Advancing Knowledge To Reduce Gangs and Gang Violence: Perspectives From Researchers and Practitioners

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Overview
A key part of the research process at the National Institute of Justice (NIJ) involves engaging with the field to identify needs and advance a research agenda. On May 12, 2020, NIJ held a virtual meeting with researchers and practitioners to ensure that NIJ’s investments in research on gangs and gang violence continue to close gaps in our knowledge on this topic. The goal of this meeting was twofold: first, to inform the development of evidence-based programs, policies, and practices to address problems associated with gangs and gang violence; and second, to advise NIJ on the use of robust research and evaluation methods to address problems associated with gangs and gang violence.

The researchers and practitioners invited to the meeting had expertise in several areas, including gangs, program development and implementation, program evaluation and research design, firearms, violent crime, justice policy, juvenile justice, law enforcement, and corrections. Besides researchers and practitioners, NIJ invited stakeholders from the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the Bureau of Justice Assistance (BJA) to attend the meeting as observers. OJJDP and BJA are NIJ’s sister offices that often provide funding to jurisdictions for implementing approaches with demonstrated effectiveness. A full list of participants may be found in Appendix A.

In advance of the meeting, participating researchers and practitioners were asked to consider a few questions to guide the meeting’s discussion:

- What are the biggest gaps in our knowledge on how to reduce problems associated with gangs and gang violence?

- What hurdles exist to conducting robust research and evaluation studies? How might we overcome them?
The meeting included a series of presentations and structured discussions on the following topics:

- State of Knowledge on Addressing Gang and Gang Violence Problems
- Identifying and Addressing Hurdles to Using Robust Research and Evaluation Methods
- Identifying Priorities To Advance Knowledge

The presentations focused on the research on gangs that NIJ has funded since 2012, information in CrimeSolutions on how to address gangs and gang violence, a randomized controlled trial (RCT) of a gang intervention program in Denver, and lessons learned in addressing hurdles to rigorous research on a gang prevention program in Philadelphia. The agenda for the meeting can be found in Appendix B.

This report shares participants’ perspectives on the topics discussed. The report may inform the priorities of researchers, practitioners, and policymakers as they make investments in studying or developing programs to address gangs and gang violence.

The Current State of Knowledge

To help frame the conversation on the state of knowledge regarding how to address problems associated with gangs and gang violence, the session began with a presentation on NIJ’s research investments on the topic. This presentation included a review of information relating to the evaluation of anti-gang programs and practices available in CrimeSolutions, an NIJ-managed repository of programs and practices that have been evaluated for their effectiveness.

From fiscal years 2012 to 2019, NIJ funded 23 gang-related studies. Nine of the 23 studies were program evaluations, including six RCTs. Three of the 23 studies addressed the Comprehensive Gang Model (CGM), two evaluated focused deterrence efforts, and two evaluated a prevention program called Functional Family Therapy–Gangs. Twenty-one of the studies focused on gangs in the community, and two addressed gangs in prison. These studies filled knowledge gaps in a number of areas, including the role of collaboration in the CGM, questions about dosage in focused deterrence efforts, and gang involvement in various types of criminal activity.

Among the programs evaluated in CrimeSolutions, information about program effectiveness is mixed. At the time of the meeting, 21 programs targeted to gang violence were rated in CrimeSolutions: five categorized as effective, 11 as promising, and five as having no effect. Among the effective and promising programs, there is an assortment of different types of programs. Some of these programs incorporate enforcement, but disaggregating the relative effects of different enforcement strategies is difficult. Several primary prevention programs also fall into the effective and promising categories in CrimeSolutions, but in many cases, it remains hard to know how well they are targeting youth at risk for gang membership. The effectiveness of variations on a model such as the CGM can differ considerably, which underscores the fact that these models and programs are difficult to implement with fidelity and require a high degree of implementation quality.

Participants’ Perspectives on the Current State of Knowledge

Participants identified several areas where our knowledge is limited. Many of these pertained to questions surrounding the effectiveness of particular programs and strategies, but participants also raised
several other issues that research could examine to inform program development and improve our understanding of gangs and the communities impacted by gangs.

Questions on Program and Strategy Effectiveness

With regard to the effectiveness of programs and strategies aimed at individuals who are gang-involved or at risk of gang involvement, participants identified the following knowledge gaps:

- The effectiveness of specific elements included in a variety of programs, such as multidisciplinary teams and outreach workers/violence interrupters.

- The impact of focused deterrence programs.

- How family members may be helpful in reducing gang engagement.

- How addressing trauma may improve program impact.

- The effectiveness of programs specifically designed to address problems associated with gangs, as opposed to focused deterrence or general violence reduction programs like Operation Ceasefire.

In addition to wanting to know broadly about the impact of outreach workers/violence interrupters, participants called for improving knowledge on:

- What role outreach workers/violence interrupters can play in preventing retaliatory violence, and whether they serve as credible messengers to aid in desistance.

- Whether outreach workers/violence interrupters are a “must have” for intervention efforts.

- Which model for outreach workers/violence interrupters is the most effective (e.g., conflict mediation, clinical model, or mentorship counseling).

- How to train individuals to serve as outreach workers/violence interrupters.

- How to address burnout and secondary trauma experienced by outreach workers/violence interrupters.

Participants identified several knowledge gaps regarding focused deterrence programs:

- How can the impact of outreach workers be disentangled from other elements of focused deterrence?

- What are the long-term effects of focused deterrence on reducing problems associated with gangs?

- How can focused deterrence efforts be tailored to specific communities, particularly with regard to program sustainability following a change in law enforcement or political leadership?

The effectiveness of strategies other than direct service provision to gang-involved individuals was also identified as a topic in need of advancement. Participants called for further investigation of:

- The impact of state and federal gang legislation, including whether varying the definitions of gang membership impacts the success of approaches to addressing gang-related problems, and if so, how.

- The impact of sentencing enhancements for gang membership.
Questions surrounding law enforcement gang databases, such as:

— The value they add to police intelligence gathering.

— What happens when data collection is stopped.

— Their influence on gang dynamics.

— The accuracy of the data, and how law enforcement addresses inaccurate or outdated database entries.

Recommendations for Improving Knowledge About Gangs and Related Issues

Beyond questions about the impact of programs themselves, participants made a number of recommendations directed to researchers about how to improve our knowledge of the impact that external factors may have on the success of gang programs. Participants recommended that researchers consider factors that may protect against gang involvement when evaluating gang programs. They called for the need to improve understanding of the role played by the organizational atmosphere in which the program operates. They encouraged greater attention to understanding how the community in which a gang member resides may impact the success of an intervention in the short and long term. Relatedly, they recommended using social network analysis to better understand and address the relationships gang members have with others, with the goal of preventing negative outcomes such as getting shot with a firearm or rejoining a gang.

Recognizing that the structure and operations of gangs may change over time, attendees pointed out some areas where changes may have occurred, but about which we have limited information. These areas included:

— Social media use, in particular:

  — Whether social media use has increased substantially among those who are gang-involved.

  — What impact social media use has on intra-gang tension.

  — How social media use may help track the degree of an individual’s engagement with a gang.

  — Whether social media can be used as a tool to provide interventions to gang-involved individuals.

— The illegal activities of gangs, including the possibility of their increased involvement in human trafficking and fraud.

Much of the discussion throughout the day pertained to questions about gang-involved individuals who are residing in the community, but participants also expressed interest in improving our understanding of individuals involved with gangs while they are in prison. Further, participants sought information on how prison gang involvement impacts reentry and whether prisons facilitate the development of social networks among those who are gang-involved.

Finally, participants posed two stand-alone questions for investigation:

— How can various organizations and agencies work better together to address gang violence more comprehensively and with less redundancy?

— Can people be trained to serve as boundary-spanners? (Boundary-spanners are individuals who are able
to work successfully across networks or systems. In the context of gang research, it is not yet clear whether street outreach workers can be trained to talk to and build bridges with and among law enforcement, public health, and other systems.)

**Recommendations for Research Designs and Methods**

Participants offered several recommendations on research designs and methods that could improve the state of evidence on effective approaches to addressing gang-related problems. In terms of research designs, they expressed support for the importance of RCTs. However, they indicated that when RCTs are not possible, researchers should consider using statistical approaches to address weaknesses associated with the selected design. They also recommended that mixed-methods approaches incorporating both qualitative and quantitative data be used to understand the nuances associated with program implementation and outcomes.

There was a call for replication studies in order to facilitate scaling up evidence-based programs. Participants recommended that NIJ encourage replication studies in its solicitations. This might include calls for new evaluations or studies that use existing data. To encourage replication, they also recommended that NIJ look to the open science movement for suggestions and consider funding academic centers of learning that could implement programs and undertake evaluation studies at multiple sites. Participants noted that when sufficient evidence has accumulated to support scaling up a program, the support of stakeholders such as practitioners and community members should be secured prior to encouraging widespread implementation of the program.

**Hurdles and Solutions for Rigorous Research and Evaluation**

The day’s second discussion was centered on identifying and addressing hurdles that stand in the way of using rigorous research and evaluation methods. This discussion began with two presentations on NIJ-funded RCTs that encountered and overcame a number of hurdles. The first presentation pertained to an evaluation of the Gang Reduction Initiative of Denver. The second pertained to a multistudy evaluation of the Functional Family Therapy–Gangs program in Philadelphia.

**Two Case Studies**

**Gang Reduction Initiative of Denver**

The Gang Reduction Initiative of Denver (GRID) was established in 2011. It takes a multidisciplinary approach that includes street outreach workers. The multidisciplinary GRID team aims to reduce redundancy and coordinate case management for young people referred by juvenile probation and other groups. In 2016, Pyrooz and colleagues began an evaluation of GRID by conducting a pilot project with a one-group preexperimental design to assess short-term changes. The pilot project demonstrated a number of positive results. In 2018, Pyrooz received funding from NIJ for a full-scale RCT and process evaluation of GRID.

The foremost challenge with the RCT was securing buy-in to conduct randomization. This occurred at the executive level.

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as well as in the community and the criminal justice system. Another concern was the long study time and wait for results — 3 to 4 years. There were also serious concerns that the university would take over referrals and dictate who received treatment. Pyrooz stated that the study team worked to explain the value of the randomized design through many meetings and emails. Once stakeholders understood that hand-selecting highly motivated people would undercut their work, and once referral partners understood that all clients would get some treatment (though not necessarily a multidisciplinary team with street outreach service), they were on board. The details of the randomization process were specified in advance and supported by stakeholders, which helped prevent contamination of the process. Being part of a university with a long history of involvement in the community also helped establish the researchers’ credentials. During the study, which was ongoing as of the meeting, external factors like COVID-19 and staff turnover have been a challenge, but new staff remain committed.

Pyrooz’s major takeaway from this experience was that building trust and establishing a track record, via the pilot study, was important. It demonstrated the team’s research capabilities and the potential value of an RCT. It also demonstrated that the team was interested in establishing basic facts about the program, not in showing staff how to do their jobs. The researchers hired people and trained them to communicate clearly what the evaluation was aiming to establish. Finally, they tried to be flexible and accommodate needs, but remained steadfast about conducting an RCT due to commitment from the city.

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institutional review board (IRB) due to the vulnerable population being studied. The researchers worked closely with the IRB and consulted with a designated prison representative and ethicist to make sure study policies were clear and forms met requirements.

Once research was underway, a number of other issues arose. First, it was difficult to track and interview this hard-to-reach population. The youth could be living in an institution or without a fixed address. For the study to succeed in this context, it was critical to use various outreach strategies, establish a tracking protocol with clear staff assignments, and create a database for tracking responses and updating contact information. Maintaining ongoing interest in a program with a long-term follow-up is also challenging, as changes in leadership, public sentiment, and policy occur. However, a fortunate byproduct of the study’s partnerships with child-serving agencies was a move within those agencies toward more evidence-based decision-making, which resulted in higher data quality. This underscores that building relationships and prioritizing data-sharing agreements and memoranda of understanding are critical.

Discussion on Hurdles and Solutions

Much of the discussion surrounding hurdles and solutions to conducting rigorous research and evaluation centered on data collection for RCTs. Other points pertained to access to existing data and program implementation.

Conducting Randomized Controlled Trials and Other Rigorous Designs

As discussed previously, participants saw great value in conducting RCTs due to the power of the design to produce information on whether a program produces desired outcomes. Randomly assigning participants to either the treatment or control group is intended to create equivalence between the two groups so that one can have confidence in attributing results to either the program or an alternate explanation. Both researchers and practitioners expressed challenges associated with getting buy-in for an RCT from program staff or other stakeholders, and with the time it takes to carry out an RCT.

On the buy-in issue, the primary hurdles attendees expressed pertained to stakeholders’ lack of understanding of what randomization means and concerns about withholding services from individuals in the control group. The concerns about withholding services related to the belief that the treatment being tested would be beneficial for all in the study. In discussion, both researcher and practitioner participants offered solutions that they had used to overcome these hurdles. These solutions can be classified into three categories: communication and training, relationship development, and pilot studies.

Attendees reported that conducting discussions and trainings to improve stakeholders’ understanding of RCTs and their benefits is one way to overcome reluctance to RCTs. Attendees offered a number of examples of success on this issue. They expressed the value of asking stakeholders to express their concerns about random assignment and of being flexible, when possible, about how the study is carried out. Providing detailed explanations of how data will be used is helpful. Having discussions helps foster relationships, trust, and understanding on both sides. Fostering relationships and understanding can also be accomplished by trying to understand the perspectives of the program staff and other stakeholders on what it means to be a member of a gang or why someone may participate in a particular gang-related activity.

One key insight is that program staff seek credit for their work. In response to this,
researchers and others supportive of RCTs have explained that they value the work staff are trying to accomplish and are interested in documenting that work and identifying what it has achieved. When a program has insufficient resources to serve everyone who seeks its services, the argument for the randomization that accompanies RCTs can be used to convince stakeholders that it will help identify who can benefit the most from the program (e.g., clients at high risk of being victims of gun violence). Then, those who benefit the most can be targeted for services.

Concerns about RCTs will likely take time to resolve. Attendees indicated that time is needed to hold the discussions and trainings that will generate trust. Time is needed to plan an evaluation to ensure study procedures will work, or to conduct a preexperimental pilot study to determine whether the program is well positioned for an RCT. In the cases raised by participants during the meeting, the time needed to secure support for an RCT or conduct a pilot test was well over a year. This suggests that researchers and practitioners should begin planning well in advance of seeking external funding to support a study.

Developing researcher-practitioner partnerships can be helpful in planning a pilot or rigorous study, such as an RCT, and these partnerships have other benefits. They can be useful for quickly addressing problems that arise during the course of an evaluation. Further, practitioners can help researchers to develop messaging for staff regarding the value of research, the importance of randomization, and demonstrating accomplishments. These partnerships are not static; as staffing and other changes occur, researchers should be prepared to cultivate new relationships throughout the project.

Rigorous studies may take several years, particularly if they track outcomes for three or more years following the end of program participation. These studies, though valuable, face challenges that should be anticipated and addressed in the planning stages and throughout the study. Given the sensitivity that often accompanies evaluations of anti-gang programs, a change in program staffing or political leadership may jeopardize the study — either because new leaders are not supportive of the randomization accompanying the study, or because they lose interest in waiting for study results.

Funding agencies may not fund studies for more than a few years at a time, requiring researchers to seek multiple funding sources or face funding gaps. Early-career academics concerned about getting tenure may shy away from these long-term studies absent incentives to pursue them. Studies requiring contact with individuals over the course of several years can expect a great deal of attrition, as individuals may become incarcerated or otherwise difficult to locate and contact. Researchers should plan to expend significant resources to locate and engage with individuals for follow-up data collection.

Multiple attendees raised a concern they called “researcher fatigue.” Not to be confused with the research fatigue associated with those who are the subject of study, researcher fatigue pertains to those conducting the research. One researcher who focuses on studying one program across multiple sites over the course of many years (i.e., conducting replication studies) is very valuable for the knowledge-building process, but this singular focus may take a toll on the researcher. This is researcher fatigue. Attendees recommended that researchers other than the ones who conducted the original study should be encouraged to conduct replication studies. Further, they recommended that NIJ explicitly request replication studies in funding solicitations.
Program Implementation

Without a program, evaluation is not possible. Attendees raised several issues of particular concern related to programs serving gang-involved individuals.

First, attendees had experienced some challenges with policymakers who did not want to acknowledge a gang problem even in the face of evidence that a problem existed. Relatedly, some stakeholders expressed concern with the labeling or unfair treatment individuals may receive if they participate in a so-called gang prevention or intervention program. Researchers were able to overcome these two problems with the same solution: name the program with language that pertains to the services provided by the program, rather than the target population served by the program.

It is common for anti-gang programs to employ former gang members in a variety of capacities, including as outreach workers, violence interrupters, or peace ambassadors. These are typically front-line positions working directly with gang members. Some cities see employing these individuals as a risky endeavor, fearing that they will engage in negative behavior. Attendees offered strategies — making investments in training and support, establishing standards of conduct, and improving understanding of acceptable and unacceptable behavior — to address these concerns and facilitate program implementation.

Ensuring that staff understand and implement their positions with fidelity can be a challenge. Clearly defining their roles (including what is not under their purview) and providing training can aid in gaining political support for employing former gang members. One possible solution is to require training and certification for front-line staff.

Data Access

In discussion on the state of knowledge regarding gangs and gang violence, participants recognized the important role that access to criminal justice system data can play. They expressed interest in learning more about issues like the impact of gang legislation and gang databases maintained by law enforcement. Researchers at the meeting expressed that they have faced resistance in getting permission to access these data. Though the discussion on resistance was limited, there was acknowledgment that political pressures faced by law enforcement regarding gangs and uneasiness regarding how the data will be used in a study contribute to resistance. Researchers have had some success in overcoming this resistance and easing concerns by building relationships and prioritizing data-sharing agreements and memoranda of understanding. They cautioned that researchers should make sure that access to such administrative data is accompanied by a strong understanding of how to interpret the data.

Identifying Priorities To Advance Knowledge

Attendees identified research priorities that would address both long-standing gaps in knowledge as well as emerging issues related to gangs. They also offered advice about techniques to use to fill these gaps.

In terms of long-standing knowledge gaps, attendees emphasized the need for research on:

- Improving understanding of gang involvement in corrections settings.
- Identifying the best target populations for anti-gang programs.
- Expanding awareness regarding the heterogeneity of gang operation.
Understanding what constitutes “high risk” of gang involvement.

Both youth and adults who are or may become involved in gangs.

Research that would address basic questions about gang involvement in correctional settings as well as program evaluation is seen as important to understanding gang politics and other broad issues associated with gang involvement in corrections. Such research may also identify interventions that could prevent gang-related problems once individuals are released to the community.

Attendees also expressed interest in conducting RCTs to help answer key questions about how to identify individuals who would be best served by anti-gang programs.

Our limited understanding of the heterogeneity in how gangs operate was also noted as a high-priority knowledge gap. These differences may be important to our understanding of criminal activity and how gangs operate geographically (e.g., within a neighborhood or across state lines). There is strong interest in studying gangs at multiple sites and conducting cross-site analyses in order to improve understanding of gang heterogeneity and how factors like sociopolitical issues impact program success.

Finally, there were two concerns about who should be studied. We need to advance our understanding of what constitutes a “high risk” or “acute risk” for gang involvement or negative outcomes. In addition, research and programming should include gang-involved adults as well as youth.

There were several emerging issues about gangs that participants thought should be made priorities for study. These included:

- The changing nature of gang membership.
- Changing gang structure.
- The role of social media in gang operations.

Participants expressed that by examining how gang structures and membership may be changing, as well as understanding how gangs are using social media, we will be better positioned to address current problems associated with gangs. Attendees wanted to prioritize learning about how social media may impact gang behavior, including how it may change definitions of gang membership and be responsible for shifting gangs to being less turf-oriented. Social network analysis was recommended as a technique to help improve understanding of changing gang structure. As definitions of gang membership change, the label of gang member may no longer be sufficient for describing patterns of gang involvement. Research should be responsive to these changes; this may include focusing on the behavior of individuals, rather than using the label of gang member. Attendees recommended that researchers become aware of emerging gang issues by engaging with individuals who have knowledge about gang issues in a particular community and have the trust of that community and its local government.

In the discussion about research priorities, there were a number of cautions about relying exclusively on police data. There are concerns that police data typically produce low estimates of gang-related violence compared to the higher levels of violence reported by gang members themselves. Many gang-related incidents may not appear in police arrest records or be officially linked to gangs. As in the discussion about gang databases, there
were general concerns about the accuracy of police data on gang involvement. Those impacted by gang crime, such as community members, may be better sources of information. Participants urged researchers to be cautious about using only police data and to consider other sources as well.

Conclusion
Participants responded to NIJ’s call for information on how to advance a research agenda on gangs and gang violence by offering diverse perspectives on knowledge gaps and priorities. Researchers and practitioners advised NIJ on both emerging and long-standing concerns and offered recommendations for research designs and other issues related to conducting studies to address gangs and gang violence. They relied on their rich experiences in working with and conducting research on gangs, including some research funding by NIJ. As research continues to improve our understanding about gangs and gang violence, it can be used by policymakers, researchers, and practitioners to inform the development of evidence-based programs, policies, and practices.
Appendix A: Meeting Participants

NIJ thanks the following researchers and practitioners for their valuable contributions during the meeting:

Eddie Bocanegra, *READI Chicago*

Martin Bouchard, Ph.D., *Simon Fraser University*

Stacy Calhoun, Ph.D., *UCLA Integrated Substance Abuse Programs*

Paul Callanan, *independent consultant formerly with Gang Reduction Initiative of Denver*

Jacob Cramer, Ph.D., *Tucson (AZ) Police Department*

James Densley, Ph.D., *Metropolitan State University*

B. Heidi Ellis, Ph.D., *Harvard Medical School and Boston Children’s Hospital*

Erika Gebo, Ph.D., *Suffolk University*

Denise Herz, Ph.D., *California State University, Los Angeles, and City of Los Angeles Mayor’s Office of Gang Reduction and Youth Development*

Brook Kearley, Ph.D., *University of Maryland*

Edmund McGarrell, Ph.D., *Michigan State University*

David C. Pyrooz, Ph.D., *University of Colorado Boulder*

Fernando Rejón, *Urban Peace Institute*

Office of Justice Programs attendees were:

Mary Poulin Carlton, Ph.D., *National Institute of Justice*

Barbara Tatem Kelley, *National Institute of Justice*

Catherine McNamee, *Bureau of Justice Assistance*

Cynthia Pappas, *Office of Juvenile Justice and Delinquency Prevention*

Phelan Wyrick, Ph.D., *National Institute of Justice*
Appendix B: Agenda

11:00 a.m.  Sign on to Webex (Eastern)

11:30-11:45  Welcome and Meeting Purpose
Mary Poulin Carlton, NIJ

11:45-12:00  Introductions
All
Why is this topic important to you?

12:00-12:30  Panel 1
Mary Poulin Carlton
Phelan Wyrick
State of Knowledge on Addressing Gang
and Gang Violence Problems

12:30-1:30  Q&A and Discussion

1:30-2:00  Break

2:00-2:30  Panel 2
David Pyrooz
Brook Kearley
Identifying and Addressing Hurdles to Using
Robust Research and Evaluation Methods

2:30-3:30  Q&A and Discussion

3:30-3:45  Break

3:45-4:45  Discussion
Identifying Priorities to Advance Knowledge

4:45-5:00  Concluding Thoughts

5:00  Adjourn