RESEARCH ARTICLE

Evaluation of a Cape Town Safety Intervention as a Model for Good Practice: A Partnership between Researchers, Community and Implementing Agency

Tali Cassidy*, Melikaya Ntshingwa†, Jakub Galuszka‡ and Richard Matzopoulos§

VPUU has a wealth of experience to share and is engaged with broader national and international policymakers and implementing agencies. Researchers are grappling with the difficulty of providing a rigorous project evaluation for these collaborations which could identify project elements that work with a view to their replication. This paper traces the evolution of an evidence-based approach to violence prevention in the Western Cape Province of South Africa. The Violence Prevention through Urban Upgrading (VPUU) project in Cape Town uses such an approach, and relies on a 'whole-of-society' methodology as well. The project and the difficulty of its evaluation are discussed. A partnership between VPUU, researchers, the community and local government has revealed both opportunities and obstacles, which are the subjects of a case study described here.

Introduction and Background

South Africa has unusually high levels of interpersonal violence which accounts for approximately 36 deaths per 100,000 people. It also accounted for 3.5 per cent of both deaths and Disability Adjusted Life Years lost (DALYs) in 2010 (IHME 2014). In 2000 homicide-related deaths accounted for thirteen per cent of premature mortalities and was the second leading cause of Years of Life Lost (YLLs) after HIV/AIDS (Bradshaw et al. 2004). Violence also greatly contributes to the burden of disease when taking into account the effects of violence on other health issues such as mental health and risk-seeking behaviour, which increases the violence burden to 10.5 per cent of DALYs (Norman et al. 2010).

* University of Cape Town School of Public Health and Family Medicine, South Africa, Sustainable Urban Neighbourhood Development, South Africa talicassidy@gmail.com
† Sustainable Urban Neighbourhood Development, South Africa, Violence Prevention through Urban Upgrading Not-for-profit Company, South Africa melikaya@sundevelopment.co.za
‡ Violence Prevention through Urban Upgrading Not-for-profit Company, South Africa jakub@sundevelopment.co.za
§ University of Cape Town School of Public Health and Family Medicine, South Africa, Medical Research Council Burden of Disease Research Unit, South Africa richard.matzopoulos@gmail.com
Primary risk factors for violence that are particularly salient in the South African context include individual and behavioural factors such as gender, age and substance abuse; neighbourhood-level risk factors such as exposure to violence in the community and poor housing; and structural factors like poverty and inequality (Myers & Naledi 2007). Inequality is a proven, international risk factor for interpersonal violence in many high-income countries (Krahm, Hartnagel & Gartrell 1986; Sampson, Raudenbush & Earls 1997), though interpersonal violence is more concentrated in areas of poverty and deprivation (Butchart, Phinney, Check & Villaveces 2004). The relationship between inequality and violence has been explained using the concept that relative deprivation breeds social tensions (Fajnzylber, Lederman & Loayza 2002) which then causes unrest and violence in these poorer areas (Butchart, Phinney, Check & Villaveces 2004). South Africa is currently not only one of the most violent countries in the world, but also one of the most unequal with a Gini coefficient — a measure of income inequality — last reported at 63.1 in 2009 by the World Bank (2012). The association with inequality is reflected in the distribution of violence in Cape Town, the Western Cape's largest city and home to almost two thirds of the provincial population. The highest homicide rates were recorded in the relatively impoverished sub-districts of Nyanga (132 per 100,000 people) and Khayelitsha (120 per 100,000 people). These rates were double the citywide homicide average of 66 deaths per 100,000 people and three times the rate recorded in the city centre (42 per 100,000 people) (Groenewald et al. 2010).

Major social changes and demographic shifts resulting from migration and spatial expansion of cities into rural areas (Montgomery 2008). In South Africa, large-scale internal migration from rural to urban areas in the late 1980s coincided with the relaxation of the apartheid-era Group Areas and Influx Control legislation. More recently, cross-border migration has increased as a result of migrants being displaced by civil unrest and economic instability in countries north of South Africa. This has placed a considerable burden on an already-stressed social infrastructure and services, particularly in the peri-urban communities that were the primary sites for the xenophobic violence in May 2008 (Kapp 2008). Between 2001 and 2006 the Western Cape experienced 100 per cent net migration, the highest of all South Africa’s nine provinces. Among these migrants was a disproportionately high number of males between the ages of 20 and 34 years who have the highest violence incidence records. This trend is projected to continue (Groenewald 2008). According to 2011 census data, approximately eight per cent of Western Cape residents had moved from another province since 2001 (Stats SA 2012). These rates are higher in informal settlements such as Khayelitsha (Stats SA 2011).

Consequently, interpersonal violence was identified as one of the province’s key public health challenges and a prevention priority by the Provincial Cabinet, which commissioned the Burden of Disease (BoD) Reduction project (Myers & Naledi 2007). This project comprised two key components. First, improved data collection was an integral part of the overarching project. The project institutionalised an all-cause mortality surveillance system across the province (Naledi & Househam 2009) and an injury mortality surveillance system (Matzopoulos et al. 2010) complemented by pilot studies for non-fatal injury surveillance (Govender, Matzopoulos, Makanga & Corrigall 2012; Schuurman et al. 2011). The second part of the project was composed of a review of risk factors and interventions for interpersonal
violence prevention with a focus on distal (upstream) interventions involving sectors other than health. This second aspect informed a multi-sectoral violence prevention approach for the province. The review identified numerous examples of other upstream interventions which have been deemed promising and have relevance in the Western Cape, where new and innovative solutions to the high rate of interpersonal violence need to be found (Matzopoulos, Bowman, Mathews & Myers 2010).

These interventions include early childhood development programmes and school feeding schemes to combat malnutrition. Malnutrition affects cognitive development and poses risks conducive to violence. Community responses to issues such as alcohol abuse, child welfare, education and firearm prevalence can also be supported by policy and legislative measures. Increased regulation of liquor outlets, support for substance abuse programmes, incentives for youths to remain in school, and providing safer school environments and stricter firearm regulations are examples of these community responses. Other upstream interventions include measures to reduce poverty such as employment and micro-finance programmes, as well as improved government services for both offenders and victims. This means working within a more efficient criminal justice system and having more comprehensive victim support services.

In this paper we explore the convergence of two initiatives within different tiers of government in the Western Cape that embrace an holistic approach to violence reduction and public safety: the Western Cape Government’s Integrated Violence Prevention Policy Framework (‘Policy Framework’) adopted in August 2013 (Matzopoulos & Myers 2014) and the City of Cape Town’s flagship Violence Prevention through Urban Upgrading (VPUU) programme (CoCT 2014; WCG 2013).

Both of these initiatives recognise that the root causes of violence are complex. Therefore both emphasise the importance of focusing on and prioritising upstream interventions to address root causes, and evaluating these causes based on the best evidence available. This requires an assessment of effectiveness and impact in addition to facilitating the instruction of key lessons. Two grants from the Canadian International Development Research Centre currently support the development of the city’s VPUU programme, as well as an evaluation framework of the Western Cape Liquor Act, a provincial legislative intervention aimed at reducing alcohol access and availability. This paper will focus on the evaluation of the former intervention, VPUU.

The evaluation research focuses on Khayelitsha, Gugulethu and Nyanga, selected low-income communities with high rates of violence that have emerged as focal points for the Provincial Government’s violence prevention and injury surveillance activities. The findings will inform scholars of the best methods for both intervention implementation and evaluative research. We reflect on the challenges of developing and implementing the evaluation framework and focus in particular on the tensions arising from applying an ‘intersectoral approach,’ that is, an interdepartmental government collaboration, to the ‘whole-of-society,’ which necessitates buy-in and participation from a range of community groups (WCG 2013).

The Provincial Government’s Integrated Violence Prevention Policy Framework

The Provincial Government’s prevention approach encapsulated in the Policy Framework embraces evidence-based methods and advocates the transition from a law enforcement-centred approach to a more comprehensive preventative public health approach. A variant of an ecologically-oriented perspective on human health and development, this approach recognises violence as the outcome of complex causal pathways that intersect individual, familial,
community and societal systems’ (WCG 2013). It acknowledges that although the Department of Health has taken the lead in developing the policy, successful implementation requires intersectoral cooperation across the whole of society including ‘role-players in the public health, criminal justice, educational and social development sectors, and the active participation and partnership of citizens and civil society more broadly’ (WCG 2013).

The Policy Framework draws on the work of the BoD Reduction Project, organized under the previous African National Congress-led Western Cape Government, and its specific call for an intersectoral approach to address the upstream contributors of major diseases, including violence and injury (Myers & Naledi 2007). There was continuity of approach under the subsequent Provincial Transversal Management Structure/System (PTMS), adopted by the current Democratic Alliance (DA)-led provincial government in 2007 and that centred on 12 Provincial Strategic Objectives (WCG 2011). This continuity is crucial for the engagement of the key prevention strategies because they require sustained long-term efforts in order to affect the root causes of violence.

The first indication of the emergence of a violence prevention concept amongst the many other intersectoral priorities of the current provincial government was the 5th Milestones of a Global Campaign for Violence Prevention Meeting: ‘Joining forces, empowering prevention,’ held in Cape Town in September 2011. The event was co-hosted by the World Health Organization (WHO), the National Ministry of Health and, most importantly, the Provincial Government, rather than just its Health Department. It featured keynote addresses by the Premier of the Western Cape alongside the National Health Minister and other high-ranking officials from several provincial departments. It was at this conference that the need for a policy framework was first noted. With support from the Department of Community Safety and other agencies in the Human Development sector, the Policy Framework, which coheres broadly with the Provincial Transversal Management Structure and its twelve Provincial Strategic Objectives (WCG 2011), was formally adopted by the provincial Cabinet in September 2013.

The Policy Framework adopts a ‘whole-of-society’ approach to preventing violence and emphasises the need for ongoing consultation with community organisations and stakeholders. It acknowledges that policing alone cannot address the social determinants of crime and violence, and that the root causes of crime need to be addressed by interventions which include infrastructural changes such as lighting, improved public spaces and safer public transport; interventions which target youths such as meaningful afterschool activities; and long term societal and structural interventions such as improving the education system and economic development (WCG 2011). This approach is consistent with the National Development Plan which aims to combat the principal upstream contributors of violence such as unemployment, poor living conditions and social exclusion (NPC 2011).

The Policy Framework’s prevention approach emphasises five key tenets: (1) strategic and systematic deployment of prevention resources to target high-risk hours, places and groups; (2) reducing the availability of firearms and the availability of alcohol; (3) improving victim support programmes; (4) the development of an accessible evidence base, the production of reliable injury surveillance data and the ongoing monitoring of outcomes and risk factors; and (5) developing life skills and parenting skills which will eventually change social and cultural norms that produce violent offenders.

The Violence Prevention through Urban Upgrading Programme

The VPUU programme takes a holistic society approach to violence prevention. It draws on key aspects of the UN Habitat Model for Safer Cities and addresses both upstream and downstream determinants. VPUU aims
to reduce social exclusion created by the apartheid regime. To achieve this goal it combines three perspectives on violence prevention: (1) **situational crime prevention** focuses on the restructuring of the urban environment according to urban planning and design principles to form safe and integrated human settlements with accessibility to basic amenities such as water, electricity and social services; (2) **social crime prevention** facilitates social and cultural transformation, community cohesion, community participation and ownership and civic engagement, as well as victim support and other violence prevention activities that focus on youth and children; (3) **institutional crime prevention** centres on the ‘whole-of-government’ approach to integrated planning and the implementation of violence prevention at all levels of government, with the required support of civil society working in this sector (GFMECD 2010). This collaboration with civil society is considered the ‘whole-of-society’ approach.

VPUU methodology places a strong emphasis on community participation and ownership. All developments are preceded by a social compact, developed in consultation with community representatives and identified stakeholders in workshops. During the workshops, the consultation stakeholders elect a representative body called the Safe Node Area Committee (SNAC). The SNAC represents existing community structures responsible for development. It serves as the interface between the project and the community and assists in the implementation of the project.

VPUU explicitly acknowledges that the community should be the driving force behind all developments. Once the SNAC has been established, VPUU provides an eight week leadership training course to capacitate members on development processes. During the training course, leaders attend a community profiling workshop and complete a baseline household survey in the broader community. These processes culminate in a community action plan, a local strategy that identifies interventions to address social problems in the settlements. Thereafter, VPUU consults the SNAC monthly on all new community developments.

VPUU holds quarterly reference group and open community meetings to provide information to the broader community. Its knowledge management products, developed primarily for internal use by VPUU staff to enhance processes and outcomes across different work streams, are also adapted to assist others in adopting their safety prevention approach. Bi-monthly newsletters are disseminated to the intervention communities with updated information about the programme’s progress, upcoming events and developments. VPUU experiences are also shared with local and international stakeholders involved with violence prevention initiatives, for instance through the VPUU Manual for Safety as a Public Good, which was published in 2014 and provides a comprehensive overview of the programme’s methodology.

The roll-out of the VPUU approach in five municipalities of the Western Cape Province demonstrates the institution’s support of the ‘whole-of-society’ approach towards crime prevention. Research on the programme’s implementation and impact on violence is crucial to acquiring the necessary leverage for a policy shift on violence prevention arising from urban upgrading. VPUU is already actively engaged in policy debate on an international level because of its membership in the UN Habitat Global Network on Safer Cities since 2011. Its research, surveillance and evaluation activities contribute to a debate on how crime prevention approaches should evolve in Africa and whether solutions developed in one part of the continent can be replicated in another part. The particular and complex context of Cape Town’s townships and informal settlements may differ from situations in other countries; however, the quality, research-based documentation describing the programme’s implementation, achievements, challenges and impacts will be a key resource for the development
of a database outlining the best methods of violence prevention in Africa.

**Evaluation**

The broad approach of the *Policy Framework* and interventions such as VPUU, outlined above, necessitates community engagement alongside research evidence to inform interventions. This presents two key evaluation challenges.

First, evaluating distal or upstream interventions such as the VPUU programme is extremely complicated. Interventions which directly target high-risk groups such as repeat offenders are relatively easy to evaluate through experimental study design (Rosenberg et al. 2006). Hence, the effects of proximal, as opposed to distal, interventions may be more prominently represented in the literature because they are relatively easy to demonstrate (Limbos et al. 2007; Matzopoulos et al. 2010). Upstream interventions, instead, often address less clear-cut risk factors such as education, employment and living conditions, and are therefore more difficult to assess. Accordingly, the literature surrounding these topics is more ambivalent (Matzopoulos et al. 2010; Ndumbe-Eyoh & Moffatt 2013). A recent systematic review of the effects of poverty deconcentration and urban upgrading on youth violence demonstrated that neighbourhood-level interventions targeting individuals or households were more amenable to experimental design. One such example is the housing voucher programme that gives poor families the opportunity to move to more affluent neighbourhoods. As a result of these interventions, evidence emerged regarding their effectiveness in reducing youth violence. The evidence was less persuasive regarding the effectiveness of distal urban upgrading programmes, which were plagued by evaluation challenges such as self-selection. For example, in one of the included studies, upgraded areas were associated with both greater community efficacy and reduced disorder. Though community efficacy may have led to both increased cooperation and therefore increased developments as well as a decrease in disorder, it is difficult to prove using data (Cassidy et al. 2013). The review also highlighted the lack of evidence from low- and middle-income countries (LMICs). All but one study (in Medellín) of urban upgrading (Cerda et al. 2012) came from American and European cities; there is clearly a need for more rigorous evaluations of urban upgrading projects that address upstream risk factors for violence, especially in LMIC contexts.

Second, community engagement in the implementation and research process is an essential requirement for a sustained intervention effort. Community engagement varies greatly by situation but can involve drawing on community members’ insights in the planning and evaluation stages, working with existing organisations and enabling community members to propel the intervention forward in the long run. Though not without complications, community engagement can help to foster ownership, effective implementation and sustainability of interventions (Emmet 2000; Peterson 2012). The *Policy Framework* includes community organisations and stakeholders in its ‘whole-of-society’ approach; however, this presents a particular challenge to the current provincial government given that the selected intervention areas are populated predominantly by supporters of its political opposition. This poses a threat to the research process because it can compromise the availability and validity of evaluative data from community stakeholders and cause an overreliance on administrative data. In this situation, utilising the network of stakeholders and community affiliates associated with the VPUU intervention presents an important opportunity and also a challenge for evaluation research. VPUU has the benefit of a history that transcends the current provincial political dispensation and which places a particular emphasis on community engagement and consultation. Any evaluation of VPUU needs to take into account their community
engagement and established procedures for consultation in order to not undermine the agency's efforts. However, community engagement is complicated when the agency being evaluated is also a gatekeeper. This complexity will be explored further in the case study below.

**Evaluation of VPUU**
The current IDRC-funded research aims to assess the effectiveness of urban upgrading interventions based on VPUU's participatory, mixed approach of infrastructural and social interventions. VPUU's impact on reducing interpersonal violence, increasing safety, enabling access to services and infrastructure will be measured. A broad range of data has been collected from 2013 to 2015, including measures of violence such as emergency room visits, household surveys and police data. Quantitative and qualitative data will be drawn on to explore what methods work and why, and how good practices can potentially be replicated.

The research team is partnering closely with VPUU. Some members of the research team collaborate with the project to assist in the ongoing surveillance and evaluation effort. This collaboration benefits both VPUU and the research team. VPUU has more access to technical research support and the research team, while the research team also acquires access and becomes more familiar with VPUU-collected data and the network of community stakeholders. As part of this partnership, the researchers also take part in community engagement and feedback through VPUU’s participatory processes.

**Methodological Approach**
Primary data include cross-sectional injury data collected for a one week period, each month for six months, from casualty departments in health facilities serving the project communities; annual household surveys; the mapping of liquor outlets and qualitative work with selected stakeholder groups including police and alcohol outlet owners. Secondary data are gleaned from VPUU operational data which includes monitoring and evaluation surveys, and violence data from research partners’ database of police-reported robberies over a ten-year period. Census data and information from the South African Index of Multiple Deprivation, a small-area index developed by Human Sciences Research Council (HSRC) and Oxford University’s Centre for the Analysis of South African Social Policy (CASASP) will also be used. Where possible, data are geo-located to specific, small areas to make the analysis of diverse data easier.

Linkage of injury, mortality, violence, and urban upgrading interventions to multiple deprivation measures at the small area level has been little explored, particularly in low- and middle-income contexts. Use of advanced geographically-weighted, regression and analytic techniques will be methodologically innovative in this situation.

These data provide further intersectoral research opportunities for several secondary projects, such as intervention audits conducted by the Provincial Health Department and several post-graduate student projects.

To reduce the complexity resulting from numerous data sources, an indicator development process is being developed to accommodate the need for simultaneous measurements of multiple interventions, exposure variables, confounders and effect modifiers. Five initial domains have been identified for this project: 1) youth development; 2) safety and security; 3) economic and human development; 4) alcohol and other drug use; and 5) infrastructure. Indicators within domains are currently being developed by cognate experts. Use of resulting indicators is intended to survive the project.

**Community Engagement in the Research Process**
Where relevant and possible in each component of the research, community engagement is incorporated before and after research begins.
Health Facility Injury Data
Cross-sectional studies are performed every six months and profile a single week of trauma injuries present in the study areas.

A key aspect of the formative work for these studies has been the allocation of injury events to small areas to enable heat maps of injury sub-types over time. VPUU’s network of community stakeholders was fundamental to the delineation of these boundaries, which reflect community-perceived neighbourhood boundaries rather than the official political and jurisdictional boundaries. These latter boundaries frequently change, seldom cohere and are either unknown, not recognised or perceived as artificial by the community. Where location data was collected, the survey used area boundaries delineated by VPUU in conjunction with community members. These boundaries between areas were better-known by locals and research results were more amenable to community presentation and participation.

The researchers have presented preliminary results to the facility managers on several occasions and to the community stakeholders at monthly SNAC meetings, in VPUU partner meetings and in newsletters and research briefs.

Household Survey
Annual household surveys of 1,500 randomly selected households that include two questionnaires are conducted in the study areas to assess community views and experiences. One household questionnaire, usually completed by the female head of the primary household, collects information about household demographics, opinions and observations about urban upgrading (physical/social), alcohol policy and enforcement; mental health and wellbeing; experience of violence; community participation and active organisations and programmes. A secondary questionnaire administered to a subset of young adults either in the main household or ancillary dwellings focusses on safety risks including access to and consumption of alcohol, access to and carrying of weapons, and experiences of violence.

In preparation for the survey, the research team engaged with community representatives from the SNAC in Gunya and in Khayelitsha, the Khayelitsha Development Forum and local government councillors. Experiences were markedly different between these two communities and both presented challenges. In Khayelitsha, the research team sub-contracted survey management to a local company which brokered permission with community representatives. Community endorsement was considerably easier but fieldwork in Khayelitsha was poorly supervised and less efficient than in Gunya.

The research company sub-contracted in Khayelitsha was not considered for the survey of Gunya, partly because VPUU partners strongly advised that community leaders hire fieldworkers from their own areas. In the absence of any viable local research company, the university research team assumed the management responsibility in Gunya. The programme plan was presented to the Gunya SNAC and employment quickly became a contentious issue. In addition, the distinction between researchers and VPUU employees was not clearly conveyed. The community survey was conflated with a pre-existing agreement between VPUU and the SNAC about fieldworker selection for an unrelated project. The impasse was only resolved once VPUU arranged a reflection meeting with the SNAC after the university research team had threatened to withdraw. It was decided that the research team would select fieldworkers from the subcouncil labour database, a local government-run database of employment seekers. Fieldwork supervisors were selected based on prior experience and merit.

After the recruitment process had been clarified, the researchers received the SNAC’s support and endorsement. However, shortly after, researchers were asked to return for another meeting in which it became clear that the SNAC members were suspicious of how the subcouncil database was used and
resented the authority of the subcouncil manager in endorsing the research without involving them in the selection process. Although this issue was eventually resolved, it highlighted the tension created by the formation of a new community representative body (SNAC) and the complexity of working in an environment with multiple gatekeepers.

On several occasions the SNAC, alongside VPUU partners, helped to resolve safety issues in the field by engaging Community Policing Forums and Neighbourhood Watch volunteers. In one instance fieldworkers were barred from working in an area by the South African National Civic Organisation (SANCO). Researchers avoided any accusations of not following due process as SANCO is theoretically represented on the SNAC. VPUU’s input on the process of engagement with the relevant civic structure was crucial to resolving this issue.

Community Research Training and Capacitation
Grassroots Soccer, one of VPUU’s NGO partners, assisted with set-up, training, and the hiring of additional mobile phones to record the data in the community survey. The use of mobile phones enabled real-time oversight capabilities and increased accountability of supervisors and fieldworkers. It allowed for instant access to data, eliminating the need for lengthy and costly data entry and led to improved data quality and reduced follow-up requirements. Fieldworkers found the cell phones easy to use and reported a preference for cell phones versus paper-based data collection methods. The success of this approach motivated both VPUU to adopt the use of cell phones for their in-house, long-term monitoring and evaluation efforts, and the research team for subsequent community surveys. The research team assisted VPUU with cell phone-based community mapping exercises and the implementation of a regular, cell phone-based monitoring and evaluation survey in Gunya. VPUU has also included selected questions from the household survey in their regular monitoring and evaluation survey and modified their methods to monitor more regularly, enhance validation and improve sampling and substitution.

Discussion
This paper has traced the evolution of an evidence-based approach to violence prevention interventions in the Western Cape Province of South Africa. It has shown how researchers for the provincial Department of Health ultimately shaped a broad and intersectoral policy framework, while endorsing a ‘whole-of-society’ approach. While this is necessary to combat violence, it also encompasses important risk factors for a range of other health issues.

The VPUU programme in Cape Town is an example of a distal or upstream intervention. Such interventions are typically under-valued because of the difficulty of demonstrating immediate, direct effects at the individual level, and because of the need to source and link data for distal and proximal determinants and outcomes. Nonetheless, in the context of an ‘all-of-society’ policy framework, continuous assessment of interventions at all levels is important both for immediate feedback to the projects and communities, and to contribute to the broader body of literature on these topics. As described in the previous section, the project utilises a mixed-methods approach to measure the effects of diverse and multi-level interventions.

Partnering with VPUU has been a useful means to gain insight into their processes, to share in their expertise, and to gain access to the communities in which they work, but such a close partnership can be complicated. Association with VPUU has exposed the research to some of the tensions between different organisations who claim to represent communities. Community representatives are heavily invested in their communities and subject to numerous social and political pressures from other community members. New structures and committees formed by intervention teams inevitably increase the
risk of power struggles with existing political structures, as was the case in Gunya. The simultaneous need to address objective community needs (e.g. the reduction of violence) presents a key challenge for researchers attempting robust and objective research in multiply deprived settings. It is essential that researchers strike the correct balance of independence and inclusion, and that the clear communication of the objectives of the research and the independent position of researchers is maintained throughout. Benefits of the research process (capacitation of fieldworkers and VPUU staff) and the research findings should be explained in the initial meetings.

VPUU's close partnership with community members and community organisations has been beneficial when issues have arisen in the field. In addition, the partnership has added value to VPUU's surveillance and evaluation activities, as in addition to introducing mobile data collection for VPUU surveys, researchers were able to advise on and improve other aspects of study design, such as sampling and substitution. This has been mutually beneficial in improving data quality, accessibility and regularity for researchers as well as capacitating the program and community members in the use of technology, improving skill-levels and program efficiency.

These partnerships have also been beneficial in terms of sharing resources and disseminating findings, an essential component of community-based participatory research. Positive feedback about the research and anecdotal agreement with findings has been expressed at all community feedback sessions, which are also a useful forum to pick up on more nuanced understanding and local explanations of findings.

The scarcity of reliable data in Africa is one of the main issues which prevents universal recognition of comprehensive prevention programmes as a key solution to tackling criminality and urban violence on the continent. VPUU, as a potential model for good practice, has a wealth of experience to share, and this has been increasingly recognised. The latest effort of VPUU's knowledge management workstream is to document these practices and consolidate them with African Guidelines on Urban Safety in cooperation with UN-Habitat. The Guidelines will be built on the rich experiences of UN-Safer Cities Programme as well as the local initiatives facilitated by municipalities, local governments, civil society and the governmental sector. The research carried out in Cape Town will be significant for the Guidelines both in terms of programme design suggestions and in helping to define what kind of research and monitoring and evaluation activities provide reliable feedback for policy makers and urban authorities. The ongoing challenge of the research outlined in this paper will be to provide a sufficiently rigorous evaluation of the project that gives greater insight into the specific elements of VPUU that work and how to replicate them.

**Acknowledgments**
The authors would like to acknowledge the funding of IDRC for the research described in this paper. In addition, the authors are grateful for the valuable comments provided by Prof. Jonny Myers in the drafting of this manuscript.

**References**


