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GANG INVOLVEMENT AMONG STREET-INVOLVED YOUTH IN A CANADIAN SETTING: A GENDER-BASED ANALYSIS

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Abstract

Objectives—Evidence suggests that gang involvement is associated with adverse health outcomes among high-risk youth. However, few studies have investigated the prevalence and correlates of gang affiliation among this population, particularly in Canada. We examined the relationship between self-reported gang involvement and early childhood traumatic experiences, social factors, and other behaviors in a study of drug-using, street-involved youth.

Study Design—Cross-Sectional Study

Methods—Data were derived from the At-Risk Youth Study (ARYS), a prospective study of street-involved youth in Vancouver, Canada. Between June 2009 and May 2011, participants were asked questions ascertaining lifetime gang involvement and gang affiliation in one's social network. We examined the gender-specific correlates of gang involvement using stratified log-binomial regression analyses.

Results—Among 435 eligible participants, 94 (21.6%) reported gang involvement and 206 (47.4%) reported having friends in a gang. In gender-stratified models, males involved in gangs were more likely to be of Aboriginal ancestry (prevalence ratio [PR] = 1.63, 95% confidence

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interval [CI]: 1.09 – 2.44), have grown up in government care (PR = 2.03, 95%CI: 1.32 – 3.12), dealt drugs (PR = 2.52, 95%CI: 1.66 – 3.85), and been incarcerated (PR = 1.40, 95%CI: 1.29 – 2.80). Women involved in gangs were more likely to have reported a history of childhood sexual abuse (PR = 3.08, 95%CI: 1.15 – 8.27).

Conclusions—These results suggest that a variety of adverse experiences in early life are associated with an increased risk of gang affiliation among street-involved youth. Primary prevention strategies aiming to avert gang initiation among high-risk youth should seek to address childhood abuse and other traumatic experiences commonly experienced by this population.

Youth gang membership is a global public health and safety phenomenon. A recently published international review identified the existence of youth gangs in countries across North and South America, Europe, Africa, Asia, and Australia.[1] In Canada and the United States, urban centers are experiencing the expansion of criminal street gangs and the proliferation of gang membership among urban youth, concomitant with increasing social and economic inequity.[2] Although the rate of gang involvement is approximately ten times lower in Canada than in the United States (0.24 youth per 1000 population compared to 2.75 per 1000), youth gang membership, particularly among females, is a growing concern in many Canadian jurisdictions.[3] These trends are of significant public health concern, given that participation in gangs has been associated with serious adverse health and social outcomes, including delinquency, substance use, traumatic stress symptoms, and among females, unintended pregnancy and sexual victimization.[4–7] International research has demonstrated that criminal and antisocial behavior associated with youth gang involvement has significant, adverse effects on local communities across the globe.[1]

Although various neighborhood, familial, peer, and psychopathologic risks for gang affiliation have been described,[7, 8] few studies have investigated early life traumatic experiences as possible correlates of gang involvement in young adulthood. Elucidating these risk factors could have important implications for primary prevention strategies aiming to prevent gang initiation, which historically have been under-addressed by public health and safety efforts.[9] Moreover, the majority of studies to date have examined gang involvement among adolescents who attend school, which may exclude out-of-school, street-involved youth who may be at highest risk for gang affiliation (possibility as a strategy for surviving on the street). To inform gang prevention interventions for high-risk youth, we examined the relationship between early life traumatic experiences and gang involvement in a sample of street-involved youth in a Canadian setting.

Data for this analysis were derived from the At-Risk Youth Study (ARYS), a prospective cohort of street-involved youth, recruited using snowball sampling and street-outreach methods. The study began enrollment in October 2005. As in other Canadian studies,[10, 11] we defined “street-involved youth” as an individual who spends a substantial amount of time on the street and/or who are heavily engaged in the street economy, and may include youth who are absolutely, periodically, or at imminent risk of being homeless. Additional eligibility criteria included: (1) being between the ages of 14 and 26; (2) recent use of an illicit drug other than or in addition to marijuana; and (3) willing to provide informed consent. Of the youth who are approached on the street or are referred to the study office,

approximately 50% are eligible and consent to participate. At baseline and every six months thereafter, participants complete an interviewer-administered questionnaire and provide blood samples for HIV and hepatitis C serology. The University of British Columbia/ Providence Health Care Research Ethics Boards approved the study.

All participants who completed an interview between June 2009 and May 2011 were included in this analysis. The primary dependent variable was defined as an affirmative response to the question, “Have you ever been involved with a gang?” Given that the outcome of interest assessed lifetime history, we restricted our analysis to each participant’s first baseline or follow-up interview conducted during the study period. We also analyzed secondary outcomes, which included ever being approached by gang members to become involved in their activities and reporting gang affiliation in one’s social network (i.e., having friends in gangs).

Independent variables that were assessed included sociodemographic characteristics: age (in years), ethnicity (Aboriginal ancestry vs. other), and lifetime history of homelessness. Early traumatic life events that were of interest and assessed included: a history of being in government care (i.e., ward of the state, orphaned, lived in a foster home), ever dropped out of elementary or high school (yes vs. no), childhood sexual abuse (defined as any type of sexual activity that was forced or coerced prior to age 18) and childhood physical abuse (perpetrated by a parent, relative, or anyone in a position of authority prior to age 18, yes vs. no). Finally, we examined proximal correlates of interest, including drug dealing, incarceration, perpetration of physical violence, experience of physical violence, and experience of sexual assault. All current correlates were dichotomous (yes vs. no) and referred to the period six months prior to the date of the interview.

We used log-binomial regression to calculate prevalence ratios (PRs) and 95% confidence intervals (CIs) for key sociodemographic characteristics, early traumatic experiences, and other proximal correlates of interest. Given the unique experiences of female gang members and the paucity of data examining gang initiation among women, we stratified all analyses by gender. Analyses were conducted in SAS version 9.2.

Of the 967 individuals who completed a baseline assessment, 435 (45.0%) completed a follow-up survey between June 2009 and May 2011 and were thus eligible for inclusion in this analysis. The mean age was 22, 145 (33.3%) were female, and 77 (17.7%) were of Aboriginal ancestry. Males (n = 74, 25.5%) were more likely than females (n = 20, 13.8%) to report a history of gang involvement ($p = 0.004$). Of the total sample, 144 (33.1%) reported ever being approached to join a gang, and 206 (47.4%) reported having friends in gangs.

As shown in Table 1, males reporting a history of gang involvement were significantly more likely to: be of Aboriginal ancestry (PR = 1.63; 95%CI, 1.09 – 2.44); have been in government care as a child (PR = 2.03; 95%CI, 1.32 – 3.12); report drug dealing (PR = 2.52; 95%CI, 1.66 – 3.85); have been incarcerated (PR = 1.90; 95%CI: 1.29 – 2.80); and have perpetrated physical violence (PR = 2.40; 95%CI, 1.64 – 3.52). In contrast, gang-involved females were significantly more likely to have a history of childhood sexual abuse (PR =

3.08; 95%CI, 1.15 – 8.27), and have experienced physical violence (PR = 2.51; 95%CI, 1.13 – 5.58).

In a secondary analysis of correlates associated with gang membership within participants' social network, males who reported having friends in gangs were more likely to grow up in government care (PR = 1.39, 95%CI: 1.11 – 1.74), report drug dealing (PR = 1.44, 95%CI: 1.15 – 1.79), have been incarcerated (PR = 1.48, 95%CI: 1.20 – 1.82), and perpetrate physical violence (PR = 1.86, 95%CI: 1.53 – 2.27). Women who reported friends in gangs were more likely to experience physical violence (PR = 1.66, 95%CI: 1.10 – 2.51) and be a recent victim of a sexual assault (PR = 2.26, 95%CI: 1.48 – 3.46).

In this sample of Canadian street youth, the lifetime prevalence of gang involvement was high and approximately 3–4 times that observed in general population and school-based surveys.[7, 9] We identified important gender differences in the early life and proximal correlates of gang affiliation. Specifically, male and female youth who reported gang involvement were more likely to report perpetrating and experiencing physical violence, respectively. A history of being in government care was associated with gang involvement for males, whereas childhood sexual abuse was a risk factor for gang involvement among females.

Our finding that a history of being in government care was a risk factor for gang involvement among males merits further research to understand the specific circumstances and experiences of foster care in Canada that may increase the risk for gang involvement in young adulthood. Community-based programs to provide recreational, economic, and pro-social alternatives to criminal activity and gang involvement among male high-risk youth may benefit by focusing specifically on young men who have a history of government care.

Our results support a growing body of literature demonstrating that gang-involved young women, and women who report gang affiliation(s) in their social networks, are at a significantly increased risk of physical and sexual violence.[4] That childhood sexual abuse was a risk factor for gang involvement among females suggests that gang intervention programs for young women should address both the detrimental impacts of childhood sexual abuse as well as the ongoing risks of sexual and physical violence following gang initiation.

This study is subject to a number of important limitations. First, given the cross-sectional nature of the analysis, causal relationships cannot be inferred. Specifically and particularly for the subset of participants less than 18 years of age, some of the traumatic experiences measured (i.e., abuse) may in fact be ongoing and concurrent with gang involvement, rather than precede it. Second, the method of recruitment was non-random and thus the results may not necessarily be generalizable to the street youth population in Vancouver or that in other urban centers. Third, the measures were self-reported and thus may be subject to response biases. Although the interviewers ensured confidentiality at several points throughout the interview, the outcome of interest in particular may be under-reported.

In summary, this study demonstrates that traumatic experiences in childhood are associated with gang involvement among street-involved youth. Primary prevention strategies aiming to avert gang initiation among high-risk youth should seek to identify those with a history of

childhood abuse, involvement in government care and other early traumatic events, and address the downstream sequelae of these adverse experiences. These findings support approaches taken by several ongoing interventions supported by the provincial gang prevention strategy, which include the provision of drop-in centres, youth employment programs, and “wraparound” services (i.e., a comprehensive continuum of individualized social services and support networks) for at-risk youth.[12] Our results also support the need for continued scale-up of gender-specific programming (e.g., after-school girl groups, one-on-one mentoring) recommended by the provincial strategy to address the distinct risk factors and gang experiences faced by girls and young women.

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- 22% of street-involved youth in a Canadian study reported a lifetime history of gang involvement, and 47% reported having friends in a gang.
- Gang-involved men were more likely to be of Aboriginal ancestry, have grown up in government care, dealt drugs, and experienced incarceration.
- Women involved in gangs were more likely to have reported a history of childhood sexual abuse, and women with friends in gangs were more likely to have recently experienced a sexual assault
- Prevention strategies aiming to avert gang initiation among high-risk youth should seek to address childhood abuse and other traumatic experiences commonly experienced by this population.

Table 1

Factors associated with reporting a history of gang involvement among male and female street-involved youth.

	Males (*N* = 290)		Females (*N* = 145)	
Characteristic	**Prevalence Ratio*** **(95% CI)**	***P* - value**	**Prevalence Ratio*** **(95% CI)**	***P* - value**
Sociodemographic Characteristics				
Age (per year older)	0.99 (0.92 – 1.06)	0.687	0.91 (0.80 – 1.04)	0.173
Ethnicity (Aboriginal ancestry vs. other)	1.63 (1.09 – 2.44)	0.017	1.88 (0.84 – 4.21)	0.126
Homeless‡ (yes vs. no)	2.34 (0.91 – 6.01)	0.077	1.37 (0.34 – 5.43)	0.656
Early Life Traumatic Events				
History of being in government care‡¶(yes vs. no)	2.03 (1.32 – 3.12)	0.001	1.16 (0.50 – 2.68)	0.729
Dropped out of school‡ (yes vs. no)	0.86 (0.57 – 1.31)	0.483	1.01 (0.39 – 2.58)	0.985
Childhood sexual abuse‡ (yes vs. no)	1.24 (0.78 – 1.97)	0.357	3.08 (1.15 – 8.27)	0.026
Childhood physical abuse‡ (yes vs. no)	1.13 (0.74 – 1.72)	0.561	1.64 (0.66 – 4.04)	0.283
Proximal Correlates				
Drug Dealing† (yes vs. no)	2.52 (1.66 – 3.85)	<0.001	1.64 (0.73 – 3.72)	0.234
Incarceration† (yes vs. no)	1.90 (1.29 – 2.80)	0.001	1.67 (0.46 – 6.09)	0.440
Experienced Physical Violence† (yes vs. no)	1.40 (0.95 – 2.07)	0.089	2.51 (1.13 – 5.58)	0.024
Perpetrated Physical Violence† (yes vs. no)	2.40 (1.64 – 3.52)	<0.001	1.81 (0.79 – 4.16)	0.162
Experienced Sexual Assault† (yes vs. no)	§	§	1.75 (0.48 – 6.43)	0.398

*Prevalence ratios computed from log-binomial models.

†Refers to activities in the past 6 months.

‡Refers to lifetime experiences.

¶Includes foster home, orphanage, or ward of the state.

§No males reported experiencing sexual assault in the past six months.