Understanding and reducing urban violence in South Africa: Initial findings from the 3-year Khayelitsha Violence Reduction Panel Study

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overview

• What violence, what questions

• What response?

• Study design & methodology
  ▶ Panel study + localized crime data

• Results

• Limitations / LEARNINGS

• Future prospects
Definition of violence

- violence “includes the threatened or actual use of physical force on another person or group and encompasses acts that may be reactive or proactive, criminal and noncriminal, acts that can occur within the context of other problem behaviors, and acts that can result in lethal and nonlethal outcomes.” (Dahlberg & Potter, 2001)

- violence can also have indirect dimensions: structural, political, societal
The Problem: young people (12-21 year-olds) in S. Africa:

- are assaulted at 8 times the adult rate, theft at 5 times and robbery at 4 times the adult rate.
- 76% of all young offenders have been victims of violent crime.
- While SA murder rate dropped from 66/100,000 in 1994/5 to 40 in 2006, violent crime against children increased from 2002 to 2005: rape up by 55%, murder by 45%, and serious assault by 50%
- The murder rate in Khayelitsha (police precinct) is consistently 150-200 per 100,000 inhabitants
- overall: 9 male homicides for every one female victim (Centre for Justice and Crime Prevention)
Imprecise homicide estimates, esp. for Africa

**Fig. 1.1:** Total number of homicides by region (2010 or latest available year)

- **Africa:** 170,000
- **Americas:** 144,000
- **Asia:** 128,000
- **Europe:** 25,000
- **Oceania:** 1,200

UNODC Global Study on Homicide 2011
The Response

• Partnership with local, “embedded” youth development NGO (Amandla Edu-Football)

• 3-year Panel Study (N=400 in Khayelitsha) of 12-22 year-old males exploring family factors, attitudes and behaviors relating to pro/anti-socialization and Violence / Aggression

• Allows for cross-sectional comparison (between intervention and control participants and longitudinal analysis of behavior/attitude change

• Access and analyze customized police crime data for the project catchment area vs. rest of Khayelitsha police precinct
Research Questions

• What risk and protective factors predict attitudes & associations favourable to the use of interpersonal violence?

• Can these factors be successfully measured and can evidence of behavioural change be discerned over a 3-year period?

• Is there a measurable change in violent attitudes/behaviour among Amandla participants compared with a control group with similar environmental characteristics and risk factors?

• If detected, are these "Amandla-effects" transient or sustained?
Identification of the CS partner
Amandla Edu-Football (www.edufootball.org)

- Active year-round;
- Have an existing permanent space in a highly vulnerable community;
- Use sport as a vehicle to attract 12-21 year-old black or coloured males (the target population for violence reduction, other groups/gender can be involved separately);
- operational for at least two years;
- some form of life skills (curriculum, counselling, educational enrichment);
- proven ability to work with at least 300 target youth on a weekly basis.
Amandla Edu-Football (www.edufootball.org)

- Began in 2006 to address orphaned youth at-risk in Khayelitsha (among highest violent crime rates in SA)
- Permanent space since 2009
- Now serving up to 1500 youth per week
- Life skills through football programming + fairplay football leagues + leadership program
Impact research overview

- 3-year longitudinal/quasi-experimental panel study with control group
- questionnaire tool ➔ violence scorecard
- exploration of risk and protective factors
- modelling paths to violence/test for intervention effects

Why: No real results = no impact = less (or no) $ next year
Theory of Youth Violence

- Violent Home
- Deviant Peers
- Substance Use
- Pro-gangs
- Harsh Parenting
- Household Deprivation

Future Attitude/Resiliency
- School Attitude

Use/rejection of violence

Structured Leisure Intervention

New Models of Behaviour
Violence “Scorecard”

26 items/possible 100 pts.

1. 10 peer deviance/criminal associates items (0-30 pts) $\alpha=0.87$

2. 15 pro-violence attitude items (0-45 pts) $\alpha=0.88$

3. How many fights have you been in in the past year? (0-25 pts)

Scorecard correlates with multi-category violent offending ever (corr.=0.59, $p<.01$), violent offend. past 12 mos. (corr.=0.48, $p<.01$), Maternal Assessment of subject’s risky behavior (corr.=0.41, $p<.01$), Substance Abuse (corr.=0.52, $p<.01$), School Failure (corr.=0.22, $p<.01$), & wave2 to wave3 scorecards (corr.=0.10, $p=.07$).

Prediction: Peer/criminal assoc. Items wave2 correlate with wave 3 violent offending ever (corr.=0.12, $p=0.27$) and wave 3 Substance Abuse (corr.=0.23, $p<0.01$).
Wave 2 Factors and pathways to Wave 3: Violence Scorecard, Serious Violent Offending, and School Failure

SEM using wave 2 and wave 3 data. Standardized coefficients reported. Fit statistics: Chi-square= 56.23. Df= 32. $X^2$/df ratio= 1.76. $p= 0.005$. CFI= 0.96. RMSEA= 0.049. N= 318. Hoelter’s ($p=.05$) = 261. Note. BOLD indicates $p \leq .05$. 
Wave 2 Factors and pathways to Wave 3: Violence Scorecard, Serious Violent Offending, School Failure, and Amandla intervention

SEM using wave 2 and wave 3 data. Standardized coefficients reported. Fit statistics: Chi-square=56.76. Df=36 X²/df ratio=1.58. p=0.015. CFI=0.97. RMSEA=0.043. N=318. Hoelter’s (p=.05) =285. Note. BOLD indicates p ≤ .05.
Wave 2 Factors and pathways to Wave 3: Violence Scorecard, Serious Violent Offending, School Failure, and Religion Participation

SEM using wave 2 and wave 3 data. Standardized coefficients reported. Fit statistics: Chi-square=65.51. Df= 36. X²/df ratio= 1.82. p = 0.02. CFI= 0.95. RMSEA= 0.051. N= 318. Hoelter’s (p=.05) =247. Note. BOLD indicates $p \leq .05$. 
### Explanation for Amandla “variability”

<table>
<thead>
<tr>
<th>Subjects are all male and African</th>
<th>Khayelitsha wave1 N=270</th>
<th>wave2 N=401</th>
<th>Wave3 N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD)</td>
<td>15.8(2.8)</td>
<td>17.0(2.7)</td>
<td>17.7(2.7)</td>
</tr>
<tr>
<td>Have heard of Amandla Edu-Football</td>
<td>82%</td>
<td>93%</td>
<td>94%</td>
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<tr>
<td>Have ever participated at Amandla</td>
<td>55%</td>
<td>71%</td>
<td>76%</td>
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<tr>
<td>Current Amandla participant (self-reported)</td>
<td>46%</td>
<td>56%</td>
<td>61%</td>
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<tr>
<td>Amandla registered participant</td>
<td>24%</td>
<td>56%</td>
<td>30%</td>
</tr>
<tr>
<td>Meeting 75% Amandla target attendance</td>
<td></td>
<td></td>
<td>9%</td>
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<tr>
<td>Variable</td>
<td>Model 1 B</td>
<td>Model 2 B</td>
<td>Model 3 B</td>
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<td>(Constant)</td>
<td>6.22</td>
<td>6.52</td>
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<tr>
<td>Age</td>
<td>.153*</td>
<td>.096</td>
<td>.087</td>
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<tr>
<td>H-old Deprivation w2</td>
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<td>.118*</td>
<td>.117*</td>
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<tr>
<td>Violent Home w2</td>
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<td>.055</td>
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<td>Harsh Parenting w2</td>
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<td>Less Parent Involvement w2</td>
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<td>Substance Abuse w2</td>
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<td>-.156*</td>
<td>-.155*</td>
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<tr>
<td>Neg School Attitude w2</td>
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<td>.060</td>
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<tr>
<td>Failed school w2</td>
<td>.031</td>
<td>.035</td>
<td>.038</td>
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<td>Neg Future Attitude w2</td>
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<td>.019</td>
<td>.021</td>
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<tr>
<td>Violence Scorecard w2</td>
<td>-.005</td>
<td>.073</td>
<td>.068</td>
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<tr>
<td>Amandla attend X howlong</td>
<td>-.031</td>
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<td>Religion Partic w2</td>
<td>-.064</td>
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<td>-.069</td>
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<td>$R^2$</td>
<td>0.08</td>
<td>0.06</td>
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<td>$\Delta R^2$</td>
<td>0.003</td>
<td>0.004</td>
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<tr>
<td>F</td>
<td>2.14*</td>
<td>1.87*</td>
<td>1.78*</td>
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Crime data analysis - 600 meter radius Ikhusi Primary School
Total Contact Crimes EXCEPT Murder - REST of Khayelitsha

Ikhusi 600m radius all contact crimes except murder / Percentage of total for Khayelithsa
Overall Lessons Learned

• Accurate attendance (Intervention Dosage) data is critical

• Shared understanding of concepts across languages and micro-cultures

• Field Research: Self-reporting/under-reporting, subject and interviewer fatigue, complexity of sampling and supervision, service providers sometimes lacking ‘humanitarian imperative’

• Time frame to see behavioural change (and sustain?)

• How to ensure high disclosure AND test-retest reliability (with youth and ‘temporality’)
Recommendations / Way Forward

• Use Scorecard/test in other contexts

• Integrate research capacity into local organisation(s)

• Continue Khayelitsha research beyond 3-year pilot to develop more robust panel data (to 5 years ??)

• Apply research at larger scale to Gugulethu/Manenburg Safe Hub incorporating multiple interventions and ‘Natural Experiment’ conditions (for 10 years ??). Pretoria-based project with U.P., city of Tshwane.

• Evidence-Based Structured Leisure Intervention may be the missing key to addressing urban youth violence in the SA context.