

# Predictors of Father Involvement: The Role of Early Life Events and Stressors

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**Abstract**—This study utilized the National Longitudinal Survey of Youth 1997 (NLSY97) dataset to examine the effect of men's early life stressful events and their father involvement with their new biological child(ren).

The problems associated with low level of father involvement or even father absence in the United States followed by the dearth of studying men who experienced stressful events during childhood were first discussed. A series of factors in the literature that can affect the level of father involvement and various of childhood stressful events were also presented. Following this, the characteristics of study subjects' demographics, household information, men's crime history, substance use history, early life stressful events, and men's father/figure were studied. A logistic regression analysis was used to determine the best predictors of the level of men's involvement with their new biological child(ren). The best predictors were age when a man became a father and whether he had been arrested in childhood. Future research is needed to evaluate fathering activities representative of the direct and indirect engagement dimensions.

**Index Terms**—Childhood, early life stressors, father involvement.

## I. INTRODUCTION

Research has shown that the role of fathers in child development is substantial. Studies confirmed that during the first 2 years of life, children develop attachment with their father just as they do with their mother (Lamb, 2010). This attachment helps children to use their father figure as a secure base for exploration of their physical and social worlds, thus promoting their emotional and cognitive development (Carlson & Sroufe, 1995; Easterbrooks & Goldberg, 1990). Researchers have also found that the consequences of positive father involvement include fewer behavior problems in later childhood (Aldous & Mulligan, 2002; Lamb, 2010), more positive school attitudes in adolescence (Flouri, Buchanan, & Bream, 2002; Lamb, 2010), greater mental health wellbeing as adults (Wenk, Hardesty, Morgan, & Blair, 1994), and increased economic-educational achievement in adulthood (Alfaro et al., 2006; Plunkett et al., 2009). When fathers are involved, children tend to “exhibit less violent behavior, have better impulse control, are more socially adept, and may demonstrate higher than average IQ” (Rump, 2002, p. 19).

Fathers' active involvement in children's life is not only linked with positive child outcomes, but also benefits the families and communities as a whole. As Mackey and Buttram (2012) suggested, father involvement strongly predicts lessened violence in a community, whereas the

absence of fathers is also strongly correlated with elevated levels of violent crime within that community.

Although there is a link between parenting and children's development, fathers' influence has not been studied to the extent of mothers' influence (Brooks-Gunn et al. 2000; Fitzgerald & Montanez 2001). The primary focus of parenting, fertility, and family formation is women and mothers because they have been considered the primary caregivers. Men and fathers have been largely missing from statistical portraits of families (Castillo & Sarver, 2011). Fathers provide caregiving for children similar to mothers, but they also interact with their infants in ways that offer something unique for infant development. Limited research has been done to study fathers' residential status, age, race and ethnicity, educational attainment, financial status, and how these factors shape fathers' involvement (Castillo & Sarver, 2011). Furthermore, relatively little research has been conducted that fully explicates the differences between men who experienced early life stressors and men who do not have early life stressors and the effect of early childhood stressors has on fathers' involvement with their children. In exploring father-child interaction, the unique perspective and history that fathers bring to their parenting behaviors are often neglected. Research shows that people with stressful events may re-experience these adverse events in the form of “intrusive recollections, flashbacks or nightmares, persistent avoidance of stimuli associated with the stressful event, emotional numbing, as well as a constant state of heightened alertness and increased arousal” (APA, 1994). A man's experiences of historical stressful events can have dramatic effects on his fathering behavior and children's development (Runyon & Kenny, 2002).

Addressing this limitation, this study focuses on the relationship between fathers' early life stressors and how these stressful events affect involvement in their fatherhood. The more we know and understand fathers, the greater likelihood that policymakers and practitioners may be able to develop and implement policies and programs benefitting diverse groups of fathers in their involvement with their children. This study will contribute to the literature by examining all fathers who experienced childhood stressful events and how these events shape the levels of father involvement.

## II. THERORETICAL PERSPECTIVES OF FATHER INVOLVEMENT

Bronfenbrenner's (1979) ecological theory looks at an individual's development within the context of the system of relationships that form his or her environment. Bronfenbrenner's theory defines complex “layers” of

Manuscript received December 28, 2016; revised May 1, 2017.

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environment, each having an effect on an individual's development. The structure of environment contains five layers: (a) the microsystem—which is closest to the individual and contains the structures with which the individual has direct contact; (b) the mesosystem—this layer provides the connection between the structures of the individual's microsystem (Berk, 2000); (c) the exosystem—which defines the larger social system in which the individual does not function directly; the structures in this layer impact the individual's development by interacting with some structure in his/her microsystem (Berk, 2000); (d) the macrosystem—which is composed of cultural values, customs, and laws (Berk, 2000); (e) the chronosystem—which encompasses the dimension of time as it relates to a child's environments; elements within this system can be either external, such as the timing of a parent's death, or internal, such as the physiological changes that occur with the aging of a child. As children get older, they may react differently to environmental changes and may be more able to determine more how that change will influence them.

The ecological theory claims that the relationships experienced within one system influence and are influenced by the relationships developed in the other systems. A person is composed of social, cultural, economic and temporal contexts. Father involvement is the result of the interaction of several factors related to the father's microsystem (e.g. the father's desire to be close to his child, employment status, mental health status); mesosystem (e.g. quality of the marital relationship, spouse's job, and child characteristics); the exosystem (e.g. father's work environment, collective agreement provisions facilitating parental leave); the macrosystem (e.g. the cultural beliefs about father's role in child development, social policies towards father involvement, etc) and the chronological system (e.g. fathers' childhood experience, the model the father had in his family of origin).

### III. METHODOLOGY

Details of the methods that use to explore the associations between men's childhood stressful events and their current involvement patterns with their children will be described. The data for the research and the sample will be introduced. The study variables for creating composite measures will be discussed.

#### A. Data Source

This study is a secondary analysis of data from National Longitudinal Survey of Youth 1997 (NLSY97), which is a comprehensive nationally-representative social science survey sponsored by the U.S. Bureau of Labor Statistics. The NLSY97 consists of a nationally representative sample of approximately 9,000 young men and women born in the years 1980-1984. They were 12-17 years old when firstly interviewed in 1997. Participants were surveyed once during the base year and then once annually since 1997, with 15 rounds of data currently available (Round 15 is the most recent data release, fielded in 2011-2012). In all, 8,984 participants were surveyed at base year, and 7,490 were retained throughout the remaining years.

The datafile includes key measures related to the research:

childhood stressful events and father involvement. Areas of the survey those are potentially sensitive, such as sexual activity and criminal behaviors compose the self-administered portion of the interview. One unique aspect of the NLSY97 is that Round 1 contains a parent questionnaire that generates information about men's family background and history. The data also contain how involved these men are with their children when they grow up. In addition, the data contain a nationally representative sample, which allows for investigating the effect of men's early life stressors on their father involvement, potentially being able to generalize findings to the population of fathers and adding to the existing literature.

#### B. Sampling

The NLSY97 utilized a probability sampling approach, which includes a cross-sectional sample and an oversample of Black and/or Hispanic or Latino respondents. The cohort was selected using these two samples to get adequate numbers of minority respondents for statistical analysis. Included in the total baseline sample were two subsamples: a nationally representative sample of 6,748 respondents and an oversample of Hispanic and Black respondents living in the US (n = 2,236).

The current investigation focuses on men's fathering involvement; females were excluded from the study. Males who had never had a child were also excluded for this study. Eligible participants for the current study are men who had fathered at least one new biological child (0-4 years old), and this reduced the sample size to 1816.

#### C. Data Collection

The interviews are conducted each round using a computer-assisted personal interview (CAPI) instrument, administered by an interviewer with a laptop computer. Computer software automatically guides interviewers through an electronic questionnaire, selecting the next question based on a respondent's answers. The preferred mode of interview is in person. When an interview is conducted in person, during sensitive portions of the interview, the respondents enter their answers directly into the laptop rather than interacting with the interviewer. This self-administered portion, called audio computer-assisted self-interview (ACASI), includes an audio option so that the respondents can listen to the questions and answers being read via headphones if they prefer. The audio component theoretically improves response quality when the respondent's literacy is in question. In some cases, due to the location of the respondent or the respondents' reluctance to be interviewed in person, interviews are conducted by phone.

When the original data was collected, no identifiable information about the individuals participating in the study was entered into the dataset. Nonidentifying identification numbers were assigned to each record to keep the identities of the children and their families confidential.

#### D. Measurement-Father Involvement

Father involvement in this study was measured by the direct interaction with a child. This is because that the data of NLSY97 only provides information about the respondent's direct involvement with his child(ren). There

are four questions that were consistently being asked in the 15 rounds of the data: (1) how often do you talk/sing to your child in the past month? (2) how often do you read or tell stories to your child in the past month? (3) how often do you bathe or dress your child in the past month? (4) how often do you play with your child in the past month? ((1=not at all, 2=rarely, 3=a few times during the month, 4=a few times a week, 5=about once a day, 6= more than once a day). Father involvement in this study was operationalized by the frequency of these four activities: talk or sing to a child, bathe or dress a child, read or tell stories to a child, and play together with a child.

#### IV. DESCRIPTIVE FINDINGS

##### A. Demographics

Most respondents were under 30 years old (53.7%) in 2011. The mean age of fathers was 29 years ( $n=1653$ ,  $SD=1.43$ , range 26 to 32). The racial/ethnic distribution of fathers was as follows: 53.4% ( $n=969$ ) were White, 31% ( $n=563$ ) were African American, 24.9% ( $n=452$ ) were Hispanic, 0.6% ( $n=11$ ) were American Indian, and 0.4% ( $n=9$ ) were Asian or Pacific Islander. Twenty percent of the fathers identified themselves as Roman Catholic ( $n=362$ ), 23.3% Baptist, 16.6% non-denominational Christian, 12.1% personal philosophy, and 4.4% Atheist or Agnostic. The majority of the fathers reported that they rarely went to church in the past year, and only 10.1% of them said that they went to church every week.

Nearly half of the men were married (46.8%) by 2011, while 34.7% were never-married, and 9.3% were separated or divorced. Over two-third of them (68.3%) lived in an urban area. Regarding education, almost half of the fathers (47.2%) had a high school diploma, 9.1% of the fathers ( $n=165$ ) received a Bachelor's degree, and 2.5% ( $n=44$ ) have finished Master or PhD degree.

From the most recent interview in 2011, 23.8% of the fathers ( $n=432$ ) reported that they experienced depression and missed work because they were 'too blue' to get up in the morning, or feeling too anxious to conduct their usual activities. Only a few fathers (5.6%,  $n=102$ ) were treated by a mental health professional because of their emotional, mental or psychiatric problem in the past 12 months.

The average age at which subjects became a father was 23 years old ( $n=1652$ ,  $SD=3.6$ , range 9 to 31). Only 18.4% of the men became fathers in their teens. Over forty percent of fathers had only one biological child (43.2%,  $n=784$ ), 34.9% of the fathers ( $n=633$ ) had two biological children, and 2.7% ( $n=104$ ) had more than four children. The number of biological child born and residing in the household ranged from 1 to 6. The number of biological children not living in the household ("non-residential biological children") ranged from 1 to 9.

As of 2011, nearly half of the study subjects ( $n=845$ , 46.5%) reported that they had never been arrested over their lifetime. For those with an arrest record, the average number of arrests was 2.3 ( $n=958$ ,  $SD=4.3$ , range 1 to 67). Regarding incarceration history, 17.5% of the 1816 fathers ( $n=317$ ) have been incarcerated as of 2011. The average number of total incarcerations for all fathers over their

lifetime was 0.3 ( $n=1816$ ,  $SD=0.8$ , range 0 to 7). For those with an incarceration history, the average age of their first incarceration was 21.5 years old ( $n=315$ ,  $SD=3.66$ , range 11 to 30). The average months for the longest spell of their incarceration was 13.9 ( $n=310$ ,  $SD=19.4$ , range 1 to 157).

##### B. Early Life Stressful Experiences

The childhood stressors/experiences are categorized as individual and family early life stressors. (a) Early Life Stressors-Individual. A fifth of the men (20.9%) indicated that they had run away from home during their childhood. Over 25% ( $n=461$ ) were a victim of bullying before 18. Almost six hundred (33%) reported that they saw someone get shot or shot at with a gun before they were 18. Over a quarter (28.3%) indicated that they witnessed either their friend or a stranger being shot. Surprisingly, 4.9% indicated that themselves were gunshot victims. Approximately 21.6% joined a gang before they were 18. Roughly 2.9% ( $n=53$ ) reported that they had been homeless or lived in a shelter for two or more nights in a row before they were 18. Six percent ( $n=117$ ) said that they have been a victim of a violent crime, such as physical or sexual assault, robbery, or arson before they turned 18. A fourth (25.1%,  $n=456$ ) had the experience of their house or apartment being broken into before they were 18 years old. (b) Early Life Stressors-Family. Nearly 200 men (11.5%) reported that they had an adult member of their household (other than themselves) experience one or more periods of unemployment lasting at least six months. Six percent ( $n=112$ ) indicated that their parents were divorced when they were 13 to 18 years old. Nearly 7.1% of the fathers stated that an adult member of their household (other than themselves) had been sent to jail or prison before they were 18. A half of the fathers (50.1%,  $n=910$ ) reported that they experienced the death of a close relative, either their parent, or their sibling, child, grandparent, or their partner passed away. Almost three hundred (16.3%) had a member of his household stay in a hospital for at least one week for treatment of illness or injury before they were 18. (c) Individual Behavioral Problems. Sixteen percent of the fathers had been arrested before 18 years old ( $n=296$ ).

##### C. Men's Overall Father Involvement with New Biological Child(ren)

Father involvement was determined by surveying fathers on how often they talk/sing bathe or dress, read books to, and play with their biological children. To measure overall father involvement, responses on the above activities were gathered from 2000 to 2011 (at each wave of the data collection) - from fathers if they were parenting children between birth and four years of age. A total father involvement score was computed by averaging all the father involvement activities for all the children by number of children over the twelve waves of data. The average score ranged 1 to 6, with higher scores indicating more involvement. The average score for a father talking or singing to his new child was 5.5 ( $n=1809$ ,  $SD=0.85$ , range 1 to 6) and playing with his child was 5.4 ( $n=1816$ ,  $SD=1.0$ , range 1 to 6). Fathers were less likely to bathe or dress their child as the average score for performing this task was 4.3 ( $n=1811$ ,  $SD=1.2$ , range 1 to 6). Similarly, reading books

has a lower average score of 3.4 (n=1816, SD=1.6, range 1 to 6).

*Research Question #1: What is the difference of father involvement among respondents of different races/ethnicities?*

1a Hispanic versus Non-Hispanic

An independent samples t-test was conducted to examine whether there was a significant difference in father involvement between respondents who identified themselves as Hispanic and Non-Hispanic. Non-Hispanic fathers reported a slightly higher level of involvement with their children (M=4.65, SD=0.88, n=1361) than Hispanic fathers (M=4.58, SD=0.9, n=452). The test revealed there is no statistically significant difference between these two groups (t=-1.5, df =1811, p=0.85). Hispanic fathers are equally likely to be involved in fathering as are non-Hispanics fathers

1b: White, Black, and Other.

A one-way between subjects ANOVA was conducted to compare the effect of race/ethnicity on father involvement in Black, White, and other racial groups. There was a significant effect of race/ethnicity on father involvement at the p<.05 level for the three groups (F (2, 1805) =4.0, p = 0.00). Post hoc comparisons using the Tukey test indicated that the mean score for Black fathers' involvement (Mean=4.5, SD=0.9, n=563) was significantly different than White fathers (Mean=4.7, SD=0.86, n=969). No significant difference was observed between Black and Other racial groups.

Taken together, these results suggest that White fathers tend to have the highest level of father involvement, following by Other, and Black fathers.

*Research Question #2: What is the difference of father involvement with new biological child(ren) among respondents who first became a father in their teens (13-19) and respondents who became a father in their 20s and 30s (20-32)?*

An independent samples t-test was conducted to examine whether there was a statistically significant difference between respondents who first became a father in their teens and respondents who became a father in their 20s and 30s in relation to their overall father involvement. The test revealed a statistically significant difference between these two groups (t=5.6, df =447.2, p=0.00). Respondents who became a father in their 20s (M=4.71, SD=0.8, n=1318) reported significantly higher levels of involvement with their children than those who had their first biological child in their teens (M=4.37, SD=1.0, n=334).

*Research Question #3: What is the difference in father involvement with new biological child(ren) between fathers who had an arrest history in childhood and those who did not?*

An independent samples t-test was conducted to compare father involvement for men with and without arrest history in childhood. There was a statistically significant difference in the scores for men with arrest history in childhood (M=4.34, SD=0.99, n=296) and men without arrest history in childhood (M=4.68, SD=0.86, n=1507); t (1801) =6.0, p=0.00. These results suggest that arrest history in childhood really does have an effect on men's involvement with their children. Specifically, men without arrest history

in childhood had higher level of father involvement.

*Research Question #4: What is the difference in father involvement with new biological child(ren) between fathers who had substance use history in childhood and those who did not?*

This study found that fathers with a childhood substance abuse history were not statistically significantly different in being involved (M=4.62, SD=0.91, n=1117) with their children compared to fathers who never used these three substances in childhood (M=4.66, SD=0.85, n=691), t (1806) = -1.0, p>0.05.

*Research Question #5: What is the difference of father involvement with new biological child(ren) between respondents who had different fathering history in their childhood?*

5a: Comparison between respondents who had lived with their father/father figure in childhood versus those who did not (non-residential)

An independent samples t-test showed that respondents who had a residential father or father figure in their childhood (M=4.69, SD=0.85, n=1276) had significant higher level of father involvement than those who had no residential father or father figure (M=4.51, SD=0.96, n=532), t (893) =3.73, p=0.00.

5b: Comparison between men's fathers' parenting styles on father involvement

A one-way between subjects ANOVA showed that respondents' fathers' parenting style had a significant influence on respondents' involvement with their children, F (3, 1423) =5.67, p = 0.00. Post hoc comparisons using the Tukey test indicated that the mean score of father involvement for respondents with a father with an uninvolved parenting style (M=4.49, SD=0.9, n=201) was significantly lower than respondents who a father with an authoritative (M=4.76, SD=0.83, n=582), or permissive parenting style (M=4.70, SD=0.86, n=362). No statistically significant difference in parenting was observed between respondents who experienced uninvolved and authoritarian parenting styles.

Taken together, these results suggest that men who had an authoritative fathering reported the highest level of father involvement, followed by respondents who experienced permissive fathering, and authoritarian fathering. Men who experienced uninvolved fathering style in childhood reported experiencing lowest level of father involvement.

## V. LOGISTIC REGRESSION ANALYSIS RESULTS

The aim of the study was to investigate which IVs (race; whether the subject has a father figure in childhood, father's supportiveness in childhood, substance use in childhood, arrest history in childhood, physical, social, and family stressors in childhood, age when the study subject became a father, and number of biological children) are predictors of level of involvement with their children (i.e., low involvement or high involvement). Prior to analysis, the variable of involvement was recoded as dichotomous and applied the following transformations: 0=low involvement (n=310), 1=high involvement (n=1491).

Data were first screened for missing data and outliers. A preliminary multiple Linear Regression was conducted to

calculate Mahalanobis' distance (M-D) and to evaluate multicollinearity among the 11 predictors. The table of regression coefficients indicates that multicollinearity was not violated because tolerance statistics for the 11 indicators are greater than .1. The MD that is calculated by SPSS Regression can be compared to a chi-square distribution with DF equal to the number of predictors in the Regression (Tabachnick & Fidell, 2007). The probability of MD 2 (the p-value, i.e. the right tail area) was computed to identify the probability of getting an MD 2 value as large as the current case's value in a chi-square distribution with 10 degrees of freedom. Cases exceeded the chi-square criteria of  $X^2(11) = 22.458$  at  $p = 0.001$  were excluded. In this dataset, 15 cases have a MD 2 with a probability less than or equal to 0.001 were eliminated using select cases from the final analysis.

*Research Question #6: What are the predictors of father involvement with new biological child(ren)? Does the inclusion of a particular variable increase or decrease the probability of the specific outcome?*

Hierarchical logistic regression analysis was used to explore which of the 11 predictor variables (race; whether the subject has a father figure in childhood; father's supportiveness and parenting style in childhood; substance use history in childhood; arrest history in childhood; physical, social, and family stressors in childhood; age when the study subject became a father; and total number of biological children) were the best predictors of father involvement. Predictor variables were entered in five blocks.

A test of the full model against the previous model was statistically significant, indicating that the predictors as a set reliably distinguished between lowly involved fathers and highly involved fathers ( $X^2(2, N=1260) = 31.858, p < 0.001$ ). The model explained 11.6% of the variance in father involvement (Nagelkerke R Square = 0.116). The model correctly classified 84.6% of the cases. Wald statistics indicated that arrest history in childhood and age when a man first became a father were significant predictors, with the likelihood of men without arrest history in childhood 2.17 times more likely to be highly involved with their children. The odds ratio for when age became a father shows that when holding all other variables constant, a man is 1.15 times more likely to be involved with his children for each one point increase on age when he first became a father.

In summary, a logistic regression analysis was conducted to predict father involvement level using race; whether the subject has a father figure in childhood; father's supportiveness in childhood; substance use history in childhood; arrest history in childhood; physical, social, and family stressors in childhood; age when the study subject became a father; and total number of biological children as predictors. Regression results indicated that the overall model of two predictors (age became a father, arrest history in childhood) were statistically reliable in distinguishing between highly and low involved males (-2 Log Likelihood = 988.359,  $X^2(2, N=1260) = 31.858, p < 0.001$ ). The model correctly classified 84.6% of the cases. The odds ratio for age when became a father shows that when holding all other variables constant, a man is 1.15 times more likely to be involved with his children for each one point increase in age when became a father. Inverting the odds ratio for

arrest history in childhood reveals that men without an arrest history in childhood are 2.17 times more likely to be highly involved with their children.

*Research Question #7: What are the predictors of father involvement for men who had only one child?*

Enter logistic regression was conducted to determine which independent variables (race; whether the subject has a father figure in childhood, father's supportiveness in childhood, substance use in childhood, arrest history in childhood, physical, social, and family stressors in childhood, and age when the study subject became a father) are predictors of father involvement level (low and high) for men who only had one child. Regression results indicated that the overall model of two predictors (age became a father, arrest history in childhood) were statistically reliable in distinguishing between highly and involved males (-2 Log Likelihood = 356.028,  $X^2(10, N=549) = 47.33, p < 0.001$ ). The model correctly classified 87.8% of the cases. Wald statistics indicated that age became a father and arrest history in childhood significantly predicted men's involvement level with their children. The odds ratio for age when became a father shows that when holding all other variables constant, a man is 1.22 times more likely to be involved with his children for each one point increase on age when became a father. Inverting the odds ratio for arrest history in childhood reveals that for a man without arrest history in childhood is 2.35 times more likely to be involved with his children.

*Research Question #8: What are the predictors of fathers' level of involvement with new biological child(ren) (high versus low) when there are equivalent number of cases?*

In the original model of all cases ( $n=1260$ ), the model was able to classify 84.6% cases. However, the actual number of low involved fathers ( $n=192$ ) is very small compared to high involved fathers ( $n=1068$ ). In the second model of fathers who only had one child ( $n=549$ ), the model was able to classify 87.8% cases correctly. The number of low involved fathers ( $n=66$ ) was also very small compared to high involved fathers ( $n=483$ ).

In order to further confirm the accuracy of the model, a random sample of 20% of the high involved fathers ( $n=205$ ) were selected and merged with low involved fathers ( $n=192$ ). Hence, the low and high involved fathers have the equivalent number of cases. Hierarchical logistic regression analysis was used to explore which of the 11 predictor variables (race; whether the subject has a father figure in childhood; father's supportiveness and parenting style in childhood; substance use history in childhood; arrest history in childhood; physical, social, and family stressors in childhood; age when the study subject became a father; and total number of biological children) were the best predictors of father involvement. Predictor variables were entered in five blocks.

A logistic regression analysis was conducted to father involvement level of 399 cases; using race whether the subject has a father figure in childhood; father's supportiveness in childhood; substance use history in childhood; arrest history in childhood; physical, social, and family stressors in childhood; age when the study subject became a father; and total number of biological children as predictors. Regression results indicated that the overall

mode of two predictors (age became a father, arrest history in childhood) were statistically reliable in distinguishing between highly and low involved males (-2 Log Likelihood=501.858,  $X^2(2, N=399) = 50.71, p < 0.001$ ). The model correctly classified 65.2% of the cases. The odds ratio for age became a father shows that when holding all other variables constant, a man is 1.11 times more likely to be involved with his children for each one point increase on age became a father. Inverting the odds ratio for arrest history in childhood reveals that for men without arrest history in childhood 1.79 times more likely to be highly involved with their children.

In summary, three logistic regression analyses were conducted: the first one used all of the 1816 cases and father involvement with all children, the second one used fathers who only had one child, and the third one for a combination of balanced number of low and highly involved fathers. All three models revealed that age when became a father and arrest history are significant predictors of father involvement. Though the third model was only able to correctly classified 65.2% of the cases, it has a higher rate of predict low involved fathers (59.4%) compared to the other two models. The third model explained more of the variance in father involvement (Nagelkerke R Square=0.159).

## VI. CONCLUSION

Overall, the results indicate that fathers in this study are, in general, positively involved with their new biological children across multiple fathering dimensions. They talk/sing, play, read, and bathe/dress their children. At the same time, there is variation in involvement by fathers, depending on their characteristics and childhood histories. In the paragraphs below, the relationship between demographic characteristics and father involvement will be first discussed, followed by determinants of father involvement from outcomes of the logistic regression.

Individual and family early life stressors as factors were not retained in the final model as they did not show significant effect on father involvement. The possible explanations are as follows: first, time as a factor may affect a person's behavior. Second, the negative effect of these stressful experiences may be solved. This is unknown from the current dataset as there is no variable assessing this area. Third, some protective factors may increase a man's father involvement, such as support system, positive co-parent relationship. These protective factors are also not available in the current dataset.

Predictive models demonstrated that age when became a father, and arrest history in childhood are consistently strong predictor of biological father's level of involvement. The older a man was when he became a father, the more likely it was that he spent time or played with his child. A man without a history of arrest showed significant higher level of involvement with his children.

The final model explained 16 percent of variance in father involvement. It is clear that some factors which contribute to father involvement according to the literature were not included in the design of this study, such as child characteristics, co-parent relationship, mental health,

and support system. On the whole, this study aimed to understand the effect of men's early life stressors, and how these stressors affect and shape their father involvement. This study examined one facet of father involvement which had not previously been studied and contributed to the literature by examining men's early life stressors and documenting their involvement level.

## VII. IMPLICATIONS FOR SOCIAL WORK PRACTICE

Research indicates that increased father involvement is related to positive child wellbeing (Lamb & Tamis-LeMonda, 2004). As such, social workers should strive to engage positive father involvement. However, fathers are not a primary participant involved in services/interventions compared to a child's mother. Phares, Fields, and Binitie (2006) identified a number of factors that may contribute to the lack of father participation including: service providers not actively inviting father participation, service providers' biases in not considering father participation important, discomfort with interparental conflict, fathers' time-constraints, fathers' assessment of intervention as unnecessary, and fathers' problem solving or coping styles. Since positive parenting appears consistently associated with positive child outcomes, it would make sense for social workers to promote positive father involvement, and to intervene in cases where the father is not actively involved in his children's lives.

Although individual social stressors experienced in childhood did not emerge as a predictor in the final model, it showed a trending significant effect toward father involvement ( $p=0.51$ ). A man was a victim of bullying, witnessing gunshot, experienced homelessness; victim of violent crime, etc. does impact his level of father involvement. As such, fathers' childhood experiences should be assessed in order to provide appropriate services to engage father involvement. Father involvement issues cannot be solved if social workers are blind to a father's childhood experience.

Additionally, the final model revealed two significant predictors of father involvement: age when a man became a father, and arrest history in childhood. Age when became a father showed a positive relationship with father involvement, and arrest history in childhood indicated a negative relationship. Programs that educate teenager males on the importance of avoiding pregnancy and crime should be developed. Very many programs focused teenage pregnancy on girls. Based on this study's findings, appropriate programs for teenage boys should also be developed. Also, parenting classes or programs should be offered for fathers.

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