

Are the Risk and Protective Factors Similar for Gang-Involved, Pressured-to-Join, and Non-Gang-Involved Youth? A Social-Ecological Analysis

Gabriel J. Merrin

University of Illinois at Urbana–Champaign

Jun Sung Hong

Wayne State University and Sungkyunkwan University

Dorothy L. Espelage

University of Illinois at Urbana–Champaign

This study examines the risk and protective factors for gang involvement among subgroups of youth (i.e., current or former gang members, youth who resisted gang membership, and non-gang-involved youth) using the social-ecological framework. Middle and high school students ($N = 17,366$) from school districts in a large Midwestern county participated. Results indicated that males were more likely than females to be involved in gangs. For the individual context, our findings indicate that racial and ethnic minorities, females, and youth with depression/suicidal ideation are likely to be at risk for gang involvement. For the family context, we found that having gang-involved family members and family dysfunction are related to youth gang involvement. For the peer context, peers' alcohol and drug use and bullying were significantly associated with gang involvement. For the school context, as our results demonstrate, youth who perceived fair treatment from teachers and other adults in school and those with a sense of belonging in school are more likely to avoid gang membership. For the neighborhood context, we found that presence of adult support in the neighborhood and perceived neighborhood safety are negatively associated with gang membership. Findings suggest that gang prevention efforts need to target multiple ecologies that surround and influence youth.

Youth gangs and youth gang-related activities have garnered considerable attention from the media, criminal justice agencies, policymakers, and researchers, although assessing the scope of youth gang problems has been challenging because of a lack of consensus among scholars on the defining features of youth gangs (O'Brien, Daffern, Chu, & Thomas, 2013). Despite the differences among scholars in the conceptualization, youth gangs typically consist of the following characteristics: "(1) a self-formed group united by mutual interests (2) that controls a particular territory, facility or enterprise, (3) [that] uses symbols in

communication, and (4) [that] is collectively involved in crime" (Howell, 1998, p. 4).

Notwithstanding decades of research and numerous prevention efforts, youth gang problems continue to be present, especially in large cities, and to a lesser degree, smaller suburbs and rural towns. According to the 2011 National Youth Gang Survey of the National Gang Center (n.d.), from 2002 to 2011, the percentage of youth gangs and gang-related activities in metropolitan areas has increased by 36% in the United States. The most recent research suggests that there are more gang members than previous studies have found (e.g., Pyrooz & Sweeten, 2015). Moreover, the number of reported gang-related homicides in the United States, which was 1,659 in 2008, rose to 2,363 in 2012 (Egley, Howell, & Harris, 2014).

Given the increasing number of youth gangs (Gordon et al., 2004; Pyrooz, 2012) and the financial, societal, and personal costs associated with youth gang offenses, many scholars have examined risk factors to explain why some youth are more likely to join gangs. Studies have primarily examined individual-level correlates and outcomes of gang involvement and activities, most notably mental health problems such as depression, traumatic stress, anti-social behavior (Alleyne & Wood, 2010, 2013; Coid et al., 2013; Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Esbensen & Weerman, 2005; Foster, Kuperminc, & Price, 2004; Gordon et al., 2004) as means of effecting behavior change.

Gabriel J. Merrin, Department of Educational Psychology, Division of Child Development, University of Illinois at Urbana–Champaign; Jun Sung Hong, School of Social Work, Wayne State University, and Department of Social Welfare, Humanities and Social Science Campus, Sungkyunkwan University; Dorothy L. Espelage, Department of Educational Psychology, Division of Child Development, University of Illinois at Urbana–Champaign.

We wish to express our deepest gratitude to Al Acker for proofreading this article.

Correspondence concerning this article should be addressed to Gabriel J. Merrin, Department of Educational Psychology, Division of Child Development, University of Illinois at Urbana–Champaign, 210 Education Building, 1310 South Sixth Street, Champaign, IL 61820. E-mail: merrin1@illinois.edu

However, merely examining these individual-level determinants provides only a limited perspective on a complex issue. Recognizing this, scholars have also examined broad range of factors beyond individual characteristics (Glesmann, Krisberg, & Marchionna, 2009; Hill, Howell, Hawkins, & Battin-Pearson, 1999; Howell, 1998). One notable study is Hill et al. (1999), which considered multiple risks associated with gang membership within individual, family, peer, school, and neighborhood contexts from a sample of 808 ethnically diverse and gender-balanced youth in the Seattle Social Development Project. Another study by Glesmann et al. (2009) also explored risk factors for gang involvement within the same contexts from a nationally representative sample of youth (Grades 7–12) in the 2007–08 California Healthy Kids Survey (CHKS). In addition, Thornberry, Krohn, Lizotte, Smith, and Tobin (2003) argue that behavior patterns of individual youths unfold continuously and change across their lives. Thornberry et al. (2003) purports that youth gang involvement begins with the more distal structural variables (e.g., neighborhood) and progresses to the more proximal variables (e.g., family). However, one shortcoming is that these studies have not considered why some youth with the same or similar risk factors are pressured to join, but choose not to.

A significant body of research has compared gang members to non-gang members (Gilman, Hill, Hawkins, Howell, & Kosterman, 2014; Lenzi et al., 2015). Recognizing the importance of understanding why some youth who are confronted with cumulative risk factors chose to resist gang membership, one study also investigated why some youth with similar risk factors chose not to join gangs, although pressured by their friends (De La Rue & Espelage, 2014). Utilizing a large school-based sample to compare risk factors of gang involvement for female youth gangs versus those who are pressured to join but resist gang membership, De La Rue and Espelage (2014) provide insight into predictors that differentiate gang-involved girls from those who resisted gang involvement. The study found that, although both groups of girls shared overlapping experiences with victimization, there were several unique risk factors for those girls involved with gangs compared to those who resisted. De La Rue and Espelage's (2014) findings reveal protective elements that enable certain youth to resist gang-related activities when asked or pressured to join. Building on these studies, we examine the congruence of risk and protective factors for gang involvement among subgroups of youth (i.e., current or former gang members, youth who resisted gang membership, and nongang youth) across individual, family, peer, school, and neighborhood contexts.

The Social-Ecological Framework

The phenomena of youth gang activities and delinquency are not isolated events, nor are they merely behavior problems of individuals. Youth are embedded in systems of relationships (Bronfenbrenner, 1979) that amplify or abate behavior problems, such as gang involvement and delinquency. Youth's behavior, and more specifically, gang involvement, is a result of youth's maladaptation to a set of relationships experienced in multiple environments (Dishion & Stormshak, 2007).

The social-ecological framework is a systems framework with multiple layers of influences, which orient researchers and practitioners to the importance of integrative and multidimensional

approaches to understanding the relationship between individuals and their social environments (Kemp, 2010). This framework has been the basis of our understanding of human behavior, pioneered by Kurt Lewin's formula [$B = f(P, E)$] proposing that behavior is interrelated with individuals' interactions with their environments (Lewin, 1936). Contrary to most behavioral and psychological theories, this framework emphasizes that all existing elements within an ecosystem play a significant role in maintaining a balance of the whole (Bronfenbrenner, 1979). Indeed, scholars have recognized the importance of a theoretical framework that expands investigational efforts beyond the individual-level (DiClemente, Salazar, & Crosby, 2007). Bronfenbrenner's (1979, 1994) ecological framework and Coll et al.'s (1996) integrative model of development also illustrate the significance of the intersecting systematic influences that shape individual behavior.

Ecology is defined as the interaction occurring between the organism and the environment (Stokols, 1992). However, the social-ecological framework pays less attention to the biological definition of ecology and pays attention more closely to the social, interpersonal, institutional, and cultural influences (Stokols, 1995). Unlike many behavioral and psychological theories, which focus primarily on individual-level factors, this framework categorizes individual and contextual interactions into various levels to illuminate our understanding of the social influences that are relevant to youths' gang involvement. The social-ecological framework also presents risk and protective factors that foster or inhibit youths' likelihood of joining a gang at the family, peer, school, and neighborhood levels. More specifically, the individuals are nested in their families, which can affect their relationships with their friends and peers. The peer group is embedded in the school environment, which is a part of neighborhood and encompasses individual youths, their families, their peer groups, and their schools.

Individual Context

An individual youth is a biological system, and development occurs when one's biological and psychological factors are embedded in various contexts. Certain individual characteristics, such as age, gender/sex, race/ethnicity, depression/suicidal behavior, prior delinquency, and alcohol/drug use can heighten or inhibit gang involvement risks. Age has been a frequently examined correlate of gang membership. Typically, youth join gangs as adolescents. However, studies have differed in results on specific ages of gang involvement. Several studies suggest it ranges between 14 and 18 (Curry & Decker, 1998; Glesmann et al., 2009; Hill, Lui, & Hawkins, 2001). Other researchers have found the average age can be as young as 11 (e.g., Klein, 1995).

In terms of gender/sex, in the past, the nature and extent of female involvement in youth gangs have not been factored in literature, mainly because females' participation has been perceived as too insignificant to warrant serious attention (Esbensen & Winfree, 1998). For decades, males have been considered the more aggressive sex and as more likely than females to be involved in the criminal justice system for gang-related activities (see Rios, 2006, 2009). However, some researchers have found that the gender/sex gap has narrowed (Garbarino, 2005; Hayward & Honegger, 2014). A growing body of recent studies has focused

on female youth gang involvement (De La Rue & Espelage, 2014; Voisin, King, DiClemente, & Carry, 2014).

Researchers have also long observed racial/ethnic differences in youth crimes and delinquency in the United States. Youth gang members are from diverse racial and ethnic backgrounds. However, levels of involvement vary by race and ethnicity. Studies have consistently reported significantly higher rates of gang involvement among racial and ethnic minorities than among Whites (Hill et al., 2001), which has been supported by several law enforcement-based studies and case studies of specific gangs and cities (Esbensen & Winfree, 1998; National Gang Center, n.d.). Yet, many studies have not included samples diverse enough to adequately examine the racial and ethnic differences in youth gangs. A case in point is Lahey, Gordon, Loeber, Stouthamer-Loeber, and Farrington's (1999) longitudinal study, which found that more African American boys joined an antisocial gang by age 19, but the authors also noted a relatively small percentage of Whites in their study sample.

Depression/suicidal behavior is another key factor that may increase the likelihood of gang involvement. Depressive symptoms such as sadness and irritability may result in defiance and hostility, contributing to behavior problems (Manasse & Ganem, 2009; Wiesner, 2003). Moreover, for many youth, depression/suicidal behaviors are characterized as loss of one's ability to perceive reality and capacity to feel and externalize pain, which can manifest in violent behaviors (Garbarino, 1999; Modestin, Hug, & Ammann, 1997). According to one research finding, gang-involved youth previously had elevated levels of depression and attempted suicide more frequently than did nongang youth (Yoder, Whitbeck, & Hoyt, 2003).

Youth who engage in delinquent behaviors are more likely to be involved in gang activities. Although research has documented that youth gang members have higher rates of delinquency than nonmembers (e.g., Alleyne & Wood, 2010; Battin, Hill, Abbott, Catalano, & Hawkins, 1998; Henry, Tolan, & Gorman-Smith, 2001), studies have also reported that early onset of delinquent behaviors are particularly strong predictors of later gang activities (Eitle, Gunkel, & Van Gundy, 2004; Gordon et al., 2004; Hill et al., 1999; Thornberry et al., 2003). One of few studies to examine the relationship between delinquent behavior and gang membership along a developmental trajectory before, during, and after gang membership, Gordon et al. (2004) found that youth who joined a gang exhibited greater levels of delinquency prior to joining than those who had not joined a gang. Furthermore, Pyrooz, Moule, and Decker's (2014) study reported that gang members were twice as likely to be offenders and victims, compared to nongang members.

The preponderance of evidence also points out that use of alcohol and illicit drugs predisposes youth to violent and illegal behaviors and activities (see Friedman, 1998, for a review). Because the growing rate of youth gang violence coincided with the crack cocaine epidemic, illicit drug use and youth gang activities were generally perceived as interrelated (Howell & Decker, 1999). However, one study found that prior to entering a gang, members did not display higher rates of drug use than nonmembers (Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993), although such behaviors increased after gang entry (Thornberry, 1998). Surprisingly, few studies have investigated whether alcohol and illicit drug use is a predictor of gang membership. From a sample of 808 youth from the Seattle Social Development Project, Hill et al.

(1999) reported that youth who had used marijuana between the ages of 10 to 12 were 3.7 times more likely to join a gang between the ages of 13 to 17 than those who had not used marijuana. Swahn, Bossarte, West, and Topalli (2010) also found that youth who drank alcohol before age 13 and those who used drugs three or more times were considerably more likely to report gang membership than those who did not report alcohol or drug use.

Family Context

One of the key features of a social-ecological framework is that adolescent development and changes occur in the context of their parents or other adult caregivers (Dishion & Stormshak, 2007). The family is a salient microsystem in the life of children, within which youth learn attitudes and behaviors that influence their outcomes (Bronfenbrenner, 1989). It is evident that family gang involvement is associated with increases in youth gang involvement. Miller (2001) found that youth who had siblings, cousins, or other family members involved with gangs were likely to join a gang. De La Rue and Espelage (2014) also found that family gang involvement was a strong predictor; specifically, girls who reported a gang-involved family member had 17.60 times higher odds of reporting being in a gang, compared to their nongang members.

Although childhood maltreatment at home has been found to predict adolescent behavior problems and perpetration of criminal offenses, (DeLisi, Kosloski, Vaughn, Caudill, & Trulson, 2014; Lansford et al., 2007; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001) the relationship between maltreatment and gang involvement has been studied less extensively. In Thompson and Braaten-Antrim's (1998) study, the odds of gang involvement are reported to be 4 times higher for youth who had been beaten or sexually abused. De La Rue and Espelage (2014) also find that gang-involved female adolescents reported having previously experienced greater levels of sexual abuse at home than did those with no gang involvement.

Research has also identified family dysfunction as an antecedent of antisocial and violent behaviors (see Hoeve et al., 2009). Family dysfunction, characterized by hostility and conflicts (e.g., fighting) can create high risk for gang involvement. Youth in dysfunctional families may turn to street gangs as an escape (Vigil, 1988). These youth may seek companionship and a sense of belonging from their "surrogate family" to fill a void in family relationships (Hardy, 1996). For these youth, their gang is viewed as their only family (Ruble & Turner, 2000), where they receive affection, understanding, recognition, and support (Morales, 1992). Conversely, parental love and support are important in reducing the risk of problematic behaviors (Stevens, Morash, & Park, 2011), including gang involvement, and are critical to healthy adolescent development and are linked to higher self-concept, psychosocial competence, and emotional well-being among adolescents (Deković & Meeus, 1997; Gray & Steinberg, 1999).

Peer Context

Youth frequently turn to their friends and peers for social and emotional support, and peer groups exert tremendous influence on adolescent behaviors. Some argue that peer affiliation represents

the most powerful environmental effect on youth's social and emotional development (Harris, 1995). This hypothesis is supported when considering the effects of peers' deviant behaviors, such as alcohol and drug use, on youth's antisocial and violent behaviors (Biglan, Brennan, Foster, & Holder, 2004; Dishion, Nelson, & Yasui, 2005). Studies also suggest that peers' alcohol and drug use is strongly related to gang involvement (Curry & Spergel, 1992; Hill et al., 1999).

Similar to other risky behaviors, early experiences in bullying perpetration can escalate into later gang involvement (Bender, Perron, Howard, & Jenson, 2010; Holmes & Brandenburg-Ayres, 1998; Viljoen, O'Neill, & Sidhu, 2005). In a sample of confined youth from 85 correctional institutions in 17 states, Holmes and Brandenburg-Ayres (1998) found that bullying was a significant predictor of later gang membership. Viljoen et al. (2005) also reported that bullies were 2 times more likely than nonbullies to be members of youth gangs. The link between bullying and later gang involvement is expected, given that bullying behavior, such as domination of others through threat or violence and intimidation, may be a prerequisite to gang membership (Bender et al., 2010). On the other hand, being a victim of bullying may also lead to gang involvement. Victims of bullying frequently feel unsupported and report feeling socially isolated from their peers and parents (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000), which can motivate them to turn to gangs as a source of support and protection, and a way to avoid further victimization.

School Context

School environment is a broad concept that comprises factors such as communication patterns, school norms, role relationships and perceptions, patterns of influence, and rewards and punishments (Tobin & Sprague, 2000; Welsh, Stokes, & Greene, 2000). As a result, researchers have recognized the importance of examining the link between youth's sense of school disconnectedness and outcomes, such as delinquency, alcohol and drug use, and other physical and mental health indicators (see, e.g., Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Le, Monfared, & Stockdale, 2005). Behavior problems and conflicts also arise when youth feel unfairly treated in school (Gottfredson, Gottfredson, & Hybl, 1993).

Prior studies also found that youth who feel disconnected or unfairly treated in school are more likely to join or affiliate with a gang (e.g., Esbensen & Huizinga, 1993; Hill et al., 1999). Gang-involved youth tend to be less connected to their school (Dishion et al., 2005; Pyrooz, 2014) and are more likely to have trouble getting along with their teachers compared to their nongang counterparts (Glesmann et al., 2009).

Neighborhood Context

There has been a strong theoretical and empirical tendency to attribute youth gang behavior and activities to neighborhood characteristics, such as neighborhood disadvantages and danger. Social disorganization theorists have long provided some of the most compelling and enduring explanations for the influence of neighborhoods on youth gang involvement (Papach-

ristos & Kirk, 2006). Youth living in neighborhoods that lack resources, and are plagued by crime, and violence may exhibit behavior problems (Plybon & Kliewer, 2001). Youth gangs are commonly clustered in disadvantaged and unsafe neighborhoods and are consistently exposed to neighborhood violence (Kosterman et al., 1996; Vigil, 1988), which can increase their likelihood of victimization, trauma, and posttraumatic stress disorders (Vaughn, Howard, & Harper-Chang, 2006; Wood, Foy, Goguen, Pynoos, & James, 2002). These youth are also likely to be involved in a neighborhood subculture in which violence is acceptable and normative and where existing role models suggest criminality is an acceptable path (Sampson, 2012), affording youthful residents with numerous opportunities to participate in gang activities.

Given how significant neighborhood-level factors can affect risky youth behavior, positive, nonparental adult figures in schools and neighborhoods are important potential sources of social support for youth living in unsafe neighborhoods. When caregivers at home are unable to provide support and guidance, other adult figures can be a critical influence (Jekielek, Moore, Hair, & Scarupa, 2002). Indeed, empirical evidence substantiates that youth who lack strong and sustained relationships with caring adult figures are vulnerable to serious, risky behaviors, such as delinquency, alcohol and drug use, and fighting (Grossman & Tierney, 1998; Thompson & Kelly-Vance, 2001). As a result, the emphasis has been on providing adult mentors for these youth as positive influences on their psychosocial development, including the prevention of risk-taking behaviors and the consequences (Beier, Rosenfeld, Spitalny, Zansky, & Bontempo, 2000, pp. 328–329). Positive adult figures can also strengthen youths' bonds to their schools and communities, and these youth are less likely to become involved in gangs and criminal activities. Supportive relationships with outside-of-home adults are important protective factors, as gang-involved youth are less likely to have such relationships (Glesmann et al., 2009).

Current Study

The aim of our study is to identify subgroups of youth (i.e., current or former gang members, youth who resisted gang membership, and nongang youth) who have experienced multiple levels of risk and protective factors for gang involvement. We also aim to examine whether these subgroups vary in these risk and protective factors, applying the social-ecological framework. More specifically, our central research hypotheses are (a) youth who have resisted gang membership and non-gang members have a greater amount of protective factors and are more likely than gang members to have lower rates of depression/suicidal ideation, delinquency, alcohol and drug use, family member involved in a gang, physical and sexual abuse at home, family dysfunction, bullying and victimization, and affiliating with peers who engage in alcohol/drug use; and (b) younger, female, and White youth, and those with parental love and support at home, perceived fair treatment by teachers at school, perceived sense of school belonging and neighborhood safety, and having dependable relationships with adult figures in school are more likely to resist gang membership.

Method

Sample and Procedure

Our sample consisted of 17,366 middle and high school students in school districts located in Dane County, Wisconsin. Fifteen out of 16 school districts and one private high school granted access. Participation was voluntary and anonymous. Parents were notified, allowed to review the survey, and given the option to refuse their child's participation. The majority of school districts collected survey data on approximately 90% of their students. The survey was administered on computers during school hours. Almost half (49.9%) were males and 50.1% were females. Most were high school students (69.4%). In terms of race/ethnicity, 74.4% were White, followed by 7% Black, 4.5% Hispanic/Latino, 6.6% mixed race, 4.5% Asian, and 3% other. From the total sample of youth, 3.6% ($n = 625$) identified as being a current or former gang member, 5.6% ($n = 973$) identified as being asked/pressured to join a gang but resisted, and 90.8% ($n = 15,768$) identified as non-gang members who had not been asked/pressured to join a gang. The majority of the youth that reported being a current or former gang member were identified as White (46.5%), followed by Black (21.0%), mixed race (10.3%), Hispanic/Latino (8.8%), Asian (7.6%), and other (5.8%). The sample was unweighted. A weighted model was tested and there were no significant differences in race/ethnicity. Additionally, racial/ethnic differences were consistent with national averages.

Data for the present study are derived from the 2009 Dane County Youth Survey, which consists of a range of adolescent health and developmental indicators. More than 17,000 7th–12th grade students from 14 school districts completed online surveys during school hours. We sent waivers of active consent with the study information to the youths' caregivers. Student assent was obtained prior to administering the survey. Along with gang involvement assessments, the survey included demographic characteristics, such as age, gender/sex, and race/ethnicity, along with depression/suicidal ideation, alcohol and drug use, delinquency, family dysfunction, physical and sexual abuse at home, parental love and support, bullying and victimization, perceived school belonging, perceived neighborhood safety, and adult support.

Measures

Dependent variable.

Gang membership. Gang researchers in the United States have primarily used the self-nomination approach to identify and define gang membership (Matsuda, Esbensen, & Carson, 2012). For the current study, one question was used to identify the participants as current or former gang members, youth who resisted gang membership, and nongang youth (were not pressured or asked to join). Participants responded to the following question, "Are you a member of an organized street gang?" Response options were "No, and I have never been asked or pressured to join," "No, but I have been asked or pressured to join," "I was in a gang, but am no longer," and "Yes, I am currently in a gang." We collapsed the latter two responses indicating former and current gang involvement into one category for the analyses, because of the low frequency of responses in the "former gang member" category and because we were particularly interested in comparing

whether an individual was ever in a gang with those in the nongang and resisted-membership categories. Former gang members, even those who were gang members for a brief time, can continue to engage in antisocial and delinquent behaviors even after leaving the gang (Melde & Esbensen, 2014).

Validation for the study measures was developed longitudinally from both 2000 and 2005 Dane County Youth Surveys. Exploratory factor analyses were conducted on the 2000 Dane County Youth Survey for initial construction of various scales. These measurement models were then validated, using confirmatory factor analysis from the 2005 Dane County Youth Survey data and further evaluation with the 2009 survey (Koenig & Bettin, 2009). Two criteria were used to retain factor loadings for the exploratory factor analysis. Factor loadings of .40 or greater were retained, and cross loadings of .40 or greater were removed. Selection variables were determined in combination with theory and the exploratory factor and confirmatory factor analyses.

Single-item indicators.

Abuse at home. To assess the extent of physical and sexual abuse at home, we included two single items. The first item asked about physical abuse ("A parent kicked you or hit your with his/her hand/fist or with an object leaving bruises or bumps?") with four Likert-type scale response options, ranging from *strongly agree* to *strongly disagree*. The second item asked about sexual abuse ("Any adult touched you in a sexual way or forced you to touch them in a sexual way that made you feel unsafe or hurt you in any way.") with response options *past 30 days*, *in the last 12 months*, *more than 12 months ago*, and *never*.

Family gang involvement. One item was included to assess whether any of the participants' family members were involved in a street gang (e.g., "Is one or more of your family members [excluding yourself] involved in a street gang?"). Response options were *yes*, *no*, and *don't know*. Because of low frequencies, the latter two, which indicated no family gang involvement, were collapsed into one category.

Teacher fairness and support. Two single items were included in the model separately to assess the extent of perceived fair treatment by teachers and other adults (e.g., "Teachers and other adults treat me fairly" and "There are adults at school if I have a problem"). Response options for both items were on a 4-point Likert scale, ranging from *strongly disagree* to *strongly agree*.

Adult support. One item was included to assess the extent of adult support ("Not counting your parents, how many adults can you rely on if you have a problem and need help?"). Response options were on a 4-point Likert scale, ranging from *none* to *four or more*.

Continuous measures.

Depression and suicidal ideation. Three items were included to assess depression and suicidal ideation. The first item asked, "During the past 12 months, did you ever feel so sad or hopeless almost every day for 2 weeks in a row or more that you stopped doing some usual activities." The second item asked, "During the past 30 days, have you seriously thought about killing yourself." The third item asked, "During the past 12 months, have you attempted to kill yourself?" Response options for all three items were *yes* and *no* ($\alpha = .65$).

Delinquency. Two items were included to assess delinquency. The first item asked, "Have you ever tagged or vandalized private or public property in the last 12 months" with 4-point Likert-type response options, *no, never* to *6+ times*. The second item asked, "During the past 30 days, on how many days did you carry a weapon onto school property" with 4-point Likert-type response options, *0 days* to *6 or more days* ($\alpha = .60$).

Alcohol/drug use. Six items were included to assess alcohol/drug use (e.g., "In the past 30 days, how many days did you . . .", "drink hard liquor," "use marijuana," "use other illegal drugs"). Response options were on a 7-point Likert scale, ranging from *0 times* to *all 30 days* ($\alpha = .90$).

Parental love and support. Six items were included to assess parental love and support (e.g., "my parents have talked with me about my future plans," "my parents love and support me," and "have consequences if I break rules"). Four-point Likert-type scale response options were used, ranging from *strongly disagree* to *strongly agree* ($\alpha = .84$).

Family dysfunction. Five items were included to assess family dysfunction (e.g., "my parents and I physically fight," "my parents physically fight with each other," "my parent uses illegal drugs at least once a week," "my parents get drunk at least once a week"). Response options included *yes, no, and don't know* ($\alpha = .79$).

Bullying perpetration. Nine items were included to assess bullying perpetration (e.g., "I upset other students for the fun of it," "I helped harass other students," "I spread rumors about other people"). Five-point Likert-type scale response options were used, ranging from *never* to *7 or more times* ($\alpha = .90$).

Peer victimization. Four items were included to assess peer victimization ("Other students picked on me," "Other students made fun of me," "I got hit and pushed by other students," "Other students called me names"), and 5-point Likert-type scale response options were used, ranging from *never* to *7 or more times* ($\alpha = .87$).

Peers' alcohol/other drug use. Two items were included to assess peer alcohol and drug use ("Most of my friends DO NOT drink or do drugs," and "Most of my friends DO NOT smoke cigarettes or chew tobacco"). Four-point Likert-type scale response options were used, ranging from *strongly agree* to *strongly disagree* ($\alpha = .85$).

School belonging. Six items were included to assess school belonging ("There are adults I can talk to at school if I have a problem," "It is important to me that I graduate," "Teachers and other adults treat me fairly," "I feel like I belong at this school"). Four-point Likert-type scale response options were used, ranging from *strongly agree* to *strongly disagree* ($\alpha = .86$).

Perceived neighborhood safety. Three items were included to assess perceived neighborhood safety ("My neighborhood is a safe place to live," "Adults in my neighborhood know me," and "I can count on the police if I need them"). Four-point Likert-type scale response options were used, ranging from *strongly agree* to *strongly disagree* ($\alpha = .70$).

Analyses

Multinomial logistic regression analysis was performed, using SPSS 22. We fitted five multinomial regression models to the data. The first model included only the individual context variables to

consider individual characteristics. The family context variables were added to the second model to consider the association close family relationships have on individuals. Peer context variables were added to the third model to consider how nested peer groups are associated with gang membership. Next, school context variables were added to the fourth model, since many individuals are nested in the family, which affects the peer groups and many peer groups are nested within schools. Finally, in the last model, neighborhood context variables were added because neighborhoods encompass individuals, their families, their friend/peer groups, and the schools they attend. Means, standard deviations, and percentages for all variables are presented in Table 1.

To address missing data, we used multiple imputation ($k = 20$) and the EM algorithm in SAS (SAS Institute Inc. 2011.Version

Table 1. Means and Standard Deviations (SD) or Percentages for the Study Variables ($N = 17,366$)

Variable	%	Mean	SD
Dependent variable			
Gang involvement			
Gang involved	90.8%		
Resist membership	5.6%		
Non-gang involved	3.6%		
Independent variables			
Individual context			
Age		14.84	1.74
Race/ethnicity			
White	74.40%		
Black	7.00%		
Hispanic/Latino	4.50%		
Asian	4.50%		
Mixed	6.60%		
Other	3.00%		
Biological sex			
Male	49.90%		
Female	50.10%		
Depression and suicidal ideation (range 0–3)		.13	.30
Delinquency (range 0–4)		.14	.43
Alcohol and drug use (range 0–6)		.28	.60
Family context			
Parental love and support (range 0–3)		.57	.51
Physical abuse (range 0–3)		.30	.67
Sexual abuse (range 0–3)		.11	.41
Family dysfunction (range 0–3)		2.61	.51
Family member in a gang			
Yes	6.20%		
No	93.80%		
Peer context			
Bullying perpetration (range 0–4)		.32	.52
Peer victimization (range 0–4)		.47	.71
Peers' AOD use		.75	.85
School context			
Fair treatment from teachers (range 0–3)		2.21	.75
Adult at school (range 0–3)		2.25	.81
School belonging (range 0–3)		.80	.53
Neighborhood context			
Adult you can rely on (range 0–4)		2.75	1.28
Perceived neighborhood safety (range 0–3)		.69	.62

Note. AOD = alcohol and other drug use.

9.3, 2011). Means and standard deviations were compared before and after imputation was complete and were very similar. To avoid biasing our sample from listwise deletion, with which we would remove samples that did not respond to certain items, we used imputation techniques as an alternative. Both methods for handling missing data have their respective limitations. Missing data for key variables ranged from 10.8–3.4%. Under the assumption that data are missing at random, the expectation maximization algorithm gives unbiased estimates of the missing data (Allison, 2002; McLachlan, Krishnan, & Ng, 2004; Schafer & Graham, 2002).

Results

Results of the multinomial logistic regression analysis comparing non-gang-involved youth and gang-involved youth are shown in Table 2. The upper portion of Table 2 displays results of the multinomial logistic regression comparing non-gang-involved youth and gang-involved youth. Results indicated that the predictor model provides a statistically significant prediction of gang involvement, $-2 \log \text{likelihood} = 8,625.77$, $\chi^2 = (46, N = 17,366) = 4,166.41$ $p < .001$. The Nagelkerke R^2 indicated that the model accounted for approximately 41% of the variance in gang involvement.

Model 1 demonstrated that many of the individual context variables were statistically significant predictors of gang involvement. Adjusting for other predictors, Black youth were 6.49 (1/154) times more likely to be in a gang ($p < .001$), Hispanic/Latino youth were 4.93 times more likely, and Asian youth were 3.23 times more likely to be involved in a gang, compared to White youth. Female youth had 2.62 times the odds of being uninvolved in a gang, compared to males. We also found that a 1-unit increase in depression and suicidal ideation was associated with 2.90 times higher odds of gang involvement. Also, a 1-unit increase in delinquency was associated with 6.67 times higher odds of gang involvement. Furthermore, a 1-unit increase in alcohol and drug use was associated with 1.81 times greater odds of gang involvement.

Model 2, which added family context variables, indicates that family dysfunction and family gang involvement were significant predictors of participants' gang involvement. Youth who reported a 1-unit increase in family dysfunction were 1.23 times more likely to be in a gang. Youth who reported family gang involvement had 19.23 times greater odds of being involved in a gang, compared to non-gang-involved youth. Additionally, Model 3, which added peer context variables, showed that bullying and peers' alcohol/drug use were significant predictors of gang involvement. A 1-unit increase in bullying was associated with a 1.85 times higher odds of gang involvement, and a single point increase in peers' alcohol/drug use was associated with 1.30 times higher odds of gang involvement. Model 4, which added school context variables, indicated that fair treatment from teachers, presence of an adult at school, and school belonging significantly predicted gang membership status. Youth who perceived fair treatment from teachers and other adults were 1.75 times more likely to not be involved in a gang. Furthermore, youth who reported presence of an adult at school had 1.34 times greater odds of noninvolvement. Likewise, a 1-unit increase in school belonging was associated with a 2.01 times higher odds of being uninvolved in a gang. Model 5, which added neighborhood context variables, showed that presence of an

adult and neighborhood safety were significant predictors. Youth who reported presence of an adult were 1.13 times more likely to stay out of gang involvement. A 1-unit increase in perceived neighborhood safety was associated with a 1.50 times greater odds of being uninvolved in a gang.

The lower portion of Table 2 displays results of the multinomial logistic regression comparing "pressured to join but resisting gang membership" and "gang involvement." In terms of individual context (Model 1), results indicated that, compared to their male counterparts, female youth had 1.44 times greater odds of resisting gang membership. Moreover, a 1-unit increase in delinquency was associated with a 1.81 times greater odds of gang involvement. For family context (Model 2), a 1-unit increase in family dysfunction was associated with 1.26 times greater odds of gang involvement. Youth who reported family gang involvement were 3.91 times more likely to be involved with a gang. For peer context (Model 3), a single point increase in bullying was associated with a 1.20 times greater odds of gang involvement. For school context (Model 4), youth who perceived fair treatment from teachers and other adults had 1.22 times greater odds of resisting gang membership. For neighborhood context (Model 5), youth who reported presence of an adult had 1.12 times greater odds of resisting gang membership.

Discussion

Our study has highlighted the importance of the social-ecological framework in enhancing our understanding of the risk and protective factors related to gang involvement by examining what factors in what contexts differentiate gang-involved youth from those resisting gang membership. For the Individual Context, our results suggest that compared to Whites, racial and ethnic minorities are more likely to be at risk for gang involvement, which is consistent with our hypothesis, along with past findings and national surveys (Esbensen & Winfree, 1998; National Gang Center, n.d.). It is noteworthy that the racial/ethnic composition of our sample is strikingly different from other studies. Unlike most research, which oversampled Blacks and Hispanic/Latinos, our study is unique in that 46.5% of gang members were identified as White. It is possible that racial and ethnic minority youth are confronted with numerous risk factors (e.g., low socioeconomic status, limited educational opportunities, discrimination, and social isolation), which can increase their risk of gang involvement. The confluence of risk factors in multiple contexts may be influenced by disparities associated with the socioeconomic and social statuses of minority youth, which are reinforced by social and economic inequality and affect the social environments in which these youth are embedded. Social and economic inequalities have historically marginalized minority and immigrant youth and contribute to making these populations vulnerable to risk of delinquent behaviors (Durán, 2013). Also congruent with our hypothesis and similar to previous findings (Esbensen, Deschenes, & Winfree, 1999), we found that females are more likely to resist gang membership. Although studies have documented a significant increase in female gang involvement, males are considerably more likely to participate in conflicts, violence, and delinquent acts (Bjerregaard & Smith, 1993), putting them at risk for gang involvement.

Table 2. Hierarchical Multinomial Analysis of Students' Gang Involvement (N = 17,366)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR
Intercept	4.57*** (.17)	—	4.56*** (.35)	—	4.89*** (.36)	—	2.57*** (.53)	—	2.48*** (.53)	—
Individual context										
Age	.01 (.03)	1.01	-.04 (.03)	.96	-.01 (.03)	.99	-.03 (.03)	.97	-.02 (.04)	.98
Race/ethnicity (White)					Non-gang-involved vs. Gang-involved					
Black	-1.87*** (.13)	.15	-.97*** (.15)	.37	-.96*** (.15)	.38	-1.03*** (.15)	.36	-.94*** (.15)	.39
Hispanic/Latino	-1.59*** (.17)	.20	-1.08*** (.19)	.34	-1.11*** (.19)	.33	-1.22*** (.20)	.29	-1.15*** (.19)	.32
Asian	-1.17*** (.20)	.31	-.751*** (.22)	.47	-.79*** (.22)	.45	-.81*** (.22)	.44	-.72*** (.22)	.49
Mixed	-.99*** (.17)	.37	-.40*** (.18)	.67	-.35 (.18)	.71	-.37* (.18)	.69	-.28 (.19)	.76
Other	-.79*** (.23)	.46	-.42 (.25)	.66	-.39 (.25)	.68	-.44 (.25)	.64	-.41 (.25)	.66
Biological sex (Male)										
Female	.96*** (.11)	2.62	.97*** (.12)	2.63	.95*** (.12)	2.57	.99*** (.12)	2.69	1.01*** (.12)	2.75
Depression and suicidal ideation	-1.07*** (.11)	.35	-.59*** (.13)	.56	-.51*** (.14)	.60	-.49*** (.14)	.62	-.45*** (.14)	.64
Delinquency	-1.90*** (.08)	.15	-1.61*** (.08)	.20	-1.44*** (.08)	.24	-1.44*** (.08)	.24	-1.42*** (.08)	.24
Alcohol and drug use	-.591*** (.06)	.55	-.33*** (.07)	.72	-.16* (.07)	.85	-.17* (.07)	.85	-.17* (.07)	.85
Family context										
Parental love and support			-.17 (.09)	.84	-.08 (.09)	.92	-.04 (.10)	.97	.06 (.10)	1.06
Physical abuse			-.09 (.07)	.91	-.07 (.07)	.93	-.07 (.07)	.93	-.05 (.07)	.95
Sexual abuse			.12 (.09)	1.13	.10 (.09)	1.10	.04 (.10)	1.04	.02 (.10)	1.02
Family dysfunction			-.20* (.10)	.82	-.14 (.10)	.87	-.12 (.10)	.89	-.09 (.10)	.92
Family member in a gang			-2.96*** (.12)	.05	-2.92*** (.12)	.05	-2.97*** (.12)	.05	-2.94*** (.12)	.05
Peer context										
Bullying perpetration					-.61*** (.09)	.54	-.56*** (.09)	.57	-.57*** (.09)	.56
Peer victimization					.06 (.08)	1.06	.06 (.08)	1.06	.08 (.08)	1.08
Peers' AOD use					-.26*** (.07)	.77	-.23*** (.07)	.79	-.20*** (.07)	.82
School context										
Fair treatment from teachers							.56*** (.10)	1.75	.55*** (.10)	1.74
Adult at school							.30*** (.09)	1.34	.25*** (.09)	1.28
School belonging							.70*** (.17)	2.01	.84*** (.18)	2.31
Neighborhood context										
Adult you can rely on									.12*** (.04)	1.13
Perceived neighborhood safety									-.40*** (.09)	.67
Individual context					Pressured to join vs. gang involved					
Intercept	1.11*** (.19)	—	2.04*** (.36)	—	2.18*** (.37)	—	1.33* (.55)	—	1.19* (.56)	—
Individual context										
Age	-.02 (.03)	.98	-.06 (.03)	.94	-.05 (.04)	.95	-.07 (.04)	.93	-.07 (.04)	.94
Race/ethnicity (White)										
Black	-.22 (.14)	.80	.24 (.16)	1.27	.24 (.16)	1.27	.20 (.16)	1.22	.20 (.16)	1.23
Hispanic/Latino	.14 (.19)	1.15	.46* (.20)	1.59	.44* (.20)	1.55	.39* (.20)	1.48	.41* (.20)	1.50
Asian	-.38 (.23)	.68	-.13 (.24)	.88	-.12 (.24)	.89	.14 (.24)	.87	-.12 (.24)	.89

(table continues)

Table 2 (continued)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR	B (SE)	Exp (B) OR
Mixed	.02 (.18)	1.02	.36 (.19)	1.43	.38* (.19)	1.46	.34 (.19)	1.41	.37 (.19)	1.44
Other	-.28 (.26)	.76	-.08 (.27)	.93	-.07 (.27)	.93	-.10 (.27)	.90	-.12 (.27)	.89
Biological sex (Male)										
Female	.37*** (.12)	1.44	.35*** (.13)	1.42	.34** (.13)	1.40	.36** (.13)	1.43	.36*** (.13)	1.43
Depression and suicidal ideation	-.17 (.11)	.84	-.13 (.13)	.88	-.11 (.13)	.90	-.09 (.14)	.91	-.07 (.14)	.93
Delinquency	-.60*** (.07)	.55	-.56*** (.07)	.57	-.51*** (.08)	.60	-.51*** (.08)	.60	-.50*** (.08)	.60
Alcohol and drug use	-.08 (.06)	.92	-.04 (.06)	.96	-.01 (.07)	.99	-.01 (.06)	.99	-.01 (.07)	.99
Family context										
Parental love and support			.05 (.09)	1.05	.07 (.09)	1.07	.08 (.10)	1.09	.11 (.10)	1.12
Physical abuse			-.04 (.07)	.96	-.04 (.07)	.97	-.03 (.07)	.97	-.03 (.07)	.97
Sexual abuse			.07 (.09)	1.07	.06 (.09)	1.06	.06 (.09)	1.06	.05 (.09)	1.05
Family dysfunction			-.21* (.10)	.81	-.23* (.10)	.79	-.23* (.10)	.80	-.25* (.10)	.78
Family member in a gang			-1.36*** (.13)	.26	-1.36*** (.13)	.26	-1.38*** (.13)	.25	-1.37*** (.13)	.25
Peer context										
Bullying perpetration					-.18* (.09)	.83	-.16* (.09)	.85	-.18* (.09)	.84
Peer victimization					.05 (.08)	1.05	.04 (.08)	1.05	.05 (.08)	1.05
Peers' AOD use					-.05 (.07)	.95	-.04 (.07)	.97	-.03 (.07)	.97
School context										
Fair treatment from teachers							.20* (.10)	1.22	.19* (.10)	1.21
Adult at school							.13 (.09)	1.14	.09 (.10)	1.09
School belonging							.24 (.18)	1.27	.26 (.18)	1.30
Neighborhood context										
Adult you can rely on									.11* (.05)	1.12
Perceived neighborhood safety									-.05 (.09)	.95
-2LL	7,506.72		8,423.90		8,673.38		8,669.58		8,625.77	
Nagelkerke R ²	.32		.39		.40		.41		.41	
df	20		30		36		42		46	

Note. AOD = alcohol and other drug use; OR = odds ratio; -2LL = -2 log likelihood. For Model 2, change in -2LL = -917.18, *df* = 10, *p* < .99; Model 3, change in -2LL = -249.48, *df* = 6, *p* < .99; Model 4, change in -2LL = 3.80, *df* = 6, *p* < .70; and for Model 5, change in -2LL = 43.81, *df* = 4, *p* < .001.

* *p* < .05. ** *p* < .01. *** *p* < .001.

In addition, consistent with our hypotheses, we found that depression/suicidal ideation is a significant predictor of gang involvement. As scholars suggest, depressive symptoms (e.g., sadness) might manifest into behavior problems (e.g., hostility), and youth who exhibit these symptoms may turn to antisocial and gang-involved peer groups (Manasse & Ganem, 2009; Wiesner, 2003). Not surprising, our results support our hypothesis that delinquency is more likely among gang-involved youth than those counterparts who are uninvolved or who have resisted gang membership. Gang-involved youth account for a disproportionate amount of delinquent and criminal activities, and youth with delinquent behaviors may be drawn to such activities and turn to gangs. Our results support our hypothesis which found that alcohol/drug use is associated with gang involvement. This result is also consistent with previous research (Hill et al., 1999). Because gang-involved youth have higher levels of alcohol and drug use, compared to non-gang-involved youth, it is plausible that youth who use alcohol and drugs might seek gang membership, where access to alcohol and illicit drugs is easier.

In the family context, several of our findings confirm our hypothesis. Our results indicate that gang-involved youth are more likely to have gang-involved family members than those who eschew gang membership. This finding is not only consonant with other studies (De La Rue & Espelage, 2014), but also supports the connection between youth's gang activities and observing such activities by family members at home. As proposed by social learning theorists, by observing and learning gang activities within the microsystem of the family, youth learn to accept such activities as legitimate. Furthermore, family dysfunction is also found to be related to youth gang involvement and is more likely among gang-involved youth, compared to the uninvolved. Researchers have suggested that youth may perceive gang membership as a means for escaping dysfunctional family environments (Moore & Hagedorn, 2001).

In the peer context, several of our hypotheses were supported. We found that peers' alcohol and drug use was significant among those involved in a gang, compared to non-gang-involved youth. Considerable evidence supports the association between peer influences in youth's behavior problems and delinquent activities, as deviant behaviors are primarily concentrated in certain peer groups, such as gangs and cliques (see Gifford-Smith, Dodge, Dishion, & McCord, 2005). We also found that compared to nongang youth, bullying was a significant predictor for youth gang involvement. As previously mentioned, it is possible that youth who are bullies are likely to be affiliated with a gang or a peer group that bullies.

In the school context, our results support our hypothesis that youth who reported being treated fairly from teachers and other adults in school were more likely to stay out of gangs. In addition, youth who reported a sense of belonging in school are also more likely to resist gang membership. These results are in agreement with other research findings (Glesmann et al., 2009; Hill et al., 1999). As proposed by social control theorists, youth who perceive they are treated fairly by school authorities are likely to bond with their school, a bond which can exert informal controls on student behavior (Hirschi, 1969).

Regarding the neighborhood context, our results are in line with our hypothesis and previous research findings (e.g., Glesmann et al., 2009), which indicated that youth who reported the presence of

adult support in the neighborhood had a higher likelihood of resisting gang membership. Another important finding is that youth who perceived their neighborhood as safe were not in gangs. It is evident that adult support and perceived neighborhood safety are salient protective factors that can inhibit youth from being exposed to or participating in risky behaviors, such as gang activities.

Taken as a group, our findings suggest that youth who have resisted gang membership share certain risk factors with gang-involved youth, but the risk factors vary. Youth who have resisted gang membership reported significantly less delinquency, family dysfunction, family members in a gang, and bullying perpetration. These youth are also likely to perceive their teachers and other adults in school as fair, and report more adults whom they can rely on, compared to gang-involved youth. It appears that having a functional home environment and having a dependable adult figure to turn to can enable youth to resist gang membership. These findings have been established by previous studies on risk factors of youth gang involvement. However, the overall findings of the current study highlights the importance of investigating numerous factors that contribute to the risks of gang involvement but also the protective elements that enable certain youth in similar situations to resist gang membership. Studies considering multiple, contextual factors can provide a holistic understanding of why some youth are involved in a gang while others, while pressured, resist gang membership.

Limitations

Despite the significance of this study, the following limitations should also be taken into account. First, our sample comprises youth residing in suburban and rural areas, and thus these results are geographically limited and do not include youth residing in other areas, such as large cities where youth gangs are prevalent. Second, the concurrent nature of the present study limits causal claims and temporal order of effects. Future studies should consider the longitudinal effects of family and neighborhood level factors on gang involvement to examine the extent to which they can buffer the effects of joining a gang. A longitudinal design would also be needed to examine the order of the effects of the various social ecologies with the development of gang involvement over a long period of time. Third, the gang variable in the current study is described as a monolithic entity, which measured membership status and did not account for length of involvement, types of gangs, or types of membership (e.g., "hardcore" and "wannabe"). Youth who are core members of highly structured gangs for a long period of time are at an increased risk of engaging in antisocial and criminal behavior (Thornberry et al., 1993). Methods to assess various degrees of gang membership have been established (Esbensen, Winfree, He, & Taylor, 2001). However, the gang measure in this study is limited and did not assess various types or intensities of gang memberships. Furthermore, similar to past studies, self-nomination was used to measure gang membership in the current study, which may not be a valid indicator of gang involvement among researchers in other countries. Fourth, some of the measures were limited in that they were single item indicators and could not provide a more nuanced understanding of the construct. We found that having a family member in a gang was one of the strongest predictors of gang involvement. A better

understanding of who the family member is, the nature of the relationship with the youth, and the length and type of the family member's gang involvement would provide a better insight about how family gang involvement influence youth membership status. Fifth, the parental love and support measure used in this study was also limited, in that it did not take into account different familial configurations, or how youth may interpret family dynamics based on their understanding of family. The measure assumes Eurocentric and heteronormative views of parenting and does not consider diverse families. And finally, the gang involvement measure did not consider the new ways in which gang-involved and non-gang-involved youth interact. Most recent research suggests that some adolescents utilize social media platforms in urban communities to instigate gang membership and activities both offline and online (see Patton, Eschmann, & Butler, 2013; Patton et al., 2014). Sixth, the race/ethnicity variable in our study is limited, because many Latino/a youth may self-report as being White. The current race/ethnicity variable distinguishes White youth from Latino/a youth who have self-identified as White. However, our participants were mainly from rural and suburban areas with significantly higher concentrations of White residents, compared to other racial/ethnic groups.

Recommendations for Practice

Notwithstanding these limitations, our findings have major implications for practice. Considering the significance of race/ethnicity and gender/sex, it is imperative that youth gang, assessment, prevention and intervention strategies be culturally relevant and gender-specific. For instance, practitioners might consider outreach programs that target racial and ethnic minority communities. It is also important that practitioners working with youth at risk for gang involvement to assess for early onset of internalizing and externalizing problems, such as depression/suicidal behavior, delinquency, and alcohol/drug use, which can heighten their risk of later gang involvement. Intervention programs typically aim at reducing the attraction youths feel about joining a gang. Such programs might be more effective if they were specifically designed to address problems of depression/suicidal behavior, delinquency, and alcohol/drug use, which may co-occur with the likelihood of joining a gang. Likewise, strategies to prevent gang involvement must start early and be developmentally appropriate.

Findings from this study highlight the importance of advocacy for social justice on behalf of youth who are at a significant risk of gang involvement and those who are pressured to join. Because these youth typically reside in urban and inner-city neighborhoods where they frequently witness violence, it is likely that these youth also experience psychosocial problems, which increases their risk of joining gang activities (Alleyne & Wood, 2010, 2013; Coid et al., 2013; Foster et al., 2004). Social and economic inequalities, which are pervasive in these areas, affect not only youths' social environments, but also their behaviors. As a consequence, the number of protective factors that are conducive to positive youth development are limited. It is also clear from this study that youth gang involvement is a multidimensional phenomenon, and ideal interventions would move beyond individual level and target risk and protective factors within the other contexts we examined. In reality, from

a clinical perspective, the social-ecological framework may not always be possible or practical (Dishion & Stormshak, 2007), particularly in communities that lack resources and exhibit high levels of gang presence. Even so, programs that draw on existing strengths of the family, school, and community and maximize coalitions among relevant stakeholders at varying levels (e.g., parents, school officials, law enforcement, and community leaders) might be feasible and cost-effective, thereby contributing to a significant reduction in youth gang involvement.

Keywords: adolescents; gang; social-ecological framework; youth; violence

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