

Youth Gang Prevention Fund Projects

What did we learn about what works in preventing gang involvement?

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La présente publication est aussi disponible en français. Elle s'intitule : Projets du Fonds de lutte contre les activités des gangs de jeunes : Qu'est-ce que nous avons appris au sujet de ce qui fonctionne pour prévenir la participation à des activités de gangs?

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Introduction

Public Safety Canada’s National Crime Prevention Centre (NCPC) has a mandate to help prevent crime in local communities by generating and disseminating evidence-based knowledge of ‘what works’ in crime prevention. This practical knowledge of effective practices will assist policy makers, program developers and practitioners make the best use of limited resources.

Since 2007, NCPC has undertaken a deliberate effort to develop the Canadian knowledge base of effective crime prevention programming focused on addressing known criminogenic factors among specific groups of persons including: children 6–11 who demonstrate early risk factors such as premature police contact, systematic difficulties adapting to school or high levels of impulsiveness and aggression; youth 12–17 who demonstrate multiple risk factors such as substance abuse, school drop-out or contact with the youth criminal justice system; young adults who have a known history of offending and incarceration; Aboriginal peoples because of their significant over-representation as offenders and victims; and gang-involved youth. In order to conduct this work, NCPC provides financial and technical support for the implementation and evaluation of community-based projects that address one or more of these priority areas. This report provides a high level synthesis of key findings from projects addressing youth gangs between 2007 and 2012.

During this period, NCPC provided funding to community-based organizations for 17 youth gang intervention projects in communities across Canada through its Youth Gang Prevention Fund (YGPF). These projects aimed to reduce the number of gang-involved youth in communities with a known or emerging gang problem. To determine what works in gang crime prevention, 14 impact evaluation studies¹ of gang projects were conducted across Canada. Evaluation research of crime prevention programs is one of the key activities conducted to generate this knowledge. Given that resources are limited and communities require the most effective programs to reduce offending among at risk children and youth, it is important to rigorously establish what works in crime prevention.

This paper provides a context for NCPC’s work on youth gangs, briefly describes the funded projects and the approach to conducting the evaluation studies, presents the key findings, and provides some conclusions for moving forward.

Gang Crime in Canada

There is currently no unique and universally accepted definition of a youth gang in Canada, and the precise measure of the phenomenon is difficult given its variability. A youth gang, as defined by the Montreal Police Service, is “an organized group of adolescents and/or young adults who rely on group intimidation and violence, and commit criminal acts in order to gain power and recognition and/or control certain areas of unlawful activity”.² The University of Toronto, Criminology Centre uses a similar definition but adds that to be considered a gang at least three youth must have participated in criminal

¹ Five projects located in Winnipeg were assessed as a multi-site evaluation.

² Montréal. Montréal Police Service. Provincial Action Plan on Street Gangs. Québec: Department of Public Security, National Coordinating Committee, 2004 [Meeting, Toronto, May 25, 2005].

activity on more than one occasion.³ The Royal Canadian Mounted Police (RCMP) use the definition developed by Malcolm Klein and Cheryl Maxson. “A gang is any group of adolescents and young adults who (a) are generally perceived as a distinct aggregation by others in their neighbourhood, (b) recognize themselves as a denotable group (almost invariably with a group name), and (c) have been involved in a sufficient number of illegal incidents to call forth a consistent negative response from neighbourhood residents and/or enforcement agencies.”⁴

Only a few studies have attempted to provide a systematic assessment of the extent of the youth gang phenomenon in Canada. According to police statistics (2009) Ontario has the largest number of gang members, with 216 gangs comprising 3,320 members. Youth gangs and gang violence have been an issue within Toronto’s socially disadvantaged communities for several decades. Toronto’s gang-related deaths peaked in 2003 at 35, and have since ranged between 14 and 30 a year.⁵ In 2010, Toronto had the fourth-highest rate of gang-related homicides per capita of any major Canadian city, after Winnipeg, Vancouver and Montreal. Saskatchewan is said to have the largest number of gang members per capita, with 1.34 youth gang members for every 1,000 people. The rate of gang-related homicide steadily increased from the early 1990s until 2008, before declining in both 2009 and 2010. In 2011, there were 95 gang-related homicides, a rate of 0.28 per 100,000 population, unchanged from 2010.⁶

Youth gang members in Canada tend to be male (94%), however, the percentage of female gang membership is increasing, particularly in the western provinces. Approximately half of all youth gang members are under the age of 18.

Available data suggests that youth gangs are associated with increased availability of guns and drugs in schools, and that these youth are responsible for a large proportion of criminal incidents (National Youth Gang Center, 2012; 2010; National Crime Prevention Centre, 2007).

The research literature on gangs indicates that being a member of a youth gang is a significant predictor of involvement in criminal activity, and youth gang members commit more crime compared to other high risk youth. For example, a study of Toronto area youth indicates that youth gang members are more than six times as likely compared to other youth to be engaged in a variety of criminal activities (Wortley, Tanner, 2006).

³ Toronto. University of Toronto, Criminology Centre: National Crime Prevention Centre, Prevention Intervention Treatment, 2011.

⁴ Klein, M & Maxson, C, *Street Gang Patterns and Policies*, Oxford University Press, 2006

⁵ Toronto Police Statistics, 2009

⁶ Statistics Canada, *Homicide in Canada*, 2011

Implementing Evidence-Based Programs

In 2006, as part of the planning to implement YGPF, the NCPC reviewed the available scientific literature of studies that had evaluated youth gang projects. Not surprisingly, most studies came from the United States. The NCPC then selected gang prevention projects that were found to show promise for reducing gang involvement and violence. Three US-based programs were identified: the Comprehensive Gang Model (Spergel model), Milwaukee wraparound and the Gang Prevention through Targeted Outreach as potential viable models to implement and evaluate in Canada.

Projects that are considered *model* or *promising* have a structured curriculum with specified protocols and dosage. They might also include information about the key services, the recommended duration and the feasibility of implementing the project in a variety of settings. As will be seen later in the paper, youth gang projects implemented “hybrid” interventions that included core elements of the original gang models as well as elements of other evidence-informed approaches such as Multi-systemic therapy (MST), Wraparound and cognitive behavioural therapy (CBT). As a result of this “hybrid” approach, seven types of models were implemented during the YGPF funding cycle.

NCPC issued a call for letters of intent (LOI) encouraging potential eligible project recipients to describe how they would implement one of the three selected gang prevention models. Selected LOIs led to full project development with support from program developers and NCPC staff. Due to a variety of administrative factors, the implementation of the projects began one year after the call. Since the original intention was to provide the projects with five years of funding, a majority of the projects received an extension to ensure they had ample time to target the appropriate youth and comprehensively implement the model. During the implementation of these projects, NCPC staff provided resources, advice and monitoring activities to ensure the project recipients had the tools required to implement effective crime prevention projects.

Overall, the NCPC provided funding to 17 YGPF projects implemented within 23 sites, representing investments of \$30,731,076 over 5 years.⁷ One project took place in Halifax (Nova Scotia), one in Quebec, five in Ontario, five in Winnipeg (Manitoba), two in Saskatchewan, one in Alberta and two in British Columbia. In addition, NCPC currently funds a youth gang project in Montreal (Quebec), Programme de suivi intensif de Montréal – Gangs de rue⁸ which is still ongoing and is therefore not included in this summary.

⁷ This funding amount includes YGPF projects that had received funds for an additional year after their contribution agreements expired in 2011.

⁸ This project is not included in Table 1 as it was initially funded under YGPF but is currently being funded under the Crime Prevention Action Fund.

The following table provides an overview of the projects implemented and evaluated between 2007 and 2012. Three of the studies in Table 1 were not included in the synthesis; two did not have the required criteria to be included in the synthesis and the City of Toronto PIT project ended after the synthesis was completed.

Table 1: Summary of NCPG Funded Gang Projects		
YGPF Project	Province	Cost Per Participant
Gang Prevention Strategy (GPS) <i>Living Rock Ministries</i>	Ontario	\$18,608.00
Youth Options for Success (YOS) <i>Niagara Citizen's Advisory Committee</i>	Ontario	School: \$596.01 Families: \$7,026.59 High-risk youth: \$3,789.25
Surrey Wraparound: A Youth Driven Plan for Gang Violence Prevention (Surrey Wrap) <i>Surrey School District # 36</i>	British Columbia	\$8,786.00
Winnipeg Youth Gang Prevention Fund Projects: Circle of Courage <i>Ka Ni Kanichihk Inc.</i> Just TV <i>Broadway Neighbourhood Community Centre</i> Project OASIS <i>New Directions for Children, Youth, Adults and Families</i> Turning the Tides <i>Ndinawnmaaganag Endaawaad Inc.</i> West Central Youth Outreach <i>Spence Neighbourhood Association</i>	Manitoba	Overall: \$15,251.00 \$10,417.00 \$12,914.00 \$24,242.00 \$15,544.00 \$13,140.00
Durham Youth Gang Strategy (DYGS) <i>Durham Family Court Clinic and Murray McKinnon Foundation</i>	Ontario	\$12,720.00
Positive Alternatives to Youth Gangs (PAYG) <i>San Romanowy Revitalization Association</i>	Ontario	Intensive stream: \$8,023.27 Contact student: \$4,908.33 Parent: \$180.71
Youth Alliance Against Gang Violence (YAAGV) <i>Prince Albert Outreach Program Inc.</i>	Saskatchewan	\$35,448.00
Youth Advocate Program (YAP) <i>Halifax Regional Municipality</i>	Nova Scotia	\$27,758.00 (per year)
Regina Anti-Gang Services Project (RAGS) <i>North Central Community Association</i>	Saskatchewan	\$8,290.20 (per year)
Youth At Risk Development (YARD) <i>Calgary Police Service</i>	Alberta	\$23,348.00
Abbotsford Youth Crime Prevention Project Abbotsford Community Services <i>South Asian Community Resource Office (SACRO)</i> Wrapping Abbotsford Youth with Support (WAYS) <i>Youth Resources Centre</i>	British Columbia	\$11,404.23
NCPG Funded Projects not included in the synthesis study		
Prevention Intervention Toronto (PIT) <i>City of Toronto</i>	Ontario	\$9,849.04
Mini-Poste Gang Prevention Project Pilot (P'tit Police) <i>Black Community Resource Centre</i>	Quebec	\$6,123.00
Eastside Aboriginal Space for Youth (EASY) Vancouver Police Department and Circle of Eagles Lodge Society	British Columbia	N/A

These projects were designed to reach at risk youth, and in some cases, their family and immediate environment. Table 2 provides an overview of the demographics of participants for all of the projects funded from 2007–2012. This information provides a context for the results shared in the findings section of this paper.

Table 2: Demographics	
Demographics	Output
Total Number of Youth served under YGPF (2007–2012)	At risk youth: 1,899 participating in the program Families: 188 families participated in program School-based: 779 youth participated in ‘universal’ programs
Gender	73% of all program participants were male (range from 59% to 96% by program) 27% of all program participants were female (range from 4% to 41% by program)
Age Range	At risk youth: youth aged 9 to 30 years old School-based: youth aged 8 to 14 years old
Ethnicity of At Risk Youth (optional)*	Caucasian: 23% African-Canadian: 42% Aboriginal/First Nations: 35% Other Minority: 15%
Level of Risk for Gang Involvement ²	20.5% of low risk youth 23.5% of moderate risk youth 56% of high risk youth
Gang Involvement	32% to 43% of youth participating in programs identified as being currently involved in gangs – depending on how the term ‘gang’ is operationalized.

* The ethnicity percentages do not total 100% as information on ethnicity was not available for all programs. This is only a general estimation of the proportions of each ethnic group participating in the YGPF projects. These proportions are based on data available for eleven of the YGPF projects.

Evaluation Approach

NCPC provided tools and resources to guide project recipients and their third party evaluators in the planning and implementation of the project-based evaluations. NCPC required that all YGPF projects at a minimum conduct a pre and post-test repeated measures design that would ensure that the data was collected before the project, at the end of the project, and at six months post-program. Some of the evaluators hired by the project recipient had the resources and capacity to compare project participants with a similar group of at risk youth who did not participate in the program (also known as a comparison group). Evaluators used qualitative techniques to qualify the quantitative data produced from the bivariate and multivariate statistical tests used in the evaluations. To measure outcomes related to knowledge, attitudes, risk and protective factors, and behaviours, the evaluators used both standardized surveys and non-standardized instruments to ensure questions to measure relevant outcomes were adapted to the Canadian context. Some common instruments used to measure the outcomes included: 1. Eurogang survey; 2. National Longitudinal Survey of Children (NLSCY); 3. Rochester Youth Violence Scales; 4. Child and Youth Resilience measure; 5. Child Behaviour Checklist; and the 6. Youth Level of Service/Case Management Inventory.⁹

⁹ The NCPC has developed an internal document, *YPGF Evaluation Matrix* that relates outcomes with recommended instruments that can be used to measure changes in knowledge, attitudes, risk and protective factors, and behaviours. All of the project recipients to be funded in the 2012–2016 cycle have received this resource.

NCPC Senior Evaluation Analysts provided advice on various types of validity issues¹⁰ to enhance the projects' ability to attribute their intervention to the outcomes being measured. Evaluators were also encouraged to utilize NCPC evaluation guidelines provided during the early project development phase that identified key criminogenic outcomes to be measured; having a pool of similar measures would allow NCPC to synthesize the data. The final evaluation reports completed by the third party evaluators for each of these studies allowed NCPC evaluation staff to conduct a synthesis of the results. Summaries of the final evaluation reports produced from these process and impact evaluations were published individually by NCPC. (<http://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/index-eng.aspx?t=yth-gngs>).

This synthesis is based on the results of ten impact evaluations. It should be noted that this study is a synthesis and not a meta-analysis as originally intended. A meta-analysis study is the preferred method for aggregating results from different studies as it involves the systematic standardization of a variety of unequal measures. To conduct the intended meta-analysis, standard data such as standard deviations and weighting the evaluation designs was required; this proved to be a challenge given that evaluation studies were conducted by different evaluation teams, with different timelines, and involved different projects on the ground, all of which limited the capacity to collect standardized data. The synthesis method used for the present study is an acceptable secondary option when the meta-analysis requirements cannot be met.

Ten of the fourteen evaluation studies have been included in the synthesis based on the following criteria: 1. statistical testing conducted (e.g. bivariate or multivariate analysis); 2. evaluation design needed to include at least a pre/post-test repeated measures design; 3. key outcomes needed to be related to gang involvement (e.g. anti-social peers, substance abuse) and; 4. final impact evaluation results needed to be available.

Frequently occurring outcomes were identified and extracted from the final reports. A total of ninety-five¹¹ outcome variables were extracted from the final reports and subsequently clustered into the following reporting constructs: 1. knowledge (i.e. change in knowledge about the consequences of gang involvement); 2. attitudes (i.e. change in attitude towards anti-social peers); 3. risk and protective factors (i.e. change in substance abuse patterns, changes in school attendance); and 4. behaviours (i.e. changes in non-violent offending, police contact and charges).

The analysis of the data included data mining and the use of inter-rater reliability to ensure the coding process was valid. Data was organized in a hierarchical structure which allowed for the calculation of tabular trends.

¹⁰ NCPC research and evaluation unit encourage the use of internal, construct, external and statistical validity. Validity reflects the extent to which a causal conclusion based on a study is warranted. A study's result can be considered valid when it minimizes bias. Definitions of the four types of validity can be found in the NCPC guide on evaluation standards (NCPC Evaluation Standards, 2010).

¹¹ Eight of these outcome variables were eventually excluded from the analysis as a result of not being statistically valid.

After the analysis, these variables were classified in a *favourable*, *unfavourable* or *no change* category based on a $p < 0.05$ ¹² level. Information related to program activities, delivery and implementation data were coded and correlated with the outcome variables initially identified in the synthesis.

The aggregated data are presented in accordance with both Prochaska and DiClemente's stages of change framework and Kirkpatrick's learning model.¹³ Both models suggest that short term changes in knowledge and attitudes precede intermediate changes in risk and protective factors. Changes in risk and protective factors increase the likelihood of making long term behavioural changes.

Prochaska and DiClemente's Stages of Change Model for example, describes how a project participant moves from the pre-contemplative to action phases during and after project implementation. In this model, each phase is a precursor to the potential preparation and action changes that will follow. Kirkpatrick's learning model also suggests that the short term changes in knowledge, attitudes and skills are important precursors to potential changes in behaviour.

Prochaska and DiClemente's model suggests that participants potentially move out of the precontemplation (not ready to change) and contemplation phase (thinking about change) when their attitudes begin to shift from negative to positive thinking. For example, projects that provide opportunities for youth to have a positive attitude about pro-social employment, pro-social peers and engaging with family allow youth to move from the contemplation (thinking of changing) to the preparation phase where they are ready to begin making positive changes. Youth who have successfully absorbed new knowledge, changed attitudes, reduced risk factors and increased protective factors, are ready to behave in a pro-social manner. Finally, youth that choose to exit their gangs and disengage in behaviour that would warrant criminal justice involvement, for example, have demonstrated that they have reached the desirable stage (also known as the "Action" stage) of the model.

The following findings are reported in an order that respects the two models previously described.

Findings

Changes in Knowledge

Three of the ten evaluation studies measured changes in knowledge and all of these showed favourable changes in at least one of the knowledge and awareness related outcomes. The most common type of knowledge outcomes changed included: 1. knowledge of crime associated risks; and 2. knowledge of gangs and associated risks. The findings suggest that over half of the participants (57–66%) increased their knowledge about the risks of crime and gangs. Changes in knowledge increase the likelihood that attitudes, risk and protective factors may also be favourably modified.

¹² The $p < 0.05$ is a standard probability measure used to determine if variables significantly contribute to changes in outcomes. For example, if an evaluator is examining if eight cognitive behavioural sessions contributed to changes in attitudes, they would need to refer to the p value. If $p < 0.05$, this would indicate that the sessions did indeed contribute to the change; it was not a result of chance. If $p > 0.05$, this would indicate that there was a possibility that the relationship between the eight sessions and the change in attitudes could have occurred by chance.

¹³ Kirkpatrick, Donald, Evaluating Training Programs (1975)

Changes in Attitudes

Seven of the ten studies included in this analysis measured changes in attitude. Six of the seven (86%) studies that measured attitudes contributed to a change in at least one of the outcomes of interest.

The outcomes that demonstrated the most positive change include: 1. increases in pro-social attitudes; 2. increases in positive attitudes towards law enforcement; and 3. decreases in attitudes about aggression and violence. Attitudes about bigotry and sexism were the least likely to be changed. Favourable changes in attitudes ranged from 27–38% indicating that approximately one-third of the youth are making positive changes in their attitudes.

Changes in attitude increase the likelihood that risk and protective factors may also be favourably modified.

The following examples illustrate the types of attitude changes demonstrated by three of the projects.

Gang Prevention Strategy

Results show that anti-social attitudes/beliefs differed between treatment and comparison groups for grade 4 students. Treatment groups showed a decline in anti-social attitudes while these negative attitudes increased over time for the comparison groups.

Regina Anti-Gang Services

At six months, program participants' results showed a 57% significant decline in general approval of aggression and a 71% significant decline in program participants' approval for retaliation.

Youth Alliance Against Gang Violence

Acceptance of gangs measured the extent to which participants believed it was acceptable or cool to be in a gang. Findings suggest that acceptance of gangs declined with time spent in the program. Significant changes were observed in the long term follow-up stages. Acceptance of gangs had declined by 38% and 42% between entry and 24 and 30 months respectively.

Changes in Risk and Protective Factors

Risk and protective factors are an essential element in crime prevention. Projects that can successfully reduce risk factors (i.e. association with negative peers) and increase protective factors (i.e. parental support) contribute to the prevention of youth involvement in criminal activity. It is useful to review proximal risk factors that are more likely to contribute to change in behaviours. Table 3 illustrates these proximal factors in relation to the variables NCPC was more likely to address during this cycle of YGPF projects.

Table 3: Gang Prevention Proximal Factors and Results

Gang Prevention Proximal Factors in Gang Literature	Variables Measured	Results (% of projects achieving favourable results)
Associations: Negative Influences in Youths Life Over-reliance and association with antisocial peers	Relations with Negative Peers	25%
Attachments: Limited Attachment to the Community Limited interest and potential in education Limited interest and potential in employment	Relations with family, community and culture Attachment to education and school Attachment to the workforce	35% 20% 50%
Substance Abuse (Drugs and Alcohol)	Substance Abuse	30%
Poor parental supervision	Not enough single measures to calculate an aggregate scale	Not available

According to the literature, youth presenting with the key proximal risk factors in Table 3 are four times more likely to join gangs if these factors are not addressed through the appropriate intervention programs (Hawking, David, 1999; Howell, James, 2005). Table 3 indicates that NCPC, through the administration of the YGPF fund, has been able to address and measure impacts on these proximal risk factors. The results indicate that 25–50% of the NCPC funded projects have been able to demonstrate a favourable impact on at least one construct related to these proximal risk factors.

Seven of the ten studies measured risk and protective measures. Five of these seven studies (71%) reported results that indicate positive change in at least one outcome measuring risk and protective factors. The most common types of changes that were favourably modified include: 1. increases in self-esteem and personal integrity; 2. increases in positive attachments to the workforce; 3. decreases in depression and mental health issues; and 4. reductions in impulsive and risk taking behaviour. The most common risk factors that showed relatively lower rates of change included: 1. substance use; 2. healthy relationships with family and pro-social peers; and 3. attachment to education/school. Overall, favourable changes in risk factors range between 18% and 60%. The following provides examples of how the projects demonstrated changes in risk and protective factors.

Durham Youth Gang Strategy

Participants in the DYGS project showed a significant reduction in associations with gangs ($p < 0.05$). The pre and post test results indicated that risk for gang involved youth disconnected with negative peers during program participation.

Youth at Risk of Development

Results of the pre and post comparison show a significant improvement in youth's attitudes toward employment.

Youth Alliance Against Gang Violence

A significant decrease (58%) in symptoms of depression was found between the pre and post testing period; this suggests that reductions were maintained in the post program period.

Changes in Behaviours

Six of the ten studies measured behavioural related outcomes. Four of these six studies (67%) reported results that indicate positive change in at least one behavioural related outcome. Behaviours assessed include police contact, violent and non-violent offending and gang involvement. Gang involvement, police contact and non-violent offending behaviour such as theft and selling illegal drugs were the most likely outcomes to be reduced. Violent offending was less likely to be reduced as most youth in these gang prevention projects did not have a violent offending history. The following provides examples of some of the behavioural related changes produced by the projects.

Gang Prevention Strategy (Violent Offending)

There was a statistically significant reduction (22%) in youth committing physical assaults by the end of the program.

Youth Advocate Program

By the end of the program youth showed a decrease in delinquency and conduct problems. Reductions in victimization were significant with a moderate effect size (0.55).

Surrey/Wrap (police contact)

Results show a significant decline (67%) in police contacts relative to the comparison group.

Gang exit (also known as the gang membership variable) was a key measure in the YGPF projects. Most of the projects targeted both youth at risk of gang involvement and gang-involved youth. Table 4 provides a summary of the gang exit rates for the projects that targeted and treated gang-involved youth. The findings suggest that for the four projects that were able to measure the gang exit rate at the end of the program, 41–67% of the youth were no longer gang-involved by the end of the project. In some projects the evaluators were able to measure the gang exit rate beyond the post-program period. The RAGS project had 100% of its participants involved in gangs and by the final follow-up stage (approximately 12 months postprogram) had 71% of its participants exit their respective gangs. Similarly, evaluators found that 100% of the youth in the YAAGV project had exited their respective gangs by the final follow-up measure (approximately 12 months post-program).

Table 4: Percentage of Participants Exiting Gangs by Project

Evaluation Study	% of Gang-involved youth prior to the program	Exit rate: Post-program (just after the program was completed)
Youth At Risk Development (YARD)	21% (estimated by staff)	41%
Youth Alliance Against Gang Violence (YAAGV)	49%	67%
Regina Anti-gang Services Project (RAGS)	100% (current or former)	46%
Gang Prevention Strategy (GPS)	29%	58%

Note: 8 of the 10 evaluations in this study measure gang exit as some of the projects solely focused on reducing risk factors that contributed to gang involvement. Only four of the studies were able to confidently report on gang exit rates. Two out of the 8 studies (RAGS and YAAGV) in Table 4 were able to report a gang exit rate one year after the project was completed. These rates are reported above Table 4.

Implementation issues

There were four key implementation challenges that were experienced by a majority of the NCPC funded gang projects including: 1. implementing the program as intended (with fidelity); 2. reaching the appropriate target group; 3. establishing relationships with families; and 4. establishing effective partnerships with the community.

Implementing the program with fidelity

The amount of service (also known as dosage) that is provided to participants is an important factor that contributes to change in the outcomes being measured. For example, NCPC Crime Prevention¹⁴ model programs such as the Stop Now and Plan (SNAP®), Towards No Drugs (TND), Life Skills Treatment (LST) and Multi-Systemic Therapy (MST) have developers that usually prescribe the dosage levels needed to effect a change. However, in YGPF, 60% of the projects implemented 'hybrid' models, making it challenging to identify a single effective model. Most gang prevention programs are innovative or promising projects where elements of fidelity including dosage are not fully established. Table 5 indicates that the average number of hours per program is 233 (or 39 weeks)¹⁵ in duration. The findings indicate that project duration varied considerably between the projects with youth participating in 4.5 to 683 hours of programming depending on the particular project; this result further demonstrates the nature of the intervention in innovating and promising crime prevention programs.

¹⁴ In the Crime Prevention Action Fund (2009–2013), more of the projects implemented model programs that included pre-developed logic models and tools to help projects identify recruitment criteria and required elements of the intervention.

¹⁵ It should be noted that some of these projects used the following formats to implement the program: 1. One-to-one counseling; 2. Group sessions; and 3. Both group and individual contact. The dosage reflects the total duration for the format used in this project. The evaluation summaries can provide details about the format used for each project: <http://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/index-eng.aspx?t=yth-gngs>

Table 5: Typical Program Dosage by Project

Program	Dosage (in total hours)	Dosage (in total weeks)	Dosage (in # of sessions)
Youth Alliance Against Violence (YAAGV)	683	100.2	Not Applicable
Winnipeg Projects Circle of Courage Just TV Project Oasis Turning the Tides West Central Youth Outreach	Not applicable	44	Not Applicable
Gang Prevention Strategy (GPS)	242	26	Not Applicable
Positive Alternative to Youth Gangs (PAYG)	147.8		Not Applicable
Youth Advocate Program (YAP)	320	64	Not Applicable
Surrey Wraparound South Asian Community Resource Office Wrapping Abbotsford Youth with Support	Not Available	Not Available	Not Applicable
Regina Anti-Gang Services Project (RAGS)	385	77	Not Applicable
Youth At Risk Development (YARD)	Not applicable	Not Applicable	18 contacts (average)
Youth Options for Success (YOS)	4.5 (Grade 4) 10 (Grade 6) 70 (building options)	6 (Grade 4) 13 (Grade 6) 2 (building options)	Not Applicable
Durham Youth Gang Strategy (DYGS)	Not Available	18 (90 days)	Not Applicable
Aggregate Results for Dosage			
Average Dosage:	233 hours	39 weeks (9.75 months)	18 contacts with youth
Range:	4.5 to 683 hours per project	2 to 100 weeks (2 weeks to 2 years)	Not applicable

Reaching the appropriate target group

Identifying and recruiting youth who are appropriate for gang prevention programs is very difficult. Implementing an appropriate recruitment strategy requires a combination of solid partnerships with key organizations such as the police and youth centres to obtain referrals, as well as street worker skills to engage potential participants and establish relations of confidence. It was sometimes a challenge to make a distinction between programming for those at risk of committing gang¹⁶ related crimes and those at risk of gang involvement. Using a risk assessment tool would help projects recruit the highest-risk youth; those who would be more likely to benefit from gang prevention. Our synthesis of the data indicates that programs that were able to attract higher-risk youth showed greater reductions in key risk factors and behaviours, including gang involvement and non-violent offending.

¹⁶ The YGPF fund sought to recruit two key target groups. The projects expressed difficulty identifying different criteria and interventions for those youth who were at risk of gang involvement but not currently gang-involved.

Establishing relationships with families

Parents of high-risk or gang-involved youth, in general, usually present with similar risk factors of project participants, including: not being present in the youth's life; having limited support for 'child minding' which compromises their ability to engage in prevention programs; and coping with substance abuse and other mental health issues. Furthermore, siblings with a criminal history, especially youth gang-involved siblings, often "transmit" their patterns of behaviour to younger youth in the family. Due to parental concerns with their families being "associated" with gangs, parental involvement in the gang projects was often limited, reducing the opportunity for parents to reinforce the values and strategies conveyed by project staff.

Eleven gang prevention projects measured changes in family and community involvement. Of those 11 projects, one-third (35%) showed a favourable change in at least one family and community involvement outcome. The other 65% of the projects showed no change in these outcomes. Qualitative results suggest that the parental concerns about stigmatization (i.e. parents were concerned that their family would be associated with all the negative connotations related to gang involvement if they participated in a gang prevention program) limited their attendance and may have subsequently contributed to an inability to make favourable changes in knowledge and attitudes about their children's behaviours.

Establishing effective partnerships within the community

Collaboration between partners is essential to the implementation and success of most crime prevention programs. Potential project funding recipients negotiated "soft" agreements for in-kind contributions in the pre-funding phase, but found less support during program implementation. Funded recipients also noted that they found it challenging to find partners that would work with violent youth or could provide specialized services such as drug treatment and mental health services. Projects implementing the wraparound model for example, require the provision of services to address multiple risk factors, further emphasizing the need for the continued availability of a diverse group of partners.

Effective Interventions

Earlier in the paper, the process for selecting evidence-based gang projects for potential funding and evaluation was described. NCPC encouraged the development of projects showing promising elements, however, most recipients implemented hybrids using elements from both prescribed and other models. In the final evaluation reports, the projects and their evaluators identified the model that their project activities most closely resembled. This classification task indicated that the YGPF projects essentially adhered to five key models (see Table 6). This classification task allowed NCPC to further identify what models contributed to favourable changes in the outcomes measured.

The examples below provide information about the models' ability to contribute to favourable changes in knowledge, attitudes, risk and protective factors and behaviours. The examples indicate that some models demonstrated a greater ability to contribute to changes than others. For example, the Wraparound and Case Management models demonstrated a greater likelihood of contributing to favourable changes in behavioural related outcomes (i.e. reducing non-violent behaviours such as selling drugs and preventing police contacts).

Findings related to Key Gang Prevention Models

Wraparound

Wraparound was the most frequently implemented model during this YGPF cycle.

100% of the outcomes related to knowledge contributed to favourable change. Thirty to thirty-five percent of the outcomes related to risk and protective factors contributed to favourable change. Seventy-two percent of the outcomes related to behavioural measures contributed to favourable change.

Spergel

The OJJDP (also known as the Spergel model) was implemented once during this cycle.

All measures related to knowledge and attitude demonstrated favourable changes.

Sixty percent of the outcomes related to behavioural changes contributed to favourable changes. The model did not contribute any favourable changes in behavioural related outcomes.

Multi-Systemic Therapy

Two of the projects implemented a majority of the elements of the MST model.

50–60% of the outcomes related to attitudes, risk and protective factors, and behaviours contributed to favourable change. The model did not contribute to favourable changes in knowledge related outcomes.

Case Management

Two of the projects implemented a Case Management model.

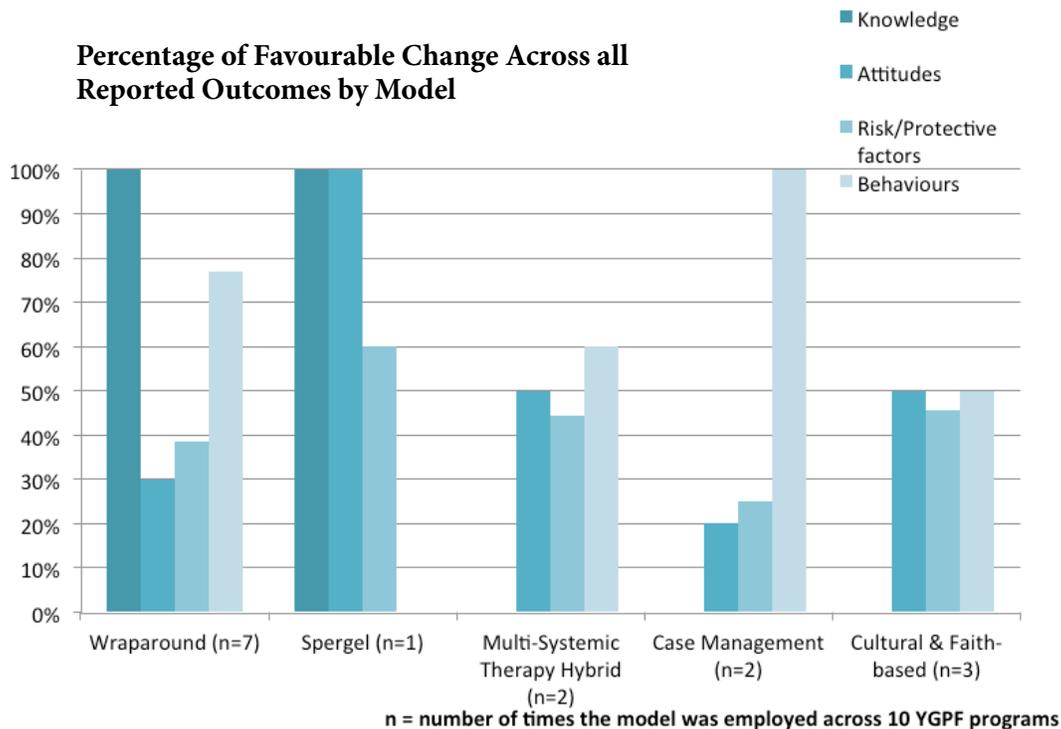
20–25% of the outcomes related to attitudes and risk and protective factors contributed to favourable change. All of the measures related to behaviours demonstrated a favourable change.

Cultural and Faith Based Models

Three projects implemented interventions that incorporated a majority of elements that focused on cultural diversity and faith related activities. Forty-five to fifty percent of the outcomes related to attitudes, risk and protective factors and behaviours demonstrated favourable change. The model did not contribute to favourable changes in knowledge related outcomes.

Table 6 provides a table version of favourable changes reported across the 5 models implemented.

Table 6: Favourable Change Across all Reported Outcomes by Model



Effective Program Activities

An analysis of 45 recurring YGPF program activities was conducted to identify what elements contributed to favourable impacts on attitudes, risk and protective factors and behaviours. Activities that demonstrated favourable change in at least 60% of the evaluation studies are included in Table 7.

Table 7: YGPF Project Elements and Impacts on Attitudes, Risk & Protective Factors and Behaviours

Activities that contributed to favourable change in Attitudes	Activities that contributed to favourable change in Risk and Protective Factors	Activities that contributed to favourable changes in Behaviours
Counselling Case management Arts (music & crafts) Learning & education Employment training & support Parenting skills Healthy relations with peers training Life management & decision making training Gang risks & recruitment Drugs, alcohol & addictions education Cultural or community education	Counselling Case management Arts (music & crafts) Employment training & support Parenting skills Life management & decision making training Gang risks & recruitment Drugs, alcohol & addictions education Cultural or community education	Counsellors Case management Sporting activities (combined with core case management) Employment training & support Healthy relationships with peers training Parenting skills Gang risks & recruitment Drugs, alcohol & addictions education Cultural or community education

Table 7 illustrates that certain types of educational and training type activities were more likely to contribute to change. Activities that demonstrated favourable change in less than 20% of the projects

included: 1. advocacy on behalf of youth; 2. therapy with a psychologist; 3. attending the complementary amusement activities (i.e. theatre); 4. unpaid intern programs; and 5. financial literacy. These activities were less likely to contribute to favourable change and were challenging to measure. In particular, it should be noted that activities such as internships and seeing a psychologist are external program activities that are challenging to measure especially given the difficulty in data collection.

The duration of time (i.e. hours, weeks, sessions) for all of the 45 activities was not measured and reported in the individual studies making it challenging to assess the amount of services and interventions required to effect a change in the participant's risk and protective factors or behaviours.

Case Studies

Qualitative Case Studies

All of the studies included a qualitative analysis with focus groups, case studies and key informant interviews. There were a few case studies that demonstrated the impact of some of the NCPC YGPF programs. The following vignettes are selected excerpts from the case studies reported in the final evaluation reports.

Case Study #1: Drug dealer avoids a life of gang-involved crime

John was raised in the downtown core and eventually moved to Rexdale in one of Toronto's priority neighbourhoods¹⁷ before he was 10. His father, uncle and brother were all gang members, making it difficult for John to focus on pro-social activities. He decided to drop out of school in grade 12, leaving the educational system just four courses short of graduation, and began to sell drugs.

One day, he went to the local youth employment centre to see if he could find youth to sell drugs for him. During this visit, he was introduced to a PIT youth case manager, who asked him what his plans were and if there was any chance he would be interested in this gang prevention program. John did not self-identify as a gang member but decided to talk to this Youth Case Manager further to investigate what this program might be able to offer.

John decided to participate in the program and the group training sessions made a positive impact on his thinking and life. John saw the youth worker as a positive alternative to his gang-involved family members and enjoyed discussing his life challenges without any fear of reprisal.

During the program, John was one of the few participants chosen to go on a trip to Ottawa, where he met Senator Don Meredith. He decided at that moment that if he wanted to be a professional, he would need to complete his high school education and go on to college or university. When he returned from the trip, he re-enrolled in high school, graduated and became employed in a job.

¹⁷ Toronto designated 13 Priority Areas—these areas have been identified as having challenges in relation to social services

Case Study #2: Gangster finally makes an exit

The following vignette is from the Regina Anti-Gang Services Project (RAGS). The original words of the project participant have been maintained for this case study. Anthony was a 26-year-old who, after participating in the RAGS project, had finally left his gang. At the time of his writing this case study, he had been out of his gang for 22 weeks. He explains his circumstances below:

My mom passed away last month, my dad is in jail looking at a Dangerous Offender status. I was raised by foster homes and my grandma. I quit 3 months into grade 12 because I wanted to be a gangster, be cool. I got more hard into it. That's when drugs came in. Started off smoking weed, then to harder ones, coke and more. Started off somewhat positive with my friends then we all started taking off from school. Getting high then started off into drugs, violence, selling drugs then in and out of jail, after grade nine. I was doing missions for my gang, scamming and taxing people. Basically all drug dealers, doing armed robberies. I made the paper a couple of times. Even when I stayed in (city) I made the paper there – stabbing. I got a thrill outta that.

Twelve years of my life a gang member – half of my life. I am out now. I dropped my rag because of family life. I have three kids. I started basically seeing the better side of life, having friends who actually cared. Like when I was in the hospital, I found out who my friends really were, who my true friends were.

It wasn't easy getting out. Not just takin' a lickin', but I still got problems. I don't answer to anyone but myself. The hardest part was abandoning them. When I needed them they were there. But when I really needed them they were nowhere to be found. Having people like you guys (RAGS staff) around, for showing the positive side, what I never seen. There's more to life than that. Someone listening to you and you being heard. Cause I know I don't have to answer to anyone, I am in charge now."

Case Study #3: Gang-involved girl finds a way to lead a positive lifestyle

A 15-year-old girl was referred to Durham Youth Gang Services (DYGS) in September of 2008 by Durham Regional Police Youth Officers. She resided with her father in an area of the city where crime was prevalent. Her risk assessment profile indicated that her risk for gang involvement included: 1. lack of family support; 2. limited interest in education; 3. anti-social peers; and 4. substance use. The girl did not have a positive female role model, having been raised by her father who had little to no parenting skills. She had been seized by Children's Aid Society (CAS) the year prior to DYGS involvement and placed into care due to her anti-social behaviour. Her school attendance was poor to non-existent and she had multiple suspensions. During this time, she was exposed to domestic violence and was subjected to physical and mental abuse by a step-mother. She developed an eating disorder; committed acts of self-mutilation and had little trust in "institutions" and adults.

She became involved with a local Oshawa gang and was being used within the gang for prostituting and dealing drugs. Youth officers in the community recognized that she did not like the gang life style and referred her to the DYGS Gang prevention program.

The DYGS program primarily consisted of individual case management work, beginning with the establishment of a trusting rapport with the girl to address the areas of concern. Cognitive dissonance techniques were used during the motivation treatment sessions to improve current lifestyle choices with family, peers, education and substance use. Cognitive behavioural strategies were also used to improve her ability to manage conflicts. Advocacy for the girl occurred with multiple community providers including educational professionals, CAS, police, and lawyers.

The girl completed her involvement with DYGS in October 2009. Currently, she remains active in school and is consistently passing courses. She has attended several job interviews and participated in a co-op placement through her school. She remains pleased with the support from other agencies and adults. She no longer has on-going contact with legal authorities and has changed her peer network; becoming active in an art program where two of her pieces sold at a fundraiser for charity. She recently ran a 5 km charity race and is training to complete a 10 km run within the next few months. At present, she is contemplating a career in either law enforcement or nursing. Most importantly, she is no longer involved with any gangs or prostitution.

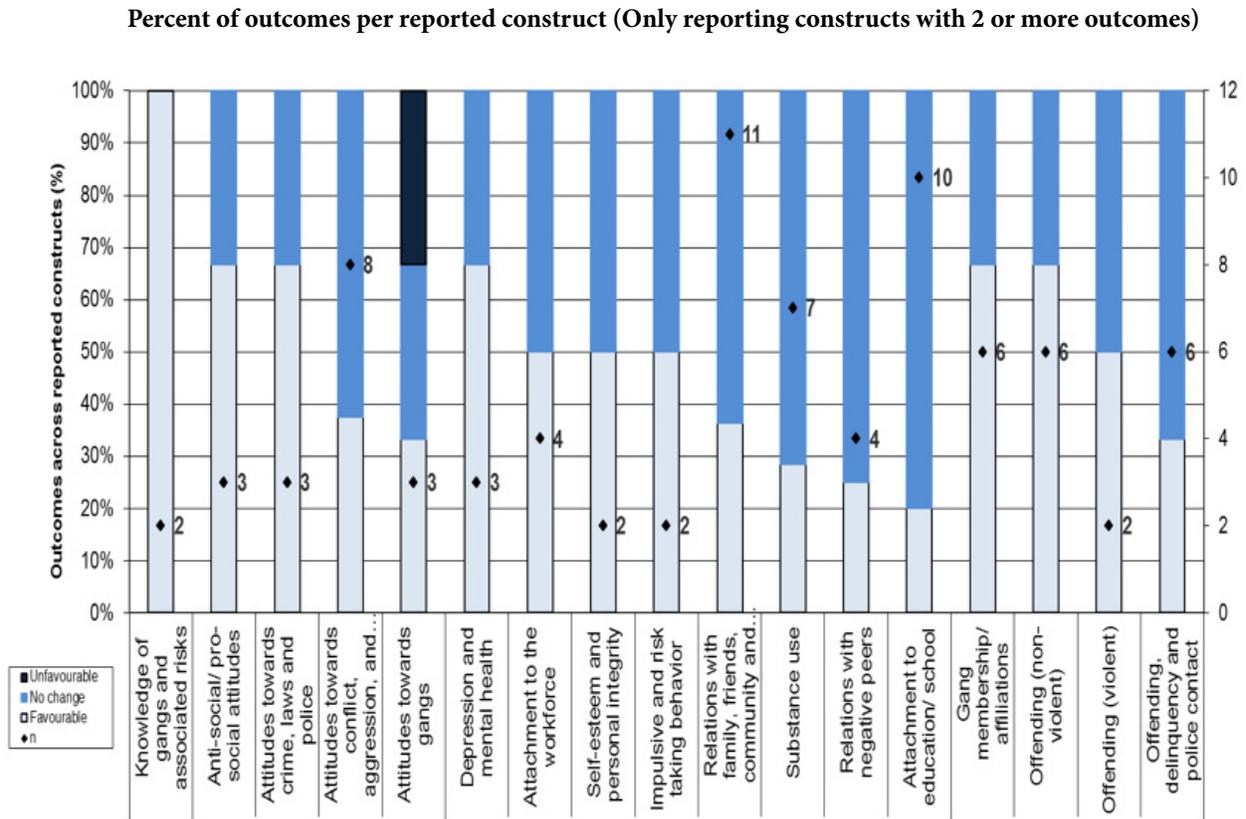
Summary

The findings suggest that the projects have contributed to some favourable change in youth's knowledge, attitude, risk/protective factors and behaviours. Table 8 below provides a summary of the percentage of evaluation studies that produced *favourable*, *unfavourable* or *no change* in the key outcomes measured. This table demonstrates that favourable changes were more likely to occur for some variables than others. It also identifies that no change is also more likely in some variables than others. The projects were more likely to bring about favourable changes related to a majority of the knowledge and attitudes measured. The favourable changes in risk factors and behaviours were demonstrated with outcomes related to: self-esteem; reduced gang membership; attachment to the workforce; impulsive risk taking behaviour; reduced police contacts; and non-violent offending. The table also demonstrates that outcomes related to: substance abuse, healthy family relationships, attachment to school, and violent offending were less likely to show favourable changes.

For example, approximately 70% of the evaluation studies did not show any change in reducing substance abuse among youth at risk for gang association or those already involved in a gang. Focus group and other relevant qualitative information related to these projects indicate that in some cases the target groups were not at high enough risk for substance abuse¹⁸ or there were no substance abuse treatment programs to directly address the type of drug being consumed. Projects found it challenging to identify and select the appropriate youth for such programs as these gang-involved youth were likely to be entrenched in patterns of illegal behaviour. Staff within the gang projects attempted to recruit youth presenting with multiple risk and protective factors but the interventions themselves did not offer services to address *all* the risk factors identified or may not have been able to provide the appropriate dosage.

¹⁸ In some regions use of hard drugs such as cocaine and heroin for example was not high enough to warrant change; the relatively low rates of use prior to the program were maintained at the end of the project.

Table 8: Summary: Percentage of evaluation studies contributing to changes in key outcomes



Conclusions

Results from these evaluation studies of youth gang projects represent the first deliberate and systematic attempt in Canada to develop knowledge of what works to prevent youth gang membership and offending related to youth gang activities. While there are still some unanswered questions remaining, much progress has been made through these efforts.

Adapting the model to the local Canadian context is essential

The gang prevention models implemented in Canada under the YGPF were developed in the U.S.A where they experience a different level of youth gang activity and violent crime. There was no prior experience in Canada implementing these types of gang-focused preventative interventions, resulting in local communities not being aware of the challenges and possible pitfalls related to a specific “model”. Through the implementation of these projects, it became clear that the same model could not be implemented in

exactly the same way in different communities. The level and quality of collaboration between agencies for example, contributed to potential variation of the models' implementation. In addition, we learned that while it is important to respect the evidence-based elements of the models, it is also necessary to develop tools, language and partnerships that are relevant for the community and the targeted youth.

Reaching the appropriate target group is essential and challenging

These projects have demonstrated that it is possible to achieve positive impacts to prevent and reduce gang membership and related offending. However, in all cases, recruiting participants with the most needs, and maintaining their involvement in voluntary activities proved to be very challenging. Youth who are gang members, or are at risk of being gang members, generally present more criminogenic risk factors and are more entrenched in criminal lifestyles. Not only are they difficult to reach, but they are also extremely difficult to recruit and retain in gang prevention programs. When the target groups recruited for gang prevention programs are not at the highest risk, or are not gang-involved there is less likelihood of observing the necessary changes required to prevent crime.

Certain models appear to achieve greater impacts in gang prevention

While information about effective models is limited at this time due to the reasons previously stated, of the seven hybrid models implemented, three in particular should be strongly considered for replication in communities that experience youth gang issues. At this point, the Wraparound, MST (hybrid), and Case Management models demonstrated a higher percentage of favourable change in outcomes related to risk and/or protective factors and behavioural change. In addition, project recipients who implemented the Wraparound projects expressed that the benefits of implementing this type of model included: 1. inclusion of youth presenting with multiple risk factors; 2. ability to partner with a diverse group of partners who can provide supplementary services; 3. greater diversity of therapeutic approaches (i.e. cognitive behavioural approaches) used; and, 4. resources of a diverse group of case managers with practical skill sets. Qualitative findings suggest that project recipients found the Wraparound and Case Management models easier to implement due to the flexibility of the elements in the model.

Moving forward

Key lessons learned from the first five years have been incorporated in a second wave of youth gang projects. These include modifications to the models selected for implementation and making more information available (i.e. fidelity and risk assessment related tools) to recipient organizations to help them recruit appropriate target groups and implement the projects as intended.

Recommendations to engage more families during project implementation and to strengthen partnerships have also been incorporated in NCPC's paper, *Prevention of Youth Gang Violence: Overview of Strategies & Approaches (2012)*. Finally, new projects were asked to submit letters of support that demonstrate their partners' ability to provide referrals and the necessary services to address specific risk factors of youth in the community and provide supporting data. Stronger letters of support were received from the police and school boards indicating that recipients would obtain more support from these important partners.

Building the Canadian-made knowledge base of effective crime prevention practices and working to ensure the dissemination of good practice and lessons learned are essential components of a strategy that will allow community stakeholders and provincial and territorial partners to choose the most appropriate programs for their local realities and make the best use of limited crime prevention resources.

For more information or to receive a copy of the final evaluation report, please contact the National Crime Prevention Centre by e-mail at prevention@ps-sp.gc.ca.

If you wish to register for the NCPC mailing list to receive information from the Centre, please visit the subscription page at: <http://www.publicsafety.gc.ca/cnt/bt/mlng-lst-eng.aspx>

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For more detailed information on each YGPF evaluation study, visit the Public Safety Canada website on the Building the Evidence Series: <http://www.publicsafety.gc.ca/cnt/rsracs/pblctns/index-eng.aspx?t=yth-gngs>.