

1. Introduction

Fathers have been recognized as important contributors to the social, emotional, and cognitive development of their children ([Boyum and Parke, 1995](#); [Lamb, 1997](#); [Palkovitz, 1997](#)). Although many studies conducted in 1990s have explored the patterns as well as possible causes and consequences of varied forms of father involvement for children's well-being, for the most part, few have examined outcomes for adolescents. Research on father involvement and adolescents is only beginning to emerge, and much still needs to be learned to determine how the quality of father involvement is associated with outcomes for this age group of children ([Lamb, 1997](#); [Larson and Richards, 1994](#); [Zimmerman et al., 2000](#)). Surprisingly, even less is known about the effects of father involvement on subpopulations of adolescents such as those in immigrant families. Such an omission is surprising given that immigrant youth constitute one of the fastest growing child populations in US.

During the 7 years from 1990 to 1997, the number of children in immigrant families grew by 47%, compared to only 7% for children of native-born parents. Nearly one of every five American children (first and second-generation) was the child of an immigrant by 2000 ([Harris, 2000](#); [Hernandez and Charney, 1998](#)). This growth is coupled with unique needs that differ from those of third-generation children who have families that have lived in US for several generations ([Hernandez, 1999](#)).

Pertinent to the present study, little is known about how father involvement is associated with outcomes for immigrant youth. Nor has prior research examined how father involvement varies over time to influence outcomes for such youth. The issue therefore that remains unanswered is how father involvement influences adolescent behaviors particularly for those in first and second-generation families. Clarifying this issue for teens is important given that adolescence is a period of high levels of risk-taking (US Department of Health and Human Services, 1998).

This study therefore has three objectives: (a) to examine the influence of father involvement on adolescent's transition to risky behaviors in immigrant and native-born families; (b) to examine whether the effects of father involvement vary with youth generational status (first or second-generation) on youth transition to risky behaviors; and (c) to examine whether the effects of father involvement interact with intact family status in predicting transitions to risky behaviors. This is of interest as it may indicate possible differences in the effects of father involvement in influencing the likelihood of outcomes for youth in certain groups.

By examining the influence of father involvement on the likelihood of risky behaviors among youth from immigrant and third-generation families, this study builds upon past research and extends the knowledge of the fatherhood and immigration literature in four ways.

First, using a nationally representative sample of youth, from the NLSY 1997–1999, we explore how father involvement is related to adolescent behaviors among a wider

classification of youth than examined in previous studies that have focused exclusively on US born children ([Marsiglio et al., 2000](#); [Parke, 2000](#)). Second, we examine whether father involvement interacts with immigration status in its effects on risky behaviors net of other individual and contextual factors. We move beyond previous research to examine outcomes for first and second-generation youth to explore the process of assimilation.

Third, we separate out the effects of paternal involvement from the effects of maternal involvement to understand how and whether fathers influence adolescents. Few studies of father involvement have controlled for variations in the level of supportive maternal behavior.

Fourth, most fatherhood research has used cross-sectional designs and therefore the direction of associations between father involvement and youth outcomes have been unclear, providing little evidence of causal relationships between paternal behaviors and offspring outcomes. The present study adopts a life course approach to examine how father involvement is associated with youth *first* transition into risk behaviors in both immigrant and native-born families.

2. Literature review

2.1. The importance of fathers

A growing body of literature suggests that the quality of the father–child relationship is of central importance to understanding how fathers influence child well-being ([Lamb et al., 1987](#); [Palkovitz, 1997](#); [Parke, 2000](#); [Pleck, 1997](#)). However, these studies have been limited in focus, exclusively examining US-born samples drawn primarily from white middle-class populations ([Marsiglio et al., 2000](#)). Therefore, little, if anything, is known about the association between father involvement and outcomes for children in other groups, especially those in immigrant families.

Although the mere presence of a father is important for economic and social reasons, research has consistently demonstrated that, in father-present families, the *quality* of father–child involvement is more clearly linked to positive outcomes than *quantity* of involvement ([Parke, 1996](#)). Previous research suggests that various dimensions of paternal behavior, such as spending time with children, providing emotional support, giving everyday assistance, monitoring children’s behavior, and using noncoercive discipline are conducive to positive outcomes. These behaviors are considered ideal for promoting desirable outcomes for children ([Baumrind, 1968](#) and [Baumrind, 1991](#); [Marsiglio et al., 2000](#); [Parke and Buriel, 1998](#)). Outcomes that have been examined include academic success, lower levels of externalizing behavior problems, positive social behaviors, and decreases in internalizing problems. Children with involved fathers tend to report fewer behavioral problems at school, greater social integration, and considering future indicators of well-being, marital success, and supportive social networks ([Amato and Booth, 1997](#); [Browne and Rife, 1991](#); [Franz et al., 1991](#)).

On the other hand, fathers who do not provide emotional support, who are overly strict or overly lenient, and who are uninvolved in the child's life (*authoritarian, permissive, and uninvolved parenting*, respectively) have children who are more likely to have negative social and emotional outcomes ([Baumrind, 1991](#)). Given the important role that fathers can play in the lives of youth, it is hard to imagine why their involvement would not matter for immigrant youth who like other youth are also at risk of adverse outcomes during adolescence.

2.2. Immigrant youth in context

Much of the current debate on immigrant youth has focused on the process of assimilation and the extent to which immigrant youth have similar levels of well-being and outcomes as do children who are native-born ([Portes, 1997](#); [Rumbaut, 1995](#)). The standard model, the "straight line" model, the "revisionist" model, and the segmented assimilation models of assimilation have all been used to explain the differences in well-being of foreign born youth and native-born youth with foreign parents compared to those of native-born youth with native-born parents.

Immigrant youth face unique challenges and circumstances that can lead to closer family relationships or to family disintegration, resulting in varied negative risk behaviors ([Harris, 2000](#); [Hernandez and Charney, 1998](#); [Leyendecker and Lamb, 1999](#); [Reardon-Anderson et al., 2002](#)). The process of assimilation is not experienced by adolescents in native-born families. While adolescence is often characterized as a period of turmoil, with adolescents rebelling from tradition, adult supervision, and institutional expectations ([Harris, 2000](#)), for immigrant youth this may represent an especially tumultuous period since they may be on a trajectory that is considered "different" from native-born youth. Some assimilation theorists argue that as a minority group becomes more highly assimilated into American values and customs, changes in health related behaviors as well as attitudes may occur, shifting toward patterns experienced by the majority group (Harris, 2001). While the family, peers, school, the community, and the larger society all play a role in the socialization process ([Dornbusch, 1989](#)), for immigrant children, the formation of close family relationships with a parent may also help adolescents develop and prosper.

Furthermore, we suggest that the role of fathers may be particularly significant for adolescents in immigrant families. Because many immigrant families espouse more traditional roles for mothers, the involvement of fathers may take on greater importance. In addition, high paternal involvement may indicate a positive family dynamic where fathers have managed to avoid being marginalized or ignored by Americanized offspring. Also, high father involvement may be critical in any family that is experiencing transition and change. This could be essential, for example, in addressing the process of making a healthy and successful transition to a new country and a new majority culture.

Research suggests that immigrant youth are at risk of both negative and positive outcomes as a result of both risk and protective factors that may exist in their immediate environments ([Hernandez and Charney, 1998](#)). Generational differences, country of

origin differences, and race and ethnic differences work along with risk and protective factors to influence outcomes for immigrant youth ([Hernandez and Charney, 1998](#)). Although along several important dimensions, immigrant children appear to be protected from negative risks, this advantage tends to decline with length of time in the US and from one generation to the next ([Gibson and Bhachu, 1991](#); [Harris, 1998](#) and [Harris, 2000](#); [Hernandez and Charney, 1998](#)). By the third and later generation, rates of most behaviors approach or exceed those of US born white adolescents ([Harris, 2000](#); [Hernandez and Charney, 1998](#)).

While outcomes for adolescents vary by generational status, they may also vary according to country of origin, as well as race and ethnicity. [Kao \(2001\)](#), for example, finds that first and second-generation Mexican adolescents are similar in grades and in math test scores, although there is a tendency towards improvement for reading test scores across generations. [Kao \(2001\)](#) also finds that first and second-generation adolescents have lower feelings of self-efficacy and higher feelings of alienation from their school-mates compared with children in native-born families. Many Hispanic, Asian, and black groups experience lower self-efficacy and feelings of alienation compared with non-Hispanic whites in native-born families. In fact, important differences in outcomes for youth often emerge, in analyses distinguishing youth by country of origin and racial and ethnic group, and when controls for socioeconomic status are added. Yet, and understanding of whether close parent–child relationships, particularly paternal involvement may influence outcomes for immigrant youth, has not been previously examined, despite the various positive and negative risk factors that such youth face.

In addition to differences associated with generation, country of origin and ethnicity, additional risk factors may contribute to negative behaviors among immigrant adolescents. Poverty is a well-documented negative risk factor for the healthy development of immigrant children ([Hernandez and Charney, 1998](#)). Children in immigrant families are significantly more likely to live in poverty than third-generation youth ([Capps, 2001](#); [Reardon-Anderson et al., 2002](#)), and if socio-economic status plays an important role in youth outcomes, then poverty status may be significantly related to greater risk behaviors ([Portes and Rumbaut, 1996](#)). Youth in immigrant families are also more likely to come from larger families ([Reardon-Anderson et al., 2002](#)), which can reduce household resources available to any one child, as well as time, attention, and the monitoring of children ([Blake, 1989](#); [Heer, 1985](#)). This may potentially have negative implications for adolescent behaviors.

Children in some immigrant families belong to racial and ethnic minorities which may expose them to peer networks that exert negative influences. Also, belonging to a minority group may also affect their access not only to economic opportunities, but also to medical, health, educational, and housing resources ([Rumbaut, 1997](#); [Sorenson et al., 1996](#)). Immigrant youth may also face acculturative stress associated with their adaptation to cultures and different social structures, which may result in negative behavioral outcomes ([Aronowitz et al., 1984](#); [Portes and Rumbaut, 1996](#)).

In addition, all adolescents experience physical and social changes and challenges, such as puberty, acquisition of greater autonomy, a larger peer network, and making decisions about high-risk behaviors (e.g., smoking, drinking, drugs, and sexual activity) ([Eccles et al., 1999](#)). Immigrant youth may find this developmental stage more challenging because they have to travel between the competing worlds of the dominant culture and the culture into which they were born. This balancing act can lead to anxiety and depression, and more overt behavioral problems such as drug use and delinquency ([Kao, 1998](#); [Phelan et al., 1994](#)).

On the other hand, several protective factors may serve to reduce the likelihood of negative behaviors in this population of adolescents. First, immigrant children are more likely than youth in US born families to live in two-parent homes—and therefore they are more likely to have fathers present in their homes ([Hernandez and Charney, 1998](#); [Reardon-Anderson et al., 2002](#)). To the extent that the presence of a father is important for healthy adolescent development, this can serve as a protective factor ([Buriel and De Ment, 1997](#); [Vega et al., 1995](#)). While parental influences tend to decrease as children age, parents continue to influence their children during adolescence, and children's social behaviors are affected by parent-child interactions ([Amato and Booth, 1997](#)). Parent-child interactions during adolescence often involve monitoring, supervision, and regulation as children make more of their own decisions. The presence of a father in the household provides more family support that can potentially foster more positive parent-child relationships of higher quality, reduced family conflict, and positive outcomes ([Leyendecker and Lamb, 1999](#)).

Youth in immigrant families may also have a deeply ingrained sense of being rooted in their families, and this may serve as a protective factor (Sabogal, [Marin et al., 1987](#)). Although family and familial obligations tend to decline with time spent in the US, familial support and extensive contacts tend to remain high among some immigrant groups relative to other US citizens despite acculturation ([Buriel and De Ment, 1997](#); [Kao, 1998](#); [Vega et al., 1995](#)).

Immigrant youth who live in a community with a large network of family members and other people from their home country may also receive substantial personal, social and economic supports that can ease the process of adolescent development. The presence of the extended family network can reduce the difficulties experienced and serve as a protective factor ([Buriel and De Ment, 1997](#); [Kao, 1998](#); [Vega et al., 1995](#)). These youth are likely to have an advantage as they adjust to school, attempt to fit into peer groups, and in general navigate within American culture ([Hernandez and Charney, 1998](#)).

In sum, available research indicates that outcomes for immigrant youth may be influenced both by risk and protective factors. Family influences are critical for the development of children in immigrant families, although research has not explored the unique influences of fathers on the behaviors of immigrant children or how these influences may differ from third-generation (native-born) families. An understanding of paternal influences within immigrant families is therefore timely and well-warranted.

3. Research questions and hypotheses

Based on our review of both the fatherhood and immigration literature, we address the following primary research questions:

3.1. Research question 1

Net of other individual and contextual factors, does father involvement predict delinquency and substance use among adolescents, in general?

Hypothesis. Higher levels of father involvement will be related to reduced adolescent delinquent behavior and substance use among adolescents.

3.2. Research question 2

Net of other individual and contextual factors, is youth immigration status associated with delinquency and substance use?

Hypothesis. First-generation or second-generation adolescent will have a reduced likelihood of involvement in delinquent behaviors and substance use compared to third-generation youth.

3.3. Research question 3

Does the influence of father involvement on delinquency and substance use among adolescents, differ for youth who live in intact families versus those who do not?

Hypothesis. Youth who live in intact families will have a reduced likelihood of delinquent behavior and substance use.

3.4. Research question 4

Net of other individual and contextual factors, does the influence of father involvement on delinquency and substance use differ by generational status for adolescents who live in intact households versus those who do not?

Hypothesis. Delinquency and substance use outcomes will vary by generational status for adolescents who live in intact households with fathers present versus those who do not.

3.5. Research question 5

Net of other individual and contextual factors, does the influence of father involvement on delinquency and substance use differ according to gender?

Hypothesis. Delinquency and substance use outcomes will differ by generational status for male versus female adolescents.

4. Data and methods

4.1. Data

The analysis is based on data from the National Longitudinal Survey of Youth, 1997 cohort, a nationally representative survey created to document the transition of adolescents into adulthood. For the present study we use data from the initial three rounds of the survey collected in 1997, 1998, and 1999. The 1997–1999 merged parent–child data include annual father-specific demographic information, as well as child specific information. One of the strengths of the NLSY is that it is a multi-topic survey that taps many dimensions of household well-being and contains many family process measures. The survey also consists of a fairly large sample of adolescents, which allows us to create population-specific subsets of youth files, and is also longitudinal, which makes it possible to track and measure changes in father involvement as well as the influence of such involvement on changes in adolescents' outcomes over time. In the initial wave of the study, both the parent (usually the mother) and the child were interviewed, and we use data obtained from both parent and youth reports. In Rounds 2 and 3 only the adolescent was interviewed. All years of available information for each child are used. In Round 1 of the survey, data were collected for 8984 youth, in Round 2 for 8386 youth, and in Round 3 for 8209 youth.

4.2. Sample

Our analytical sample includes adolescents in both intact and non-intact families. Five thousand three hundred and forty-five lived continuously with both parents during all three waves of the study and 1897 did not. One hundred and thirty-three cases were lost due to sample attrition between Round 1 and Round 3. Two hundred and eighty-seven youth were excluded due to left-censoring. The oldest youth in the sample is age 18 at the time of observation.

In this sample, each respondent's experience is segmented into a series of person-year observations. Each person year is defined as the period between successive annual interviews. Individuals will enter the risk set at the time of their first interview and will contribute exposure to the risk of a risky behavior until they commit such a behavior or they are censored by the terminal interview conducted in 1999. Those who had a risky behavior before the time of the first interview (left censored) are excluded from these models.

The dependent variable is a binary variable that indicates whether the first risky behavior was committed during the interval. The independent variables measure characteristics of fathers, the family context, etc. at the beginning of the interval.

Of the total sample of 7242 youth (intact and non-intact), 37.6% had their first delinquent act, and 44.7% experienced their first substance use during the observation period.

4.3. Dependent variables

4.3.1. Delinquent activity

One of the events of interest is adolescent's first delinquent activity. We use a delinquency index comprised of 10 items asked of youth in 1997, 1998, and 1999 interview regarding whether they had ever done any of the following: run away; carried a hand gun; belonged to a gang; purposely damaged or destroyed property; stolen something from a store; stolen something from a store, person or house; committed other property crimes such as fencing, receiving, possessing or selling stolen property; attacked someone with the idea of seriously hurting them; sold or helped sell marijuana (pot, grass), hashish (hash) or other hard drugs; or been arrested by the police or taken into custody for illegal or delinquent offence. This measure has a range of 0–10. Higher values indicate more incidents of delinquency. High predictive validity has been found for this index through a significant association between substance use and other behavioral problems ([Moore et al., 1999](#)). This measure was dummy coded with all cases that recorded 0 on the index coded 0 (*not involved in delinquent activity*), and all others with a value of 1 or more coded 1 (*involved in a delinquent act*).

4.3.2. Substance use

Our second event of interest is adolescent's first substance use. We use an index comprising three items. This measure is also based on youth reports. Youth were asked whether they had done any of the following in 1997, 1998, and 1999 interview: smoked a cigarette; had a drink of an alcoholic beverage; and used marijuana.

This measure has a range of 0–3. Higher values indicate more instances of substance use. Because this is an index, internal consistency is not applicable. This measure has been found to have good predictive validity ([Moore et al., 1999](#)). This measure was dummy coded. All cases that recorded 0 on the index were coded 0 (*not involved in substance use*). All others with a value of 1 or more on this index were coded 1 (*involved in substance use*).

4.4. Independent variables

4.4.1. Father involvement

We created a measure of father involvement that is a time varying covariate operationalized by the use of a scale consisting of six items that ask about the closeness and supportiveness between the youth and the residential father. This measure of father involvement represents both the quality and quantity of the relationship between the adolescent and the parent by capturing both the emotional and behavioral dimensions of involvement. The emotional dimension is measured using the youth report of the level of closeness and warmth of the parent–youth relationship, and reflects the quality of the relationship ([Harris et al., 1998](#)).

The following three items are asked of the adolescent about the father in 1997–1999 interviews and capture the emotional aspect of the father-youth relationship: I think highly of him; he is a person I want to be like; and I really enjoy spending time with him.

The responses are scored on a five-point likert scale ranging from *strongly disagree* to *strongly agree*.

The behavioral dimension of parental involvement is measured using the adolescent's report about doing things together and supportive types of communication and interaction. This dimension of parental involvement reflects the degree of companionship and supportive behaviors of the parent. The following three items were asked of the adolescent about the father in 1997–1999 interviews: How often does he praise you for doing well? How often does he criticize you or your ideas? and How often does he help you do things that are important to you? (reverse-coded). The responses to these questions are scored on a five-point likert scale ranging from 0 (*never*) to 4 (*always*).

The scores of the scale are summed resulting in values ranging from 0 to 30, with higher scores indicating higher levels of father involvement. The α coefficient of reliability for the scale with all six items is .82 for fathers (mother's reports were also obtained for this scale and the Cronbach's α for mothers is .75). Construct validity on this measure is determined to be high, and an analysis of predictive validity on this measure also found that higher levels of father involvement are related to lower scores on an index of behavior problems ([Moore et al., 1999](#)).

4.4.2. Citizenship and immigration status

We classified adolescents into first and second-generation. First-generation youth are those who are foreign born and who migrated from their country of birth to US. Children can automatically become naturalized while under the age of 18 if both parents become naturalized; or the child can naturalize himself or herself after reaching the age of 18. These children are represented by dummy variables coded as 1 if they are born outside the US, and 0 otherwise. Second-generation youth are US born children who have at least one foreign-born parent (US born children of foreign-born parents). This is represented by a dummy variable coded as 1 or 0 otherwise. The reference category is third-generation youth (native-born) who are US born children of US parents.

4.4.3. Time spent in the US

We also include a covariate that measures the length of time spent in the US. This is a dummy variable coded as less than 10 years or more than 10 years. More than 10 years spent in the US is the reference category.

4.4.4. Parenting styles

Measures of family context capture both the supportive and structural features of the family environment. We use the four parenting styles developed by [Maccoby and Martin \(1983\)](#) created by crossing two global dimensions of parenting: “demandingness” (e.g., strictness), and “responsiveness” (e.g., warmth, support). Authoritative parents are high on both demandingness and responsiveness; authoritarian parents are high on demandingness and low on responsiveness; indulgent parents are low on demandingness

and high on responsiveness; and indifferent-uninvolved parents are low on demandingness and responsiveness.

The two items that comprise this measure are asked of youth regarding whether the parent “in general is very supportive, somewhat supportive, or not very supportive”; and is “permissive or strict about making sure you did what you were supposed to do.” The supportiveness responses were measured on a three-point scale ranging from very supportive to not very supportive. The strictness responses were measured on a two-point scale ranging from permissive to strict.

Responses of “not very supportive” or “somewhat supportive” on the supportiveness items were recorded 0 (*non-responsive*); responses of “very supportive” are recorded 1 (*responsive*). Responses of “strict” on the permissive/strictness item were recorded 1 (*demanding*), and responses of “permissive” were recorded 0 (*non-demanding*). The two two-level variables are combined to produce a parenting style variable with four categories: uninvolved (permissive and not very or somewhat supportive), authoritarian (strict and not very or somewhat supportive), permissive (permissive and very supportive), and authoritative (strict and very supportive).

Both construct and predictive validity have been found to be good for these parenting styles ([Moore et al., 1999](#)). Each category was dummy-coded with 1 (*the parent does use the parenting style*) and 0 (*the parent does not use the parenting style*); zero is the reference category.

4.4.5. Parental monitoring

This time-varying covariate captures the degree of parental awareness and monitoring of youth, and was asked of both mothers and fathers in 1997, 1998, and 1999 interview. The scale was created using four items with respondents indicating how much their parent’s know about: close friends; close friends’ parents; who you are with when you are not at home, and who your teachers are and what you are doing in school.

The responses to the questions are scored on a five-point likert scale ranging from 0 (*knows nothing*) to 4 (*knows everything*). The responses to the questions were summed, resulting in a continuous scale with scores ranging from 0 to 16. The α coefficient of reliability for the index is .71 for mothers and .81 for fathers. An analysis of predictive validity for this index found that both mothers and fathers who were rated high on monitoring are also rated as more strict and had youth with fewer behavioral problems ([Moore et al., 1999](#)).

4.4.6. Father’s individual characteristics

We include variables that capture the employment status of the father and is represented by dummy variables, coded as not employed, if the father was not employed at the time of the interview, and employed (reference category). We also include a variable that

measures father's educational attainment dummy coded as less than high school, high school, and some college and higher (reference category).

4.4.7. Mother's individual characteristics

We include measures of mother's involvement and maternal attitudes, because mothers determine how involved fathers are likely to be with their children ([Lamb, 1997](#)). Maternal attitudes play a significant role in understanding fathers' involvement and can independently affect adolescent risky behavior ([Tinsley and Parke, 1988](#)). Spousal relationships also have the ability to influence father involvement. For example, the amount of social support a father receives from his spouse or the amount of gate-keeping in which a spouse engages can facilitate or suppress father involvement ([Allen and Hawkins, 1999](#); [Beitel and Parke, 1998](#)).

Mother-specific control variables include a time-varying covariate of maternal involvement, maternal monitoring, and maternal parenting styles (all three have been described above for fathers). We also include a measure of the mother's educational attainment dummy coded as: less than high school, high school, some college and higher, with the latter being the reference category.

4.4.8. Mother–father relationship

To control for any confounding effect of the relationship between the parents on adolescent outcomes, we include a time-varying covariate of the parent–spouse relationship quality measured by the mother–father relationship index. The index is comprised of six items asked of residential parents in 1997, 1998, and 1999 interview regarding whether the spouse is: fair and willing to compromise when there is a disagreement; scream or yell when he/she is angry; insult or criticize ideas; expresses affection or love; encourage or help do things that are important; blame spouse for problems. The responses are measured on a five-point scale ranging from never to always. This measure has a range from 0 to 24. Higher scores indicate a more positive marital relationship. The α coefficient of reliability for the scale with all six items is .83 (residential mother's report of support from the residential father).

4.4.9. Household-level covariates

We include a measure of intact (father present continuously) versus non-intact (father absent) family status. This covariate is dummy coded 1 or 0 otherwise. The reference category is non-intact family. We use a proxy measure for poverty level indicated by whether or not the household received AFDC in the first year of the study. This covariate is dummy coded 1 or 0 otherwise. The reference category is did not receive AFDC. We also include one measure that captures household composition, measured by the number of children less than 18 years old co-resident in the household. This measure is time-constant and measured as a continuous variable in the analysis.

4.4.10. Child-level covariates

Age, which captures the duration dependence of the estimated hazard of a first risk behavior, is measured in years. Age is measured at each annual interview and is treated as a time varying covariate in the event history regression analyses. We also include dummy variables that identify the ethnic origin of youth. Race/ethnicity is defined for all adolescents, but the measure is used to classify youth in third-generation (native-born) families in aggregate comparison to youth in immigrant families. Unfortunately the NLSY data did not contain detailed measures of race/ethnicity. While there is substantive significance potentially related to the identification of the ethnic backgrounds of youth, this cannot be explored in any meaningful way within the confines of this paper. These measures identify youth who are non-Hispanic white, African American, American Indian/Eskimo or Aleut, Asian/Pacific Islander, and Hispanic. These are coded 1 or 0. Non-Hispanic whites are the reference category.

4.4.11. Time

Trends in the risk of first substance use and delinquent activity between 1997 and 1999 are captured by including a continuous variable for year of observation. Largely because respondents can “age” into the sample at any year, a respondent’s age and the year of observation are not linear functions of one another, and thus the effects of both can be estimated. [Table 1](#) summarizes the operationalization of all variables used in the analyses.

Table 1.

Descriptive statistics of variables used in the analyses in the NLSY97, 1997–1999

Variable	Mean or frequency	Standard deviation	Description
<i>Parental involvement</i>			
Paternal			
Father involvement	21.4	5.85	Six item scale. Scores range from 0 to 30
Paternal monitoring	8.2	3.95	Four item scale. Scores range from 0 to 16
Father’s parenting style			
Permissive	26.35%	0.36	Whether father is permissive (1 = yes)
Authoritarian	23.92%	0.34	Whether father is authoritarian (1 = yes)
Authoritative	26.50%	0.40	Whether father is authoritative (1 = yes)
Uninvolved	22.85%	0.31	Whether father uninvolved (1 = yes)

Variable	Mean or frequency	Standard deviation	Description
Maternal			
Mother involvement	24.62	5.13	Six item scale. Scores range from 0 to 30
Maternal monitoring	9.90	3.23	Four item scale. Scores range from 0 to 16
Mother's parenting style			
Permissive	26.0%	0.43	Whether mother is permissive (1 = yes)
Authoritarian	27.0%	0.34	Whether mother is authoritarian (1 = yes)
Authoritative	27.05%	0.45	Whether mother is authoritative (1 = yes)
Uninvolved	20.0%	0.34	Whether mother is uninvolved (1 = yes)
Immigration status			
Third-generation	76.4%	0.42	Third-generation of US parents (1 = yes)
First-generation	11.9%	0.33	Foreign born, emigrated to US (1 = yes)
Second-generation	11.7%	0.016	US born, 1 foreign parent (1 = yes)
Family status			
Intact Family	74%	(0.73)	Lived continuously with both parents (1 = yes)
Non-Intact Family	26%	(0.26)	Did not live continuously with father (1 = yes)
Time spent in the US			

Variable	Mean or frequency	Standard deviation	Description
<10 years	88.2%	0.32	Present in the US <10 years (1 = yes)
>10 years	11.77%	0.32	Present in the US >10 years (1 = yes)
Father's education			
Less than high school	61.4%	0.49	Father less than high school (1 = yes)
High school	22.7%	0.42	Father completed high school (1 = yes)
Some college and higher	15.9%	0.24	Father some college and higher (1 = yes)
Father's employment			
Father employed	60.7%	0.48	Father employed (1 = yes)
Father not employed	39.3%	0.36	Father not employed (1 = yes)
Mother's education			
Less than high school	0.54	0.50	Mother less than high school (1 = yes)
High school	29.2%	0.45	Mother completed high school (1 = yes)
Some college and higher	0.07%	0.27	Mother some college and higher (1 = yes)
Family context			
Marital relationship	18.35	0.44	Six-item scale. Scores range from 0 to 24
Children under 18 in home	2.1	1.25	Co-resident children under 18 in the home
Parents married	72.4	0.43	Parents married (1 = yes)
Parents not married	27.60	0.21	Parents not married (1 = yes)

Variable	Mean or frequency	Standard deviation	Description
Received AFDC	10.1%	0.29	Household received AFDC at time t
Did not receive AFDC	89.9%	0.45	Household did not receive AFDC at time t
Child characteristics			
Male youth	51%	0.51	Whether respondent is male (1 = yes)
Female youth	49%	0.49	Whether respondent is female (1 = yes)
Black	26.5%	0.44	Whether respondent is Black (1 = yes)
White (non-Hispanic)	58.2%	0.48	Whether respondent is White (1 = yes)
American Indian/Eskimo/Aleut	0.6%	0.08	Whether respondent is A.I. (1 = yes)
Asian/Pacific Islander	1.7%	0.13	Whether respondent is Asian (1 = yes)
Hispanic	11.9%	0.32	Whether respondent is Hispanic (1 = yes)
Child's age	14.2%	1.09	Child's age in years at time t
Adolescent outcomes			
Delinquency	37.6%	0.48	First del. act between time t and $t + 1$
Substance use	44.7%	0.50	First subs. use between time t and $t + 1$
Year	1998.58	1.01	Observation year at time t
Number of person-year observations (Delinquency)		9362	
Number of person-year observations (Substance Use)		8566	
n		7242	

4.5. Analytic strategy

The analysis models the effects of the explanatory variables on the timing of first substance use and first delinquent activity using a discrete time event history analysis ([Allison, 1984](#); [Yamaguchi, 1991](#)). A discrete time model is chosen for several reasons. First, one of the advantages of these models is that they allow us to examine how the risk of experiencing an event changes with age. Second, they easily incorporate time-varying explanatory variables with values that change over time ([Allison and Waterman, 2002](#)). Third, this method is useful in the analysis of non-repeatable events (i.e., transitions from one state to another state that occur once for each subject). Such non-repeatable events include life events such as first substance use or first delinquent activity that are our outcomes of interest. It is important to know about youth's first risky behaviors because previous research suggests that early risk taking predicts persistent delinquency during the life course, and these cases often account for a large proportion of all risky behaviors ([Moffitt, 1993](#)).

Fourth, not only do these models deal with right censoring at the time of the first interview, they also take into account left truncation of respondents who had a delinquent act or used substances before the time of the first interview (1997). These models solve the truncation problem by allowing the risk period for individuals to begin with age at first interview ([Guo et al., 2002](#)). Discrete time hazard models of this type can be estimated using logistic regression techniques.

In these models, each respondent's experience is segmented into a series of person-year observations. Each person year is defined as the period between successive annual interviews. The dependent variable is a binary variable that indicates whether a first act of substance use or delinquent activity occurred during the interval. The independent variables measure characteristics of fathers, family context and other socio-demographic characteristics at the beginning of the interval.

The derived coefficients are interpreted for their significance and transformed through exponentiation to yield odds ratios that indicate the magnitude of the variable's impact on the likelihood of the outcome occurring. The results in this study are interpreted in terms of odds ratios. For categorical variables, an odds ratio greater than one indicates an increased chance of an outcome occurring; those less than one signify a decreased chance of an outcome occurring. An odds ratio of 1 means that the variable has no effect. For continuous variables the odds ratio measures the change in the dependent variable per unit change in the variable.

The standard errors of the logistic coefficients predicting youth initiation into risky behaviors are adjusted using a Huber correction for the effects of cluster sampling. This adjustment is implemented in SAS. The possible presence of more than one child per family in the sample violates the assumption that each observation is obtained from its own cluster. This would have led to a substantial underestimate of the variance of the estimated coefficients. The Huber procedure corrects for the likelihood of children being interrelated within groups. It corrects for the requirement that the errors are

homoscedastic and that observations follow the assumed distribution. The standard errors of all coefficients are adjusted to account for this cluster effect. As a validity check, the models are run with one child randomly selected per family. These estimates differed very little from the models with the Huber correction and all children present in the family, which suggests that the concern in the analysis about the use of more than one child per family is addressed by the Huber correction. Models are built using hierarchical regression.

We also add two-way interaction terms to the main effect models. Log-likelihood tests between the models of direct effects and interaction models are conducted to determine whether the addition of interaction terms significantly increases predictive power while controlling for other variables. The log-likelihood statistics $c = -2(\log L_0 - L_1)$ test the hypothesis that all coefficients except the intercept are 0. Tests are done between direct effect models and models with interaction terms.

5. Results

5.1. Descriptive statistics

[Table 1](#) presents descriptive statistics for all variables in the analysis. These statistics are based on the complete person-year file and thus represent the typical values of the variables averaged over person years of exposure to first substance use or first delinquent activity. The data indicate that 37.6% of youth at risk of indulging in delinquency do so during the observation period, and 44.7% of youth at risk of indulging in substance use do so during the observation period. These youth are on average between 14 and 15 years old at the time of observation. These youth are predominantly third-generation (76.4%), and almost similar proportions are first-generation (11.9%), and second-generation (11.8%). Fifty-one percentage of these youth are male. The largest percentage of youth are white non-Hispanic (58.2%), followed by African-Americans (26.5%), and Hispanics (11.9%). Forty-five percent of these youth live in intact families (fathers present) compared with 51 percent in non-intact families.

[Table 2](#) shows the means and standard deviations for the outcomes of interest and selected parental involvement measures for first, second, and third-generation youth. For all of the outcomes, third-generation youth have a greater propensity to engage in risky behaviors than do first and second-generation youth. Based on the means presented, first and second-generation youth are less likely to engage in substance use than native-born youth—0.44 and 0.45, compared with 0.51 for third-generation youth. Similarly, first and second-generation youth are less likely to engage in delinquent activity than native-born youth—0.34 and 0.37, compared with 0.39.

Table 2.

Means of parental involvement and outcome measures: first, second, and third-generation youth in the NLSY97, 1997–1999

Measure	First-generation	Second-generation	Third-generation
Father involvement	21.13	21.79	21.50
Paternal monitoring	7.47	7.80	7.86
Paternal parenting style			
Uninvolved	0.11	0.09	0.10
Permissive	0.14	0.17	0.16
Authoritarian	0.16	0.22	0.13
Authoritative	0.19	0.23	0.21
Intact Family	0.53	0.48	0.46
Outcomes			
Substance use	0.44	0.45	0.51
Delinquency	0.34	0.37	0.39
<i>n</i>	847	862	5533

Note. All differences are statistically significant at the $p < .001$ level.

A less consistent pattern emerges with regard to parental involvement measures though all differences are statistically significant. Father involvement tends to be lowest for adolescents in first-generation families and highest in second-generation families, 21.13, compared with 21.79. Father involvement is not as high in third-generation families (21.50). Paternal monitoring also tends to be lowest in first-generation families, and highest in second-generation families, 7.37, compared with 7.80. Paternal monitoring is not as high in third-generation families, as it is second-generation families (7.86). There is also a great deal of variability with regard to parenting styles in the three groups. Authoritarian parenting is more common in first and second-generation families than in native-born families, 0.16 and 0.22, compared with 0.13. Authoritative parenting is also most common in second-generation families, and least common in first-generation families, 0.23 compared with 0.19 in third-generation families.

There is also variability in terms of the presence of the father in the household across the three groups. Third-generation youth are least likely to have a father present in the household compared with first-generation youth, 0.46 compared with 0.53.

5.2. Multivariate analysis

5.2.1. Does father involvement predict youth transition into substance use and delinquent activity?

[Table 3](#) presents the results of the baseline event history multiple logistic regression analysis for the risk of first substance use. This equation estimates only the additive effects of the explanatory variables on the estimated hazard of first substance use. The estimates are presented in the form of odds ratios. For the most part, these effects accord with the hypotheses derived from theory and prior research.

Table 3.

Odds ratios and Huber corrected standard errors for baseline logistic regression analysis of the effects of father involvement on youth first delinquent activity and first substance use, NLSY97 97–99

Variable	First delinquent activity		First substance use	
	Odds ratio	SE	Odds ratio	SE
Father involvement				
Father involvement	0.99	(0.0005)	0.99	(0.0005)
Father monitoring	0.96	(0.007)	0.97****	(0.006)
(Non-Intact Family)				
Intact Family	0.81	(0.06)	0.83	(0.05)
Father's parenting style				
(Authoritative)				
Uninvolved	1.05	(0.06)	1.10	(0.06)
Permissive	0.99	(0.05)	1.00	(0.05)
Authoritarian	1.16	(0.05)	1.13	(0.05)
Mother involvement				
Mother involvement	0.99	(0.004)	0.99	(0.004)

Variable	First delinquent activity		First substance use	
	Odds ratio	SE	Odds ratio	SE
Mother monitoring	0.94	(0.008)	0.97	(0.007)
Mother's parenting style				
(Authoritative)				
Uninvolved	1.19	(0.06)	1.19	(0.06)
Permissive	1.09	(0.05)	1.10	(0.05)
Authoritarian	1.15	(0.06)	1.16	(0.05)
Parental relationship	0.99	(0.0006)	0.99	(0.006)
Immigration status				
(Third-generation)				
First-generation	0.83	(0.06)	0.79	(0.06)
Second-generation	0.94	(0.15)	0.81	(0.16)
Time spent in the US				
(>10 years)				
<10 years in the US	1.016	(0.091)	0.99	(0.09)
Father's education (College plus)				
Less than high school	1.01	(0.06)	1.17	(0.0669)

Variable	First delinquent activity		First substance use	
	Odds ratio	SE	Odds ratio	SE
High school	0.98	(0.06)	1.15	(0.0655)
Father's employment				
(Employed)				
Father not employed	1.03	(0.04)	1.01	(0.03)
Mother's education				
(College plus)				
Less than high school	1.00	(0.06)	0.97	(0.06)
High school	0.93	(0.15)	0.96	(0.05)
Family context				
Number of children under age 18	0.99	(0.017)	0.89****	(0.01)
Household received AFDC	0.94	(0.09)	1.01	(0.03)
Child characteristics				
Race				
(Non-Hispanic White)				
Black/African American	0.94	(0.05)	0.57****	(0.05)
American Indian/Eskimo/Aleut	0.98	(0.24)	0.60	(0.24)
Asian/Pacific Islander	0.69	(0.14)	0.48****	(0.15)
Hispanic	1.08	(0.06)	0.97	(0.06)
Sex				
(Female)				
Male	1.68	(0.04)	1.04	(0.03)
Child's age	1.13	(0.01)	1.12****	(0.01)

Variable	First delinquent activity		First substance use	
	Odds ratio	SE	Odds ratio	SE
Year	1.70	(0.03)	0.90	(0.03)
Log likelihood (<i>df</i>)		8489.1(29)	9043.4 (29)	
No. of person-year observations	9362	8566		
No. of persons	7242	7242		

Note. Variables in parentheses are omitted/reference category. *Source.* 1997–1999 NLSY97.

$p < .05$.

$p < .01$.

$p < .001$.

The father involvement covariate exerts a significant influence on youth risk of first substance use (although the effects are small). The risk of first substance use is lower for adolescents with fathers with higher levels of father involvement, controlling for other covariates. Each unit increase in father involvement is associated with a 1% reduction in substance use. Higher levels of paternal monitoring awareness also significantly reduce the likelihood of substance use. Each unit increase in paternal monitoring is associated with a 3% reduction in substance use. Having a father with an authoritarian parenting style, is also associated with a 13% increase in substance use compared with having an authoritative father (reference category).

Additional covariates that significantly *increase* the risk of substance use include having a mother with an uninvolved, permissive or authoritarian parenting style compared with a mother with an authoritative parenting style (reference group). The risk of first substance use also increases with age with each yearly increase being associated with a 12% increase in substance use.

Other covariates that significantly *reduce* the likelihood of youth substance use include living in an intact family compared with living in a non-intact family (reference group), higher levels of maternal involvement and maternal monitoring, a more positive parental relationship, being a first-generation youth compared to being third-generation (reference group), having a larger number of co-resident children under age 18 in the household, and being African American, American Indian, or Asian (compared with being non-Hispanic

white). The odds ratio for year is less than one and significant indicating a nonlinear trend in the risk of substance use for the whole sample.

[Table 3](#) also presents logistic regression results for the transition to first delinquent activity. Net of the effect of other variables, the father involvement covariate is significantly associated with a reduced likelihood of delinquent activity. Each unit increase in father involvement is associated with a 1% reduction in delinquency and each unit increase in paternal monitoring is associated with a 4% reduction in delinquent activity. Fathers reported by youth to have an uninvolved or authoritarian parenting style, compared to an authoritative parenting style (reference category), also increase the likelihood of delinquent activity.

Additional covariates that significantly *increase* the likelihood of delinquent activity include having a mother with an authoritarian parenting style (compared with an authoritative parenting style). Other covariates that significantly *decrease* the likelihood of delinquent activity include living in an intact family (compared to a father-absent family), higher levels of mother involvement and maternal monitoring awareness, being a first-generation youth (compared to being third-generation), and being Asian (compared to Non-Hispanic white). The coefficient for year is significant and positive indicating a linear trend in the risk of delinquent activity for the whole sample.

5.2.2. Is youth immigration status associated with delinquency and substance use among adolescents?

[Table 3](#) illustrates that being a first-generation adolescent is associated with a decreased likelihood of transitioning into first substance use net of controls. First-generation immigrant youth have a 21% reduction in the odds of substance use compared with third-generation youth (reference category). [Table 3](#) also shows that being a first-generation youth is associated with a decreased likelihood of transitioning to first delinquent activity. First-generation youth have a 17% reduction in the odds of delinquent activity compared with third-generation youth. The effects are not significant for second-generation youth.

In sum, youth immigration status is associated with reduced risky behaviors, but only for first-generation adolescents. These effects accord with the hypotheses derived from theory and prior research.

5.2.3. Does the influence of father involvement on delinquency and substance use outcomes among adolescents differ for youth who live in intact families versus those who do not?

To examine this relationship, we include a two-way interaction term between the father involvement predictor and intact/non-intact family structure (father involvement \times intact family structure). The results in [Table 4](#) indicate that this interaction term was significant for both the substance use and the delinquency outcome. These findings suggest that net of other individual and contextual factors, the influence of father involvement on

substance use outcomes among adolescents is larger for youth who live in intact families compared with youth who do not live in intact families.

Table 4.

Odds ratios and Huber corrected standard errors for interaction effect logistic regression analysis of the effects of father involvement and intact family status on youth first delinquent activity and first substance use, NLSY97 1997–1999

Variable	First delinquent activity		First substance use	
	Odds ratio	SE	Odds ratio	SE
Father involvement				
Father involvement	0.99	(0.001)	0.98	(0.002)
(Non-Intact Family)				
Intact Family	0.98	(0.01)	0.99	(0.01)
(Father Involvement Non-Intact Family)				
Father Involvement Intact Family	0.98	(0.01)	0.97	(0.01)
Log likelihood (<i>df</i>)	8488.9 (30)		9039.9 (30)	
No. of person-year observations	9362		8566	
No. of persons	7242		7242	

*** $p < .001$.

** $p < .01$.

Note. Variables in parentheses are omitted/reference category. *Source.* 1997–1999 NLSY97.

$p < .05$.

5.2.4. Does the influence of father involvement on delinquency and substance use outcomes differ by generational status for adolescents who live in intact households versus those who do not?

To examine this relationship, we include a two-way interaction term between the generation status predictor and intact family structure (generation status \times intact family

structure). Neither of these interaction terms was significant for either the delinquency or substance use outcome, and so models are not reported in the tables. In sum, net of other individual and contextual factors, youth generation status does not interact with intact family structure differences to predict involvement in delinquent activity or substance use among adolescents.

5.2.5. Does the influence of father involvement on delinquency and substance use differ for adolescents according to gender?

To examine this relationship, we include a two-way interaction term between the father involvement predictor and gender of the adolescent (father involvement \times gender). [Table 5](#) indicates that both of these interaction terms were significant for the delinquency and substance use outcomes. In sum, net of other individual and contextual factors, father involvement does interact with gender to predict differences in delinquent activity and substance use among male and female adolescents, with stronger effects for sons than for daughters.

Table 5.

Odds ratios and Huber corrected standard errors for interaction effect logistic regression analysis of the effects of father involvement and gender on youth first delinquent activity and first substance use, NLSY97 1997–1999

Variable	First substance use		First delinquent activity	
	Odds ratio	SE	Odds ratio	SE
Father involvement				
Father involvement	0.99	(0.001)	0.98	(0.001)
(Female)				
Male Youth	1.51	(0.13)	1.40	(0.16)
(Father Involvement Female)				
Father Involvement Male	0.99	(0.06)	0.98	(0.01)
Log likelihood (<i>df</i>)	9027.9 (30)		8475.6 (30)	
No. of person-year observations	9362		8566	

Variable	First substance use		First delinquent activity	
	Odds ratio	SE	Odds ratio	SE
No. of persons	7242		7242	

Note. Variables in parentheses are omitted/reference category; *Source.* 1997-1999 NLSY97.

$p < .05$.

$p < .01$.

$p < .001$.

6. Discussion and conclusion

This analysis began with the premise that father involvement has a significant influence on adolescent risk behaviors (above and beyond mother involvement) in this case, youth delinquency and substance use. We further hypothesized that first and second-generation youth would have a decreased likelihood of engaging in risk behaviors compared to third-generation youth. We also hypothesized that father involvement interacts with youth immigration status to predict delinquent behaviors and substance use. In addition, we hypothesized that youth who live in intact families with fathers present will have a reduced likelihood of delinquent behavior and substance use, and the association between father involvement and delinquency and substance use outcomes will vary by generational status for adolescents who live in intact households with fathers present versus those who do not. We also hypothesized that association between father involvement and delinquency and substance use outcomes will differ by generational status for male vs. female adolescents. Our analyses support some of these hypotheses, but not all.

First, consistent with our initial hypothesis, father involvement is associated with less risky behavior among adolescents, above and beyond the effects of mother's involvement. More specifically, we found that higher levels of father involvement predict a decreased risk of transitioning into delinquent behaviors and substance use, as compared to lower levels of father involvement. This result remains consistent even after controlling for various aspects of mother involvement, immigration covariates, other father and mother characteristics, family and household level characteristics, and child level characteristics. The effects of father involvement are modest, but are consistently significant. We interpret this as meaning that fathers matter, but there are many other important components of a youth's life that matter, as well.

Also consistent with our hypothesis, we found that the immigrant status of the youth predicts a reduced likelihood of transition into risk behaviors. More specifically, above and beyond the effects of mother and father involvement, youth who are first-generation are at a reduced risk of engaging in both substance use and delinquent activity than youth who are third-generation. A plausible explanation for this finding is the way that parents who are immigrants socialize their children. The assimilation literature finds, for example, that more assimilated immigrant parents may socialize their children differently from non-assimilated parents ([Kao, 2001](#)). Previous research also shows that the length of time that immigrant mothers have been in the US is the best predictor of youth reading test scores, whereas immigrant father education has been found to be the best predictor of children's math test scores ([Gonzales et al., 2001](#); [Hurtado et al., 1999](#)). These findings suggest that becoming assimilated into American culture has implications for youth outcomes that are influenced by length of time and parental resources.

We also hypothesized that youth who live in intact families with fathers present will have a reduced likelihood of delinquent behavior and substance use compared with youth who do not. The tests of two-way interaction models reveal that the influence of father involvement on substance use outcomes among adolescents is larger when youth live in intact families with fathers present.

Third, and not consistent with our hypothesis, the tests of two-way interaction models did not reveal that father involvement interacts with youth immigration status to predict delinquency and substance use outcomes. Fourth, we hypothesized that the association between father involvement and delinquency and substance use outcomes will vary by generational status for adolescents who live in intact households versus those who do not. The tests of two-way interaction terms between generation status and intact family structure were not significant. Finally, the hypothesized association between father involvement and delinquency and substance use outcomes differing by adolescents who are male vs. female was significant, with effects larger for sons than for daughters.

Our finding that father involvement matters is consistent with previous research on father involvement which shows that father child relationships are influential for child outcomes ([Lamb, 1997](#); [Harris et al., 1998](#); [Marsiglio et al., 2000](#)). Father involvement must be viewed in the context of a network of mutually interdependent relationships within the family, with fathers influencing these children (and vice versa), both directly and indirectly, as well as other significant members of their social ecologies. The father-child relationship has also been found in previous research to affect children's behaviors outside the family as well as other outcomes such as academic success, externalizing behaviors, and social behaviors ([Carson and Parke, 1996](#); [Parke, 1996](#); [Parke and Buriel, 1998](#)). These associations between paternal behaviors and offspring outcomes have tended to be on average, moderate rather than large, and we also find that in this case these effects are modest.

This study also examined the effects of father involvement among immigrant youth. Little is known, overall, about immigrant youth, and even less about father involvement in this population, but our findings are consistent with previous work that shows that

immigrant youth engage in fewer risky behaviors than third-generation youth ([Harris, 2000](#)). One explanation for this is the “protective factor” that exists in immigrant families. [Harris \(2000\)](#) has shown that this protective factor is largely based on the cultural orientation of immigrant families that tie youth to the family values and traditions of their own ethnic origins, thereby slowing the process of assimilation into the dominant culture. Thus first and second-generation youth are more likely to live in households that retain traditional cultures that buffer and protect immigrant youth from readily adopting the behaviors of the native-born population. Our findings suggest that first-generation youth are less likely to engage in risky behaviors.

Youth in immigrant families also have a deeply ingrained sense of being rooted in their families, which may serve as a protective factor against engaging in risky behaviors ([Buriel and De Ment, 1997](#); [Kao, 1998](#); [Vega et al., 1995](#)). Although family and familial obligations tend to decline over time in the US, familial support and extensive contacts tend to remain high among immigrant youth relative to other US citizens despite acculturation.

An important correlate of the social and economic well being of children is the presence of both parents in the household ([Jensen, 2001](#)). Our finding that youth who live in intact families with fathers present have a reduced likelihood of delinquent behavior and substance use compared with youth who do not, emphasizes the importance of having a father present in the household especially as it applies to immigrant youth. To the extent that the presence of a father is common in immigrant families and important for healthy adolescent development and positive outcomes, this can serve as a protective factor for such youth ([Buriel and De Ment, 1997](#); [Vega et al., 1995](#)).

In addition, immigrant children who live in a community with a large network of family members and other people from their home country may be receiving substantial personal, social, and economic supports, including resources that ease the adaptation process, and possibly lead to more positive behavioral outcomes ([Hernandez and Charney, 1998](#)). Our finding that the substance use and delinquency outcomes vary according to gender are consistent with prior research on parenting. Some prior studies have found that boys are at greater risk than girls of externalizing behaviors and conduct problems ([Loeber and Hay, 1997](#)). These differences may be because the family processes associated with problem behaviors differ by gender ([Loeber and Stouthamer-Loeber, 1998](#)). Research also done on fathers indicates that fathers are more involved with boys than with girls and that fathers may parent girls and boys somewhat differently. This can have different implications for adolescent outcomes by gender ([Lamb, 1997](#)). Gender differences should not be ignored in examining the propensity to engage in risky behaviors among adolescents.

The results of our study, however, only provide preliminary evidence of how father involvement works in immigrant and native-born families and there are some important limitations of this study that should be noted. First, these data did not capture country of origin variations. Clearly, caution is warranted given differences that may exist among outcomes for youth by country of origin, and there is substantial heterogeneity that is

masked by using gross categories like first, second, and third-generation to describe immigrant youth. It is very possible that there are variations in outcomes for youth that may vary by country of origin, and these effects may disappear when all immigrant children are grouped into larger groups of first and second-generation. Nationality reflects the enduring influence of immigrant modes of incorporation, with this influence being much stronger among some groups than others ([Portes and Rumbaut, 2001](#)). Country of origin differences may herald different constellations of advantages and disadvantages for different groups of youth. Some prior research indicates that the most advantaged in terms of the likelihood of living with both parents are the Filipinos/Laotians/Cambodians, and Vietnamese. On the other hand, some first and second-generation Haitian and Jamaican children have a comparatively low percentage living with both parents ([Jensen, 2001](#)).

In addition, this analysis does not examine the interaction between father involvement and immigration status from a particular country of origin. Unfortunately, the data used did not allow us to conduct such subgroup analyses. If this were possible, we would expect that youth from different regions of the world might have different risk outcomes based on the level and quality of father and mother involvement.

Third, this research did not take into consideration the cultural differences in parenting among immigrant groups that are likely to influence adolescent outcomes. An emerging body of research suggests that cultural differences should be an essential area of investigation. ([Chiu et al., 1992](#); [Feldman et al., 1992](#)). There is evidence of differences in some socialization practices across diverse groups ([Knight et al., 1994](#); [Phinney and Chavira, 1995](#)). This diversity that exists in family functioning and parenting, coupled with the diversity in regard to family structure, together have pervasive implications for adolescent development. Families, in their structure and function, influence virtually all facets of the youth's psychological and social functioning. This influence may be associated with both positive and negative characteristics of adolescent behavior and development. Although family influences are not the only source of problems in adolescence, they covary with these other sources in affecting the incidence of problem behavior; at the same time family of origin influences can protect youth from the occurrence of problem behaviors ([Lerner et al., 1998](#)). Thus, the conclusions regarding the influence of father involvement on adolescent behaviors in immigrant families must be viewed as first steps toward acquiring more definitive knowledge.

Fourth, we used rudimentary measures of immigration status. The NLSY only provides a crude measure of immigration status that is based on whether or not the respondent was born in the US, or outside of the US. Measurement problems may also exist in the operationalization of the father involvement measure. As mentioned, there is an ongoing fatherhood initiative to create valid and reliable measures of father involvement ([Cabrera et al., 2004](#)). In the meantime, researchers are left with measures that might not capture all relevant components of father involvement for all cultural groups. We also used a liberal measure of substance use, one in which trying alcohol was included. A more conservative measure that restricts the definition of substance use to more extreme behavior might result in more powerful effects.

In addition, our data did not contain variables that allowed us to measure the possible negative influences of parents. There is also likely to be some under-reporting of substance use and delinquent activity among adolescents, although reporting by adolescents is likely to be more reliable and valid than reports provided by parents ([Harris et al., 1998](#)).

Despite these limitations however, this study represents a first step in evaluating how father involvement influences outcomes for a larger group of adolescents than has been previously studied. First, using an event history framework, we conducted a longitudinal analysis of the effects of father involvement on youth risk behaviors. Previous studies have used cross-sectional designs and cannot track these changes over time. Second, using a discrete time logistic analysis, we account for the potential effects of censoring and time-dependent covariates (time-varying explanatory variables), and therefore the timing of events on our outcomes of interest.

Third, this study is also one of the few to measure both the quality of fathers' and mothers' involvement with children using nationally representative data. Our attempts to capture dimensions of quality remind us that both quality and quantity of paternal involvement are essential for good parenting. The conceptualization of involvement as a combination of several components provides a strong framework for understanding how fathers can influence their children. Results indicate that work aimed at improving the measurement and collection of father involvement data in nationally representative surveys and across a wide variety of subpopulations is well-warranted.

Continued efforts to collect more detailed data on cultural differences in parenting styles among various immigrant groups would have a lot to offer to the field. Many variables contribute to differences and variations in parenting among immigrant groups: country of origin, economics, education level, dual income, family structure, urban or rural residencies, and religious beliefs. The documentation of these diverse culturally structured environments is important to understand youth outcomes in immigrant families. The beliefs and values underpinning family actions provide a foundation that can foster positive outcomes for youth. Such a foundation is already being recognized for immigrant groups ([Lucas, 1990](#)). Future research that continues to address these cultural differences is well-warranted.

References

[Allen and Hawkins, 1999](#) S.M. Allen and A.J. Hawkins, Maternal gate-keeping: mothers' beliefs and behaviors that inhibit greater father involvement in family work, *Journal of Marriage and Family* **49** (1999), pp. 29–40. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Allison, 1984](#) P.D. Allison, Event history analysis: regression for longitudinal event data, Sage, Newbury Park, CA (1984).

[Allison and Waterman, 2002](#) P.D. Allison and R.P. Waterman, Fixed-effects negative binomial regression models, *Sociological Methodology* **32** (2002) (1), pp. 247–265.
[Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Amato and Booth, 1997](#) P.R. Amato and A. Booth, A Generation At Risk: Growing Up in an Era of Family Upheaval, Harvard University Press, Cambridge, MA (1997).

[Aronowitz et al., 1984](#) Aronowitz, E., Bromberg, E.M., et al., 1984. Mental health and long-term physical illness. Canto, MA, Published for Westchester County Dept. of Community Mental Health by PRODIST.

[Baumrind, 1991](#) D. Baumrind, The influence of parenting style on adolescent competence and substance use, *Journal of Early Adolescence* **11** (1991) (1), pp. 56–95.

[Baumrind, 1968](#) D. Baumrind, Authoritarian vs. authoritative parental control, *Adolescence* **3** (1968) (11), pp. 255–272.

[Beitel and Parke, 1998](#) H. Beitel and R.D. Parke, Paternal involvement in infancy: the role of maternal and paternal attitudes, *Journal of Family Psychology* **12** (1998) (2), pp. 268–288.

[Blake, 1989](#) J. Blake, Family Size and Achievement, University of California Press, Los Angeles, CA (1989).

[Boyum and Parke, 1995](#) L.A. Boyum and R.D. Parke, The role of family emotional expressiveness in the development of children's social competence, *Journal of Marriage and the Family* **57** (1995), pp. 593–608. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Browne and Rife, 1991](#) C.S. Browne and J.C. Rife, Social, personality, and gender differences in at-risk and not-at risk sixth-grade students, *Journal of Early Adolescence* **11** (1991) (4), pp. 482–495.

[Buriel and De Ment, 1997](#) Buriel, R., De Ment, T., 1997. Immigration and sociocultural change in Mexican-, Chinese-, and Vietnamese- American Families. In: Booth, A., Erlbaum, L. (Eds.), *Immigration and the Family: Research and Policy on U.S. Immigrants*.

[Cabrera et al., 2004](#) N. Cabrera, K. Moore, J. West, J. Bronte-Tinkew, T. Halle and J. Brooks-Gunn *et al.*, The DADS initiative: measuring father involvement in large scale surveys. In: R. Day and M. Lamb, Editors, *Measuring Father Involvement*, Erlbaum, New York (2004).

[Capps, 2001](#) R. Capps, Hardship among children of immigrants: Findings from the 1999 National Survey of America's Families (Assessing the New Federalism Policy Brief B-29), The Urban Institute, Washington, DC (2001).

[Carson and Parke, 1996](#) J. Carson and R.D. Parke, Reciprocity of parent-child negative affect and children's social competence, *Child Development* **67** (1996), pp. 2217–2226. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Chiu et al., 1992](#) M.L. Chiu, S.S. Feldman and D.A. Rosenthal, The influence of immigration on parental behavior and adolescent distress in Chinese families residing in two western nations, *Journal of Research on Adolescence* **2** (1992) (3), pp. 205–239.

[Dornbusch, 1989](#) S.M. Dornbusch, The sociology of adolescence, *Annual Review of Sociology* **15** (1989), pp. 233–259.

[Eccles et al., 1999](#) Eccles, J.S., Roeser, R., et al., 1999. Academic and motivational pathways through middle childhood. *Child Psychology: A Handbook of Contemporary Issues*. L.B.C. Tamis-LeMonda, Taylor & Francis.

[Feldman et al., 1992](#) S.S. Feldman, R. Mont-Reynaud and D.A. Rosenthal, When east moves west: the acculturation of values of Chinese adolescents in the US and Australia, *Journal of Research on Adolescence* **2** (1992) (2), pp. 147–173. [Full Text via CrossRef](#)

[Franz et al., 1991](#) C.E. Franz, D.C. McClelland and J. Weinberger, Childhood antecedents of conventional social accomplishment in midlife adults: a 36-year prospective study, *Journal of Personality and Social Psychology* **60** (1991) (4), pp. 586–595. [Abstract](#) | [Abstract + References](#) | [PDF \(1069 K\)](#) | [Full Text via CrossRef](#)

[Gibson and Bhachu, 1991](#) M.A. Gibson and P.K. Bhachu, The dynamics of educational decision making: a comparative study of Sikhs in Britain and the United States. In: M.A. Gibson and J. Ogbu, Editors, *Minority Status and Schooling*, Garland, New York (1991).

[Gonzales et al., 2001](#) N.A. Gonzales, J. Tein, I.N. Sandler and R.J. Friedman, On the limits of coping: Interactions between stress and coping for inner-city adolescents, *Journal of Adolescent Research* **16** (2001), pp. 372–395. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Guo et al., 2002](#) J. Guo, I. Chung and K.G. Hill, Developmental relationships between adolescent substance use and risky sexual behavior in young adulthood, *Journal of Adolescent Health* **31** (2002) (4), pp. 354–362. [SummaryPlus](#) | [Full Text + Links](#) | [PDF \(121 K\)](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Harris, 1998](#) J.R. Harris, The Nurture Assumption on Trial. *The Nurture Assumption: Why Children Turn Out the Way They Do*, Free Press, New York (1998) pp. 350–362.

[Harris, 2000](#) K.M. Harris, Health risk behavior among adolescents in immigrant families. In: D.J. Hernandez, Editor, *Children of immigrants: Health, adjustment, and public assistance. Committee on the Health and Adjustment of Immigrant Children and Families, Board on Children Youth and Families, National Academy Press, Washington, DC* (2000).

[Harris et al., 1998](#) K.M. Harris, F. Furstenberg and J. Marmer, Parental involvement with adolescent in intact families: the influence of fathers over the life course, *Demography* **35** (1998) (2), pp. 201–216. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Heer, 1985](#) D. Heer, Effects of sibling number on child outcomes, *Annual Review of Sociology* **11** (1985) (85), pp. 27–67.

[Hernandez, 1999](#) Hernandez, D., 1999. Children in immigrant families. In: *Generation to Generation: The Health and Well-Being of Children in Immigrant Families*. National Academies Press.

[Hernandez and Charney, 1998](#) In: D.J. Hernandez and E. Charney, Editors, *From Generation to Generation: The Health of Children in Immigrant Families. Committee on the Health and Adjustment of Immigrant Children and Families, National Research Council and Institute of Medicine, National Academy Press, Washington, DC* (1998).

[Hurtado et al., 1999](#) M. Hurtado, E. Krieger, A.H. Claussen and K.G. Scott, Early Childhood Anemia and Mild or Moderate Retardation, *American Journal of Clinical Nutrition* **69** (1999), pp. 115–119.

[Jensen, 2001](#) L.I. Jensen, The demographic diversity of immigrants and their children. In: R.G. Rumbaut and A. Portes, Editors, *Ethnicities: Children of Immigrants in America*, The Russell Sage Foundation and the University of California Press, New York, NY and Berkeley, CA (2001).

[Kao, 1998](#) G. Kao, Psychological well-being and educational achievement among immigrant youth. In: D.J. Hernandez, Editor, *Children of Immigrants: Health, Adjustment, and Public Assistance. Committee on the Health and Adjustment of Immigrant Children and Families, Board on Children Youth and Families, National Academy Press, Washington, DC* (1998).

[Kao, 2001](#) Kao, G., 2001. *Children of Immigrants: Health, Adjustment, and Public Assistance*. Commission on Behavioral and Social Sciences and Education.

[Knight et al., 1994](#) B.P. Knight, L.M. Virdin and M. Roosa, Socialization and family correlates of mental health outcomes among Hispanic and Anglo American children: consideration of cross- ethnic scalar equivalence, *Child Development* **65** (1994), pp. 212–224.

[Lamb, 1997](#) In: M.E. Lamb, Editor, *The Role of the Father in Child Development* (third ed.), Wiley, New York (1997).

[Lamb et al., 1987](#) M.E. Lamb, J.H. Pleck, E.L. Charnov and J.A. Levine, A biosocial perspective on paternal behavior and involvement. In: J.B. Lancaster, J. Altman, A.S. Rossi and L.R. Sherrod, Editors, *Parenting Across the Life Span: Biosocial Dimensions*, Aldine Publishing Company, Hawthorne, NY (1987), pp. 111–142.

[Larson and Richards, 1994](#) R. Larson and M. Richards, *Divergent Realities*, Basic Books, New York (1994).

[Lerner et al., 1998](#) Lerner, R., Noh, E.R., Wilson, C., 1998. Parenthood in America. Proceedings of the conference held in Madison, Wisconsin April 19–21, 1998. Published by the University of Wisconsin-Madison General Library System.

[Leyendecker and Lamb, 1999](#) B. Leyendecker and M.E. Lamb, Latino families. In: M.E. Lamb, Editor, *Nontraditional Families: Parenting and Child Development*, Erlbaum, Mahwah, NJ (1999), pp. 247–262.

[Loeber and Hay, 1997](#) R. Loeber and D.F. Hay, Key issues in the development of aggression and violence from childhood to early adulthood, *Annual Review of Psychology* **48** (1997), pp. 371–410. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Loeber and Stouthamer-Loeber, 1998](#) R. Loeber and M. Stouthamer-Loeber, Development of juvenile aggression and violence. Some common misconceptions and controversies, *American Psychologist* **53** (1998), pp. 242–259. [Abstract](#) | [Abstract + References](#) | [PDF \(2103 K\)](#) | [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Lucas, 1990](#) A. Lucas, Does early diet program future outcome?, *ACTA Paediatrica Scandinavica Supplement* **365** (1990), pp. 58–67. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Maccoby and Martin, 1983](#) E.E. Maccoby and J.A. Martin, Socialization in the context of the family: parent–child interaction. In: E.M. Hetherington, Editor, *Handbook of Child Psychology*, Wiley, New York (1983).

[Marin et al., 1987](#) G. Marin, F. Sabogal, B. Marin, R. Otero-Sabogal and E.J. Perez-Stable, Development of a short acculturation scale for Hispanics, *Hispanic Journal of Behavioral Sciences* **9** (1987), pp. 183–205.

[Marsiglio et al., 2000](#) W. Marsiglio, P. Amato, R. Day and M.E. Lamb, Scholarship on fatherhood in the 1990s and beyond: past impressions, future prospects, *Journal of Marriage and the Family* **62** (2000) (4), pp. 1173–1191. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Moffitt, 1993](#) T.E. Moffitt, Life-course-persistent and adolescence-limited antisocial behavior: a developmental taxonomy, *Psychological Review* **100** (1993), pp. 674–701. [Abstract](#) | [Abstract + References](#) | [PDF \(3083 K\)](#) | [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Moore et al., 1999](#) K.A. Moore, S.M. McGroder, E.C. Hair and M. Gunnoe, NLSY97 Codebook Supplement Main File. Round 1, Appendix 9: Family Process and Adolescent Outcomes Measures, Bureau of Labor Statistics, US Department of Labor, Washington, DC (1999).

[Palkovitz, 1997](#) R. Palkovitz, Reconstructing “involvement”: Expanding conceptualizations of men’s caring in contemporary families. In: A.J. Hawkins and D.C. Dollahite, Editors, *Generative Fathering: Beyond Deficit Perspectives*, Sage, Thousand Oaks, CA (1997).

[Parke, 1996](#) R.D. Parke, *Fatherhood*, Harvard University Press, Cambridge, MA (1996).

[Parke, 2000](#) R.D. Parke, Father involvement: a developmental psychological perspective, *Marriage and Family Review* **29** (2000) (2,3 & 4).

[Parke and Buriel, 1998](#) R. Parke and R. Buriel, Socialization in the family: ecological and ethnic perspectives. In: W. Edmond, Editor, *Handbook of Child Psychology*, Wiley, New York (1998), pp. 463–552. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Phelan et al., 1994](#) P. Phelan, H.C. Yu and A.L. Davidson, Navigating the psychosocial pressures of adolescence: The voices and experiences of high school youth, *American Educational Research Journal* **31** (1994) (2), pp. 415–447. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Phinney and Chavira, 1995](#) J.S. Phinney and V. Chavira, Parental ethnic socialization and adolescent coping with problems related to ethnicity, *Journal of Research on Adolescence* **5** (1995) (1), pp. 31–53. [Full Text via CrossRef](#)

[Pleck, 1997](#) J.H. Pleck, Paternal involvement: levels, sources, and consequences. In: M.E. Lamb, Editor, *The Role of the Father in Child Development*, Wiley, New York (1997).

[Portes, 1997](#) A. Portes, Immigration theory for a new century: some problems and opportunities, *International Migration Review* **31** (1997) (4), pp. 799–825. [Full Text via CrossRef](#) | [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Portes and Rumbaut, 1996](#) A. Portes and R.G. Rumbaut, *Immigrant America: A Portrait* (second ed.), University of California Press, Berkeley, CA (1996).

[Portes and Rumbaut, 2001](#) A. Portes and R. Rumbaut, *Legacies: The Story of the Immigrant Second Generation*, University of California Press, Berkeley (2001).

[Reardon-Anderson et al., 2002](#) J. Reardon-Anderson, R. Capps and M. Fix, The Health and Well-being of Children in Immigrant Families (Assessing the New Federalism Policy Brief B-52), The Urban Institute, Washington, DC (2002).

[Rumbaut, 1995](#) Rumbaut, R., 1995. The New Californians: Comparative research findings on the educational progress of immigrant children. In: Rumbaut, R.G., Cornelius, W.A. (Eds.), *California's Immigrant Children: Theory, Research and Implications for Educational Policy*. Center for U.S. Mexican Studies, University of California, San Diego, La Jolla, CA.

[Rumbaut, 1997](#) R.G. Rumbaut, Ties that bind: Immigration and immigration families in the United States. In: A. Booth, A.C. Crouter and N. Landale, Editors, *Immigration and the family: Research and Policy on U.S. Immigrants*, Lawrence Erlbaum Associates, New Jersey (1997).

[Sorenson et al., 1996](#) S.B. Sorenson, D.M. Upchurch and H. Shen, Violence and injury in marital arguments, *American Journal of Public Health* **86** (1996), pp. 35–40. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Tinsley and Parke, 1988](#) B.J. Tinsley and R.D. Parke, The role of grandfathers in the context of the family. In: P. Bronstein and C.P. Cowan, Editors, *Fatherhood Today: Men's Changing Role in the Family*, John Wiley & Sons, Oxford, England (1988).

[Vega et al., 1995](#) W.A. Vega, E.L. Khoury, R.S. Zimmerman, A.G. Gil and G.J. Warheit, Cultural conflicts and problem behaviors of Latino adolescents in home and school environments, *Journal of Community Psychology* **23** (1995), pp. 167–179. [Abstract + References in Scopus](#) | [Cited By in Scopus](#)

[Yamaguchi, 1991](#) K. Yamaguchi, *Event History Analysis*, Sage, Newbury Park, CA (1991).

[Zimmerman et al., 2000](#) M.A. Zimmerman, D.A. Salem and P.C. Notaro, Make room for daddy: II. The positive effects of fathers' role in adolescent development. In: R.D. Taylor and M.C. Wang, Editors, *Resilience Across Contexts: Family, Work, Culture, and Community*, Erlbaum, Mahwah, NJ (2000).