Bullying and Its Correlates Among High School Students in Hawaiʻi
Presentation Overview

- Introduction
  - Youth violence and bullying
- Research design
  - Hawai‘i Youth Risk Behavior Survey
- Results
  - Prevalence of bullying
  - Associated risk and protective factors
- Impact and implications
  - Translational research
  - Implications for interventions and policy
  - Social ecological approach
Youth Violence

- Homicide is among the top four leading causes of death for youth ages 1 to 24 (CDC, 2009)

- 14 million juvenile arrests occur annually (FBI, 2008)

- Youth violence costs an estimated $47 billion annually (CDC, 2011a)
Bullying

- Sub-form of youth violence
  - In the US – 20% of high school students (CDC, 2011b)
  - In Hawai‘i – 51% of high school students felt bullying was a problem in their school (2009 Youth Risk Behavior Survey)

- Variety of associated risk and protective factors
  - Mental health issues & suicidality (Meltzer et al., 2011)
  - Substance use (Goebert et al., 2010; Radliff et al., 2012)
  - Social support & positive adult role models (Seeley et al., 2011)
Measuring Bullying

Definition

• Not standardized, but commonalities include:
  • Aggressive behavior, pattern over time, imbalance of power

“Cyber-bullying”

• Occurs through e-mail, chat rooms, instant messaging, websites, text messaging, videos (David-Ferdon & Hertz, 2009)

• Unlike traditional bullying... (Hinduja & Patchin, 2010)
  • Anonymity
  • “Viral” actions
  • Separation from victim’s response
  • Adult intervention difficult
Youth Risk Behavior Survey (YRBS)

- Currently the leading nationally representative survey
  - Overseen by Centers for Disease Control & Prevention
  - Main data source to monitor Healthy People 2020 Goal (IVP-25, “Reduce bullying among adolescents”)
    - Baseline of 19.9% → target of 17.9%

- Administered every two years (odd years)

- Monitors variety of health behaviors – violence, substance use, mental health, sexual behavior, nutrition, physical activity, etc.
## Bullying & the Hawai‘i YRBS

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Violence</td>
<td></td>
<td></td>
<td>Fights Weapons</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Feel unsafe at school, or going to/from school</td>
<td></td>
</tr>
<tr>
<td>Harassment</td>
<td></td>
<td></td>
<td>Physically &amp; verbally</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Perceived as LGBT</td>
<td></td>
</tr>
<tr>
<td>Bullying</td>
<td>N/A</td>
<td></td>
<td>Agree or disagree that bullying is problem at school</td>
<td>Bullied at school &amp; Electronically bullied</td>
</tr>
</tbody>
</table>
Analyses

- Bullying items from 2011 Hawai‘i high school YRBS
  - SAS version 9.2
  - Weighted data & complex survey procedures

- Prevalences
  - Differences by sex, ethnicity, grade, sexual orientation

- Correlates
  - Associations with other risk/protective behaviors
Youth Violence & Bullying
2011 Hawai‘i High School YRBS

- Carry weapon*: 13.9%
- Carry weapon in school*: 4.2%
- Felt unsafe*: 6.6%
- Threatened with weapon**: 6.3%
- Fight**: 22.3%
- Fight in school**: 8.1%
- Bullied in school**: 20.3%
- Electronically bullied**: 14.9%

(*In the last 30 days; ** In the last 12 months)

~8,900 students
~6,600 students
Bullying – By Sex
2011 Hawai‘i High School YRBS

**Indicates statistically significant difference (p<.05)
Bullying – By Grade
2011 Hawai‘i High School YRBS

**Indicates statistically significant difference (p<.05)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Bullied in school**</th>
<th>Electronically bullied**</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>28.7%</td>
<td>17.0%</td>
</tr>
<tr>
<td>10th</td>
<td>20.1%</td>
<td>15.3%</td>
</tr>
<tr>
<td>11th</td>
<td>14.3%</td>
<td>12.5%</td>
</tr>
<tr>
<td>12th</td>
<td>14.0%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

**Indicates statistically significant difference (p<.05)
Bullying – By Sexual Orientation

2011 Hawai‘i High School YRBS

**Indicates statistically significant difference (p<.05)

**Heterosexual

Gay, lesbian, or bisexual

Bullied in school**

- 19.0%

Electronically bullied**

- 13.7%

- 25.6%
Bullying in School – By Ethnicity

2011 Hawai‘i High School YRBS

Statistically significant differences (p<.05):
White & Other > NH, Filipino, Mixed Non-Hawaiian > Other PL, Japanese, Other Asian
Statistically significant differences (p<.05):
Filipino, Other PL, Japanese, Mixed Non-Hawaiian > NH, White, Other > Other Asian
Youth Violence Items | Increases Risk of Bullying By: | Increases Risk of Electronic Bullying By:
--- | --- | ---
1) Carried a weapon in the past 30 days | 1.9-fold | 2.0-fold
2) Carried a weapon in the past 30 days, on school property | 2.9-fold | 3.8-fold
3) Did not go to school because felt unsafe at school, or going to/from school | 5.0-fold | 4.7-fold
4) Threatened with a weapon in the past 12 months, on school property | 7.6-fold | 6.1-fold
5) In a physical fight | 2.5-fold | 2.7-fold
6) In a physical fight, on school property | 3.3-fold | 2.5-fold
## Correlates – Risk Factors

**2011 Hawai‘i High School YRBS**  
*(All associations shown are statistically significant)*

<table>
<thead>
<tr>
<th>Mental Health Items</th>
<th>Increases Risk for Bullying By:</th>
<th>Increases Risk for Electronic Bullying By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Felt so sad or hopeless almost every day, for 2 or more weeks, and stopped usual activities</td>
<td>2.7-fold</td>
<td>4.9-fold</td>
</tr>
<tr>
<td>2) Seriously considered attempting suicide, past 12 months</td>
<td>3.5-fold</td>
<td>4.3-fold</td>
</tr>
<tr>
<td>3) Made a suicide plan, past 12 months</td>
<td>2.8-fold</td>
<td>4.4-fold</td>
</tr>
<tr>
<td>4) Attempted suicide, past 12 months</td>
<td>2.7-fold</td>
<td>4.6-fold</td>
</tr>
</tbody>
</table>
## Correlates – Risk Factors

### 2011 Hawai‘i High School YRBS

(All associations shown are statistically significant)

<table>
<thead>
<tr>
<th>Substance Use Items</th>
<th>Increases Risk for Bullying By:</th>
<th>Increases Risk for Electronic Bullying By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Used alcohol, in last 30 days</td>
<td>-</td>
<td>2.0-fold</td>
</tr>
<tr>
<td>2) Had 5 or more alcoholic drinks in a row, within a couple of hours (past 30 days)</td>
<td>-</td>
<td>1.8-fold</td>
</tr>
<tr>
<td>3) Used marijuana, in last 30 days</td>
<td>-</td>
<td>1.6-fold</td>
</tr>
<tr>
<td>4) Use alcohol/drugs to relax, feel better about self, or fit in</td>
<td>1.7-fold</td>
<td>2.6-fold</td>
</tr>
<tr>
<td>5) Use alcohol/drugs while alone</td>
<td>1.4-fold</td>
<td>2.2-fold</td>
</tr>
<tr>
<td>6) Know adults who got drunk/high, (past 12 months)</td>
<td>1.4-fold</td>
<td>1.5-fold</td>
</tr>
</tbody>
</table>
# Correlates – Protective Factors

## 2011 Hawai‘i High School YRBS

*(All associations shown are statistically significant)*

<table>
<thead>
<tr>
<th>Adult Support &amp; Future Outlook Items</th>
<th>Decreases Risk for Bullying By:</th>
<th>Decreases Risk for Electronic Bullying By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Adult can talk to about important things, outside of school</td>
<td>1.6-fold</td>
<td>-</td>
</tr>
<tr>
<td>2) Teacher in school that can talk to about problems</td>
<td>1.4-fold</td>
<td>-</td>
</tr>
<tr>
<td>3) Feel likely to complete post-high school program/degree</td>
<td>1.4-fold</td>
<td>2.0-fold</td>
</tr>
</tbody>
</table>
Limitations

- Data are cross-sectional

- Biases
  - Respondent bias – self-reported data
  - Selection bias – active consent required, issue of absences/suspensions

- Exclusion of private and charter schools
Impact & Implications

- **Connection of data to practice & policy**
  - Takes an average of 20 years for data/research to move “bench to bedside” (Institute of Medicine, 2001)
  - Only 10% of publicly funded systems use evidence-based practices (Hoagwood & Olin, 2002)

- **Translational research** (Spoth, 2008)
  - Type 1 – applying evidence to intervention design
  - Type 2 – expanding interventions to real-world implementation
Bullying as a ubiquitous problem
- No differences by sex, ethnicity

Further investigation/evaluation of interventions for specific groups
- 9th graders – transition to high school
- LGBT youth
More comprehensive approach

- Increasing protective factors (assets model), versus solely focusing on risk factors (deficits model)

- Coupling with prevention of other risk behaviors

- Dichotomy between preventative/public health & punitive approaches (Srabstein, Berkman, & Pyntikova, 2008)
A Public Health Approach

The Social Ecological Model
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References


QUESTIONS, COMMENTS, AND DISCUSSION

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