The Effect of Low Perceived Life Chances on Odds of Adolescent Participation in Fighting, Stabbing, and Shooting

Alice L. March RN, PhD, FNP-C, CNE
Capstone College of Nursing
The Problem: Violence

• Fighting, Stabbing, and shooting
  – Fighting may be a gateway behavior to violence
  – Minority/impoverished teens disproportionately
  – Violence increases likelihood of early death
Consider This

- **2007 YRBS**
  - 31.5% reported physical fight past 12 months
  - Consistent with previous surveys

- **Minority youth in middle school**
  - 66% reported fighting or weapon use in past 3 months (Clubb et al., 2001)
<table>
<thead>
<tr>
<th>Age</th>
<th>5-14</th>
<th>15-24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rates (100,00)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unintentional injury (all causes)</td>
<td>5.5</td>
<td>37.4</td>
</tr>
<tr>
<td>Accidental discharge of firearm</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Assault (Homicide)</td>
<td>0.9</td>
<td>13.1</td>
</tr>
<tr>
<td>Assault (homicide) by firearm</td>
<td>0.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Assault (Homicide) other</td>
<td>0.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Discharge of firearm (unknown intent)</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Numbers (actual)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidental discharge of firearm</td>
<td>46</td>
<td>155</td>
</tr>
<tr>
<td>Assault (Homicide)</td>
<td>346</td>
<td>5,551</td>
</tr>
<tr>
<td>Assault (homicide) by firearm</td>
<td>201</td>
<td>4669</td>
</tr>
<tr>
<td>Assault (Homicide) other</td>
<td>145</td>
<td>882</td>
</tr>
<tr>
<td>Discharge of firearm (unknown intent)</td>
<td>12</td>
<td>82</td>
</tr>
</tbody>
</table>

*Note:* Source (CDC, 2007)
Filling the Gap

- Alarming rates of injury and death in adolescents
- Lack of theory-based research exists
- Problem behavior theory
  - Impoverished African American adolescents
Modified Theoretical Model

Figure 1. Modified Model of Psychosocial and Behavioral Risk and Protection

*Adapted from a theory-based protection/risk model developed at the Institute of Behavioral Sciences, University of Colorado by Jessar, Costa, Krueger, & Turbin (2003).
Purpose

• Explore relationships between violence behaviors (ever fighting, stabbing, shooting), and selected risk and protective factors
Methodology

• Secondary analysis of survey data
  – Mobile Youth Survey (MYS) longitudinal study
  – 1998 to present

• Selected from 294 questions
  – Constructs representative of model variables

• Analysis
  – Multiple regression
Respondents

• N= 1241
• Impoverished
  – 88.7% free/reduced cost lunches
• African American: 96%
• Female = 49.7%, male = 50.3%
• Mean age of 12.77 years old
Results: Physical Fighting

- Ever fought 19.9%
- Increased odds
  - Low perceived life chances ($\beta = .459$, $p=.009$)
- Decreased odds
  - Female gender ($\beta=-.612$, $p<.0001$)
  - Neighborhood resources ($\beta=-.329$, $p=.046$)
Results: Stabbing

- Ever stabbed 10.8%
- Increased odds
  - Low perceived life chances ($\beta=18.481$, $p<.0001$)
  - Low self esteem ($\beta=.707$, $p=.003$)
- Decreased odds
  - Religion ($\beta = -.044$, $p=.022$)
  - Interested adults ($\beta = -.770$, $p=.002$)
Results: Shooting

• Ever shot at someone 9.8%

• Increased odds
  – Low perceived life chances ($\beta=.985$, $p<.0001$).
  – Low self esteem ($\beta=.619$, $p=.016$)

• Decreased odds
  – Female ($\beta=-1.899$, $p<.0001$)
  – Neighborhood resources ($\beta=.418$, $p=.048$)
Model Predictions Supported

- **Vulnerability Risk**
  - Low perceived life chances
  - Low self esteem

- **Support Protection**
  - Interested adults
  - Neighborhood resources
  - Religion
Model Predictions Not Supported

• Controls Protection
  – Value on achievement
  – Involvement in school
Implications: Discovery

• First steps to reduce behaviors
  – Identify factors affecting participation
  – Culturally appropriate community interventions
Questions?

Contact information

almarch@bama.ua.edu