

# Exploring the Role of Community Assets in Youth Violence

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# Introduction: The Problem of Youth Violence

- In 2013:
  - 24.7% of high school students reported having been in a physical fight in the past year
  - ~18% reported carrying a weapon in the past 30 days
- Violence during adolescence is a potent risk factor for ongoing violence in young adulthood



References: Borowsky, Widome, & Resnick, 2008; Dahlberg & Potter, 2001; David-Ferdon & Simon, 2014; Herrenkohl et al., 2000 ;  
Picture: [http://wikiforwriting.wikispaces.com/SOCIAL+ILLS+\(EDITED\)](http://wikiforwriting.wikispaces.com/SOCIAL+ILLS+(EDITED))

# Introduction: The Problem of Youth Violence

- Males and African Americans are at particular risk for involvement in serious forms of violence

In 2011:

- Youth homicide rate was 6 times higher among males than females
- Homicide rates among African American youth age 10 to 24 were 3 to 14 times higher than rates for other groups of youth



References: David-Ferdon & Simon, 2014; Herrenkohl et al., 2000

Picture: <http://www.indystar.com/story/opinion/columnists/2015/05/14/adults-share-blame-youth-violence/27312011/>

# Introduction: Theory

- Theoretical perspectives suggest that where adolescents live, and factors within their social context, may play a role in their violence involvement
- Resiliency theory - factors in adolescents' lives may influence the likelihood of engaging in behaviors that can positively or negatively impact their health and well-being

References: Bronfenbrenner, 1979; Fergus & Zimmerman, 2005

# Previous studies: Neighborhood

## Neighborhood disadvantage

– Strong link between poverty and violence

- Residential instability
- More family and community violence
- Fewer pro-social role models



References: Brooks-Gunn, Duncan, & Aber, 1997; Kroneman, Loeber, & Hipwell, 2004; Valois et al., 2002

Picture: <http://wellbeingwire.meyouhealth.com/basic-access/bad-neighborhoods-hurt-childrens-chances-for-the-future/>

# Previous Studies: Neighborhood

- Neighborhood Assets
  - Youth serving organizations
    - Presence of a variety of organizations in a neighborhood was negatively correlated with adolescents' exposure to community violence and the amount of violent crime in the neighborhood
    - Participation in school and after-school activities moderated the association between youth exposure to violence and later aggression and delinquency

References: Gardner & Brooks-Gunn, 2009; Jain & Cohen, 2013

# Previous Studies: Neighborhood

## Neighborhood Assets

Higher concentration of organizations (such as parks, youth centers, after-school programs, and mentoring and counseling services) in a community was associated with lower odds of aggression among youth participants



References: Molnar, Cerda, Roberts, & Buka, 2008

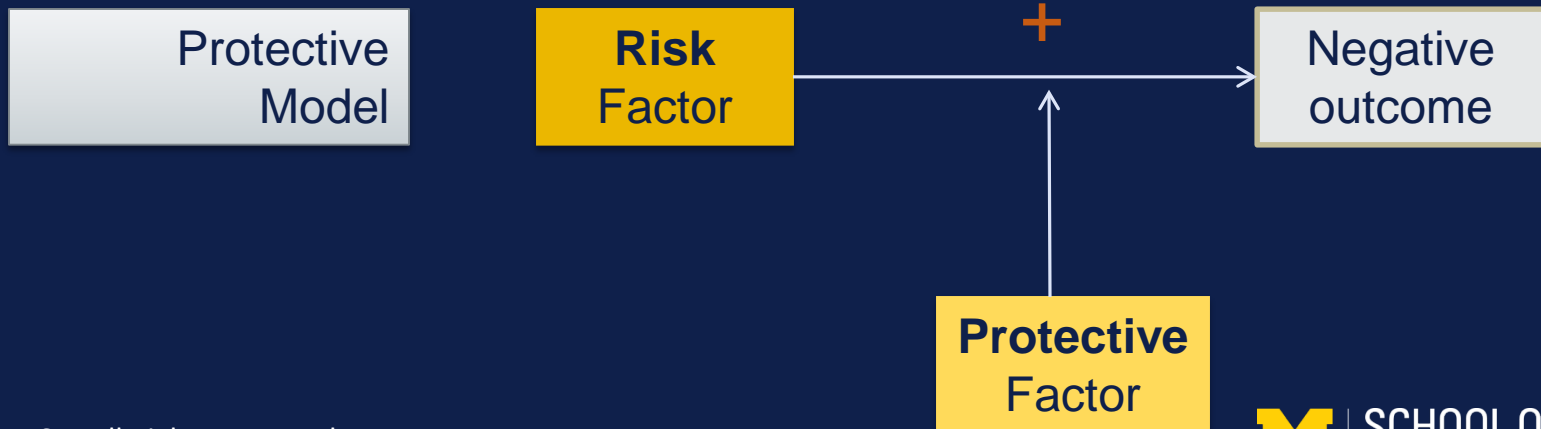
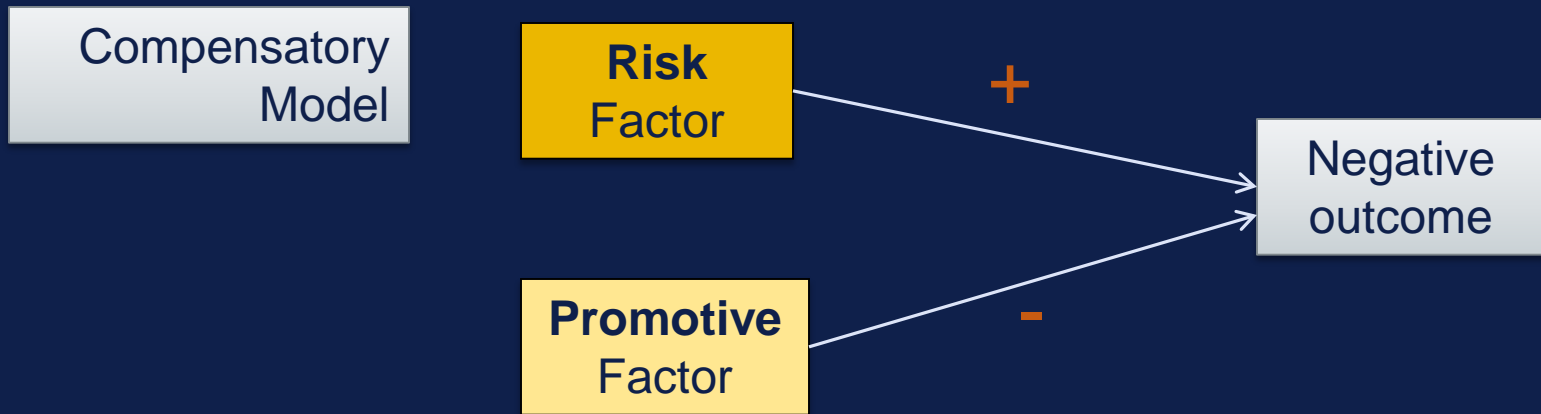
Picture: <http://www.appletonparkandrec.org/>

# Purpose

- To examine the effect of neighborhood disadvantage and neighborhood organizational resources on violent behavior in a sample of 10<sup>th</sup> grade urban youth.



# Resiliency



# Methods

- ***Secondary data analysis of data from youth at-risk for high school drop out (n = 850; 80% African American, 50% Male)***
- ***Eligibility:***
  - grade point of 3.0 or lower
  - no diagnoses emotional or developmental impairments
  - self-identified as African American, White, or Bi-racial (African American and White)
- Paper-pencil survey
- Participants provided a home address –obtained latitude and longitude for analysis
- Present analysis focused on 10<sup>th</sup> grade year

# Measures

- Violent Behavior
  - Frequency of violent behavior in past 12 months (4-items)
  - *In the past 12 months, how often have you gotten into a fight at school?*

# Measures

- Risk index
  - Factors included: approval of violence, observed violence, victimization, hopelessness about the future, non-violent delinquency, weapon carrying, friends' negative influence, friends' aggressive or delinquent behaviors, friends who are suspended from school, weapon carrying by resident adults, and weapon carrying by non-family adults
- Promotive index
  - Factors included: self-acceptance, positive attitude about school, school relevance, future expectations, friends' support, friends' positive influences, friends' participation in positive activities, parent support, and family participation in recreational or fun events

For more information see Stoddard, Zimmerman, & Bauermeister, 2012

# Measures

- Neighborhood Organizational Resources
  - **InfoUSA** searched for churches, youth organizations, higher education organizations, parks, other learning organizations, and schools
  - Latitude and longitude for each organization
  - Variables indicate number of organizations within a ¼ mile were created for each category
- Neighborhood Disadvantage
  - 2000 **US Census** data
  - Disadvantage index included:
    - Percent below poverty line, percent female-headed households, percent of individuals aged 16+ who are unemployed, percent population under age 16, percent African American

# Data Analyses

Linear regression augmented with a non-parametrically estimated thin-plate spline function of the spatial coordinates to remove any residual spatial autocorrelation from the data, thereby providing the independent errors required for proper statistical inference.

## Hierarchical approach

1. Risk Model: Neighborhood disadvantage
2. Compensatory Model: Density of neighborhood resources
3. Protective Model: Interaction neighborhood disadvantage X neighborhood asset

# Results: Neighborhood Disadvantage

Variable	Risk Model
Intercept	-2.57 (0.66)***
Gender (ref=Male)	-0.11 (0.04)**
Race (ref=Black)	
Race=White	0.10 (0.07)
Race=Mixed race	-0.05 (0.11)
Age	0.04 (0.03)
Cumulative Risk	0.30 (0.04)***
Cumulative Promotive Factors	0.09 (0.04)*
Risk x Promo Interaction	-0.01 (0.00)**
Neighborhood disadvantage	0.18 (0.07)*

\* p<.05 , \*\* p<.01 , \*\*\* p<.001

# Results: Neighborhood Resources

Variable	Promotive Model
School	0.05 (0.02)*
Neighborhood Disadvantage	0.20 (0.07)**
Youth Organizations ¼ mile	0.27 (0.12)*
Neighborhood Disadvantage	0.19 (0.07)**
Churches ¼ mile	0.01 (0.01)
Neighborhood Disadvantage	0.16 (0.07)*
Higher Education Centers ¼ mile	-0.00 (0.07)
Neighborhood Disadvantage	0.18 (0.07)*
Other Learning Centers ¼ mile	0.01(0.08)
Neighborhood Disadvantage	0.18 (0.08)*
Parks ¼ mile	0.17 (0.09)
Neighborhood Disadvantage	0.17 (0.07)*

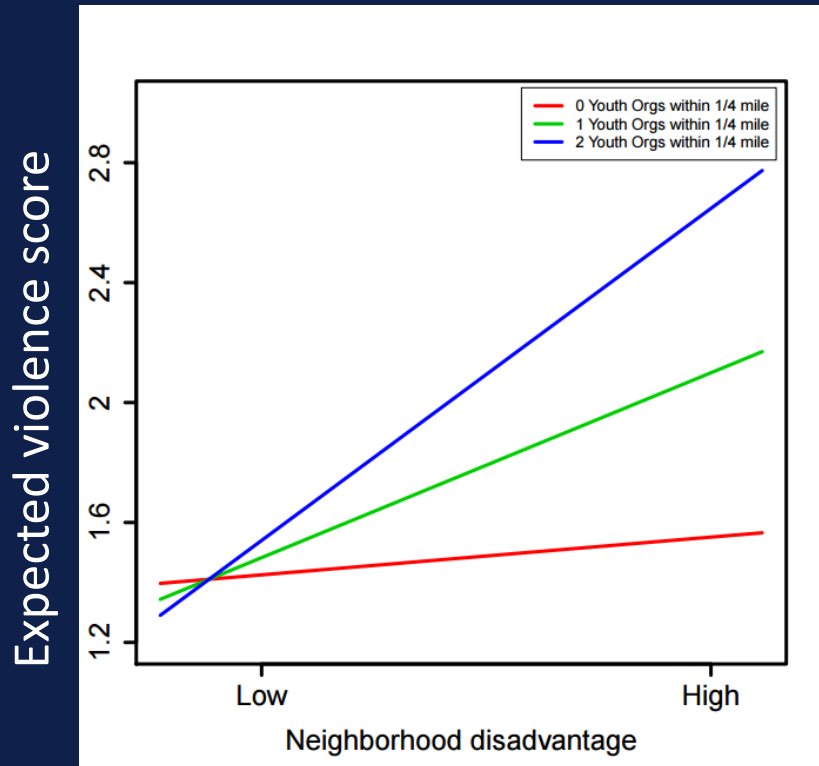


# Results: Protective Model

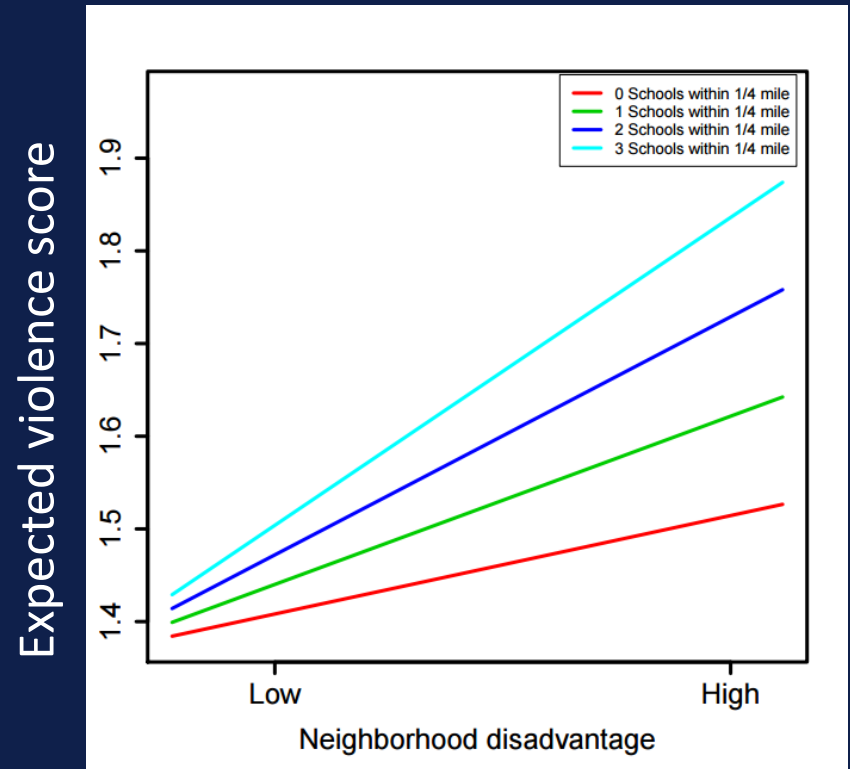
Variable	Protective Model
School	-0.09 (0.07)
Neighborhood Disadvantage	0.14 (0.08)
Interaction	0.10 (0.05)*
Youth Organizations ¼ mile	-0.71 (0.43)
Neighborhood Disadvantage	0.17 (0.07)*
Interaction	0.66 (0.28)*
Churches ¼ mile	0.05 (0.04)
Neighborhood Disadvantage	0.20 (0.09)
Interaction	-0.02 (0.03)
Higher Education Centers ¼ mile	-0.19 (0.20)
Neighborhood Disadvantage	0.17 (0.08)*
Interaction	0.14 (0.15)
Other Learning Centers ¼ mile	0.00 (0.26)
Neighborhood Disadvantage	0.18 (0.08)*
Interaction	0.00 (0.17)
Parks ¼ mile	-0.23 (2.25)
Neighborhood Disadvantage	0.17 (0.07)*
Interaction	0.23 (1.28)

# Protective Model

## Youth Organizations



## Schools



# Conclusions

- Higher concentration of schools and youth organizations were associated with *more* violent behavior.
  - For youth in neighborhoods with higher disadvantage, higher concentrations of schools and youth organizations were associated with *more* violence.
- In disadvantaged areas, schools and youth organizations may offer positive opportunities and resources for youth; yet, places youth congregate may also be associated with aggressive and violent behavior.
- Future research should explore place-based risks and assets in locations where youth spend time.

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