in single family households (Fox and Kelly 1995), a growing body of work has begun to explore the effects of nonmarital birth on mother's health. These results suggest that single mothers are at greater risk for psychological distress (McLanahan 1983), not just resulting from the lack of economic resources, but a lack of social support as well (McLanahan and Booth 1989, Cairney et al. 2003).

In light of the growing work on mental health of single mothers, there remains a dearth of empirical research that examines the potential influence of non-resident father involvement on mothers' health outcomes. This is a significant oversight given the work which suggests that non-resident father involvement has a positive effect on child's development, particularly through child support payments (King 1994).

In this paper, we will contribute to the gap in this literature by examining several distinct aspects of father's involvement and its effects on unpartnered mother's mental health. First, by exploring the underused data from the Three-City Study, an intensive study conducted in Boston, Chicago, and San Antonio to assess the well-being of low-income children and families in the post-welfare reform era, which has higher response and retention rates as compared with other surveys of low income households (Fomby and Estacion 2007). Second, we will use multiple measures of both the father's involvement with the focal child and mother's mental health. Lastly, we will analyze the effects of father's involvement using both the mother's reports of father involvement and the father's self reports.

## Data and Methods

We will use the three waves of the Welfare, Children and Families: A Three City Study (Three City Study). The data are from a longitudinal study of low income families in Boston, Chicago, and San Antonio which began in 1999 and included 2402 households. In wave 1, each household had a child age 0 to 4 or 10 to 14 at the time of the interview. The child and the child's primary female caregiver were the focus of the study. The initial response rate is 75%, with an acceptable retention rate across waves. These families were re-interviewed in 2000-2001 and again in 2005-2006. The sampling methods of the Three City Study have been described in detail elsewhere\*.

We restrict the data to unpartnered birth mothers ages 18 years and older. We believe mothers under the age of 18 are subjected to several other stressors that we cannot fully account for in this dataset that may have significant impacts on her mental health. We further restrict the data to single, non-cohabiting mothers. However, we do include separated non-cohabiting mothers in our analysis as they do not have a partner present in the household much like a single mother. After these restrictions, we maintain an analytic sample of 1701 respondents.

## Variables and Measures

### *Dependent Variables*

Mother's mental health is measured in terms of the following three indices: 1) negative self-concept, a five-item index, which includes her level of (dis)agreement with such statements as, "*All in all, I am inclined to feel that I am a failure*" and "*I feel I don't have much to be proud of*" ( $\alpha=.72$ ); 2) positive self-concept, a 5-item index, which includes her level of (dis)agreement with such statements as, "*On the whole, I am satisfied with myself*" and "*I am a useful person to have around*" ( $\alpha=.65$ ); and 3) a global self-concept that is comprised of all 10 measures ( $\alpha=.76$ ). Higher scores on the three indices represent a more negative response on the negative self-concept and a more positive response on the positive self-concept and global self concept.

### *Key Independent Variables*

There are three distinct measures of father's involvement. The first measure is a 7 question composite scale using such questions as, "*How much responsibility does FATHER take for making sure the CHILD behaves*" and "*Overall, how close would you say the FATHER is to the CHILD.*" This composite scale was created by calculating the mean of the responses to the 7 items after they had been standardized. To insure the integrity of the scale, at least 2/3 of the items were needed to calculate the composite score. Two additional constructs of father's involvement will include measures of financial child support and the provision of material necessities.

### *Co-Variates*

In addition, our models will adjust for the potentially confounding effects of a number of sociodemographic variables, including: race/ethnicity (1=non-Hispanic Black, and 1=Hispanic vs. 0=non-Hispanic white); nativity; measures of income and poverty; mother's employment status; father's employment status; age (measured in years); education (1=less than a high school degree, 1=1-3 years of college, 1=4 or more years of college, vs. 0=high school degree); age of focal child; and childcare enrollment (1=child enrolled in childcare vs. 0 child not enrolled in childcare).

## Methods

We will exploit the longitudinal aspect of the study design to make a stronger case for the causal relationship between father's involvement and single mother's mental health. We will pool the three waves of data to analyze the changes in mother's mental health and their associations with changes in father's involvement between waves. We will utilize Ordinary Least Squares regression to analyze the relationships in these data.

## Analysis and Results

Our descriptive analysis of wave 1 of the data shows our weighted sample is comprised of 2.6% nhWhite, 69.1% nhBlack, and 27.0% Hispanic (See Table 1). Further, 76.84% of the respondents in the sample have only a high school education or less. Additionally, 80.1% of our sample lives below the poverty line.

The average standardized score for mother's *positive* self concept is 21.9 with a range of [5, 25]. The average standardized score for mother's *negative* self concept is 8.8 with a range of [5, 25]. On average, the women in our sample do not display characteristics of low self concept.

Table 2 displays the OLS coefficients using wave 1 of the data. We find there is indeed a positive association between father involvement and mother's negative self concept after controlling for our socio-demographic measures. In other words, the more involved a father is in the focal child's life, the more negative is the mother's concept of herself.

**Table 1**

Weighted Descriptive Statistics of Selected Variables

	Range		Mean	Standard Deviation
	Low	High		
Positive Self Concept	5.000	25.000	21.930	14.179
Negative Self Concept	5.000	25.000	8.818	17.371
Global Self Concept	10.000	50.000	43.112	26.743
Father's Involvement	-1.310	1.510	-0.017	3.123
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	Proportion (%)			
Race				
nhWhite				2.59%
nhBlack				69.12%
Hispanic				27.01%
Other				1.28%
Education				
High School Only				39.29%
Less than High School				36.55%

Source: Three City Study

Table 2: Estimated Net Effects of Father Involvement and Covariates on Mother's Mental Health Outcomes (OLS regression, weighted, N=1701).

	Positive Self-Concept	Negative Self-Concept	Global Self-Concept
Father Involvement	.012/.003	-.300/-.054*	.312/.036
Black	1.325/.165*	-1.234/-.126	2.559/.170**
Hispanic	1.169/.141*	.558/.055	.611/.039
Other	2.543/.078**	-1.467/-.036	4.009/.065*
Age	.026/.075**	.004/.010	.022/.034
US Born	-.699/-.055*	-.350/-.023	-.349/-.015
Less than High School	-.748/-.098***	2.058/.219***	-2.805/-.194***
Some College	-.057/-.007	1.139/.107***	-1.196/-.073**
College Degree or more	-8.383/-.211***	8.775/.180***	-17.158/-.229***
FC's Age	-.003/-.005	.050/.058*	-.053/-.040
Childcare Enrollment	1.100/.050*	-3.519/-.131***	4.620/.112***
Below Poverty Line	-.637/-.069**	1.578/.139***	-2.216/-.127***
Intercept	20.188***	10.431***	39.828***
R <sup>2</sup>	.07	.15	.13

Notes: \*p < .05, \*\*p < .01, \*\*\*p < .001

Unstandardized and standardized coefficients are presented; standardized coefficients are after the (/).

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- \* [http://web.jhu.edu/threecitystudy/images/publications/users\\_guides/Wave\\_1\\_User\\_Guide.pdf](http://web.jhu.edu/threecitystudy/images/publications/users_guides/Wave_1_User_Guide.pdf) accessed September 20, 2009.