What Will It Take To Improve the Effectiveness and Relevance of Violence Prevention Programs For Adolescents?

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1. Early adolescence is a peak period for development of aggression and exposure to risk.

2. Violence prevention efforts for early adolescents have had limited success.

3. The focus of intervention strategies should be on promoting positive development, not simply avoiding problem behaviors.

4. Comprehensive efforts are needed to address factors across multiple contexts.

5. Traditional designs may not be well suited to evaluating comprehensive prevention strategies.
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Youth Violence is a Serious Problem

- High rates of youth violence occur across the U.S.
  - In 2010, ER departments saw nearly 900,000 violence-related injuries to youth ages 10-24\(^1\)
  - In 2009, over 30% of high school students reported being in a physical fight and nearly 20% reported being bullied on school property in the past 12 months\(^2\)
  - In 2009, 5,048 young people ages 10 to 24 were murdered—an average of 14 each day\(^1\)

- Youth violence is not discriminatory
  - Homicide is the leading cause of death among African American youth ages 10-24; 2\(^{nd}\) leading cause of death for Hispanic youth; and 3\(^{rd}\) leading cause of death for American Indian, Alaska Native, and Asian/Pacific Islander youth\(^1\)

Less Extreme Forms of Violence are Even More Prevalent

- 40-80% of adolescents have ever been the target of teasing, threats, humiliation, or deliberate social rejection (Juvonen & Graham, 2001)
- About 1/3 of 12- to 18-year-olds report having been bullied in the past year (Department of Education, 2009)
- About 17% of 6th-10th grade students report having been bullied in the past month (Nansel et al., 2001)
- Prevalence peaks in middle school (DeVos & Kaffengerger, 2009)
Violence Has Serious Consequences

- **Injury**
  - In 2007, 4% of high school students required medical attention for violence-related injuries (CDC, 2008).

- **Disruptions in education**
  - 6% reported that they failed to attend school at least once in the past 30 days because they felt unsafe either at school or on their way to or from school (CDC, 2008).

- **Engagement in other problem behaviors**
  - An adolescent that engages in violence is more likely to engage in other risky behaviors such as substance use and other forms of delinquency (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002).
Victimization Has a Serious Negative Impact on Adjustment

• Increases in:
  o Anxiety symptoms (Hawker & Boulton, 2000; Paul & Cillessen, 2003; Prinstein et al., 2005)
  o Somatic complaints (Graham et al., 2003; Greco et al., 2006; Kumpulainen & Rasanen, 2000)

• Decreases in:
  o Self-esteem (Hawker & Boulton, 2000; Prinstein, Cheah, & Guyer, 2005)
  o Social competence (Greco et al., 2006; Paul & Cillessen, 2003; Rigby, 1998)
  o Academic competence/self-efficacy (Greco et al., 2006; Paul & Cillessen, 2003; Rigby, 1998)
  o Academic achievement (Schwartz et al., 2005)
Victimization May Be Linked To A Negative Spiral of Poor Adjustment

Social Skills

- Poor social skills
- Victimization
- Fear of negative evaluation
- Social avoidance
- Ineffective social functioning
- Low social support
- Depression

Ineffective social functioning leads to low social support, which leads to depression. Depression then leads back to ineffective social functioning, completing the negative spiral of poor adjustment.
Peer influences become increasingly salient during adolescence (Rappaport & Thomas, 2004).

Peer climate may be particularly influential during the transition to middle school (Eccles et al., 1993).

Youth may enter school environments where informal social norms support aggression as a means to gain status and correct perceived injustices (Fagan & Wilkinson, 1998).

Growth curve trajectories for aggression and risk increase during middle school and promotive factors decrease.

- Source Multisite Violence Prevention Project representing data from 5,642 students from 37 schools across four sites
- Trajectories represent changes across 3 years from the beginning of the 6th grade for participants at control schools
Mean Growth Trajectory for Aggression

Frequency of PBFS Aggression

- Boys
- Girls

- Fall 6th
- Spr 6th
- Fall 7th
- Spr 7th
- Fall 8th
- Spr 8th
School and Peer Risk Factors

School Norms for Aggression

Peer Deviancy
Parental Support for Fighting and Nonviolence

Parental Support for Fighting

Parental Support for Nonviolence
Parental Monitoring/Involvement

Parental Monitoring

Boys

Girls

Fall 6th
Spr 6th
Fall 7th
Spr 7th
Fall 8th
Spr 8th

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
Individual Beliefs

Individual Norms for Aggression

Self-Efficacy for Nonviolence
There May be Critical Times to Address Specific Factors

Moderating Effect of Parental Support for Nonviolence

• Surgeon General’s Report (2001,).  
  – “Much of the money America spends on youth violence prevention is spent on ineffective, sometimes even harmful, programs and policies” (p. 99).

• Recent meta-review by Matjasko et al (in press) concluded:  
  – Most reviews yielded moderate or weak program effects - one review of “Scared Straight” and similar programs found an iatrogenic effect on youth offending
“Many of the positive effects reported in evaluation studies of school-based prevention programs reflect changes in knowledge, attitudes, and responses to hypothetical situations rather than actual behavior. Often, effects are gender-specific, represent effects for subgroups of participants, or classrooms where fidelity or dosage was particularly strong. Such effects are evident even among programs designated as model or exemplary. The extent to which these programs can produce significant effects in the real world has yet to be established.”

Richmond Youth Against Violence (1991-1999)

- Initiated in 1991 in response to community concern about youth violence with initial funding from the Governor’s office.
- Focus on 10 Public Middle Schools.
- Student population is predominantly African American.
- The majority live in single-parent, female-headed households (60%). 70% qualify for the federal school lunch program.
- Both boys and girls report high rates of witnessing violence, victimization, and aggressive behaviors.
Initial Design (1991-1992)

**Intervention**

- 18-session curriculum including components of Prothrow-Stith’s program implemented by prevention specialists

**Design**

- Posttest only – No control group at 6 schools

X O
Developed through several iterations of implementing and evaluating middle school curricula for 6th, 7th, and 8th grade.

Within-school randomized trials in Richmond revealed promising effects on indicators of aggression and injuries, but effects were not consistent across all outcome domains and time points in intent-to-treat analyses.

Replication with full school implementation in quasi-experimental design in five rural Florida counties also showed some promising effects.

RIPP program designated ‘Promising’ Program by U.S. Department of Education Safe, Disciplined and Drug Free Schools.
Multi-Site Violence Prevention Project (MVPP) (1999-2006)
Key Questions

- What is the best approach to reduce violence rates among middle school students?
  - **Universal**: Focus resources on school-wide intervention and general population.
  - **Selective**: Focus resources on high-risk students.
  - **Both**?

- What are the ecological effects of implementing interventions at the school level?
MVPP Investigators

- CDC
  - Thomas Simon
  - LeRoy Reese
  - Emilie Smith
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  - Andy Horne
  - Pamela Orpinas
  - William Quinn
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- Duke University
  - David Rabiner
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  - Kenneth Dodge
  - Steve Asher

- Virginia Commonwealth University
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  - Aleta Meyer
  - Terri Sullivan
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# MVPP Research Design

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selective</strong>&lt;br&gt;(9 Schools)</td>
<td><strong>Selective</strong>&lt;br&gt;(10 Schools)</td>
</tr>
<tr>
<td><strong>Universal</strong>&lt;br&gt;(9 Schools)</td>
<td><strong>Control-No Intervention</strong>&lt;br&gt;(9 Schools)</td>
</tr>
</tbody>
</table>

- Combined Intervention
- Selective Intervention
- Universal Intervention
- Control-No Intervention
Focus on Cohort-Wide Sample

- Two successive cohorts of about 80 randomly selected sixth graders from each of the 37 schools (N = 5,642)
- Represents impact of both universal and selective interventions on representative sample of students within the cohort.
- Examined effects of both intervention approaches on primary outcomes related to aggression and school climate.


Main Effects at Posttest

Intervention Effects on Aggression (PBFS) by Risk

Effect size estimate (d coefficient)

Number of risk factors

- Universal
- Selective
- Combined
Intervention Effects on Overt Victimization by Risk

Effect size estimate (d coefficient) vs Number of risk factors

- Universal
- Selective
- Combined

VCU Clark-Hill Institute for Positive Youth Development
Intervention Effects on Physical Aggression (Composite) Over Time

- Control
- Universal
- Selective
- Combined

Selective only p < .05
Universal Intervention Effects on Attitudes Supporting Aggression by Risk

Universal Intervention Effects by School Consensus about Norms for Aggression

![Graph showing aggression slope by school norms and consensus levels.](image)

- High Consensus:
  - Control: $t(27) = 2.07, p < .05$
  - Universal: $t(27) = 2.04, p < .05$

- Low Consensus:
  - Control: $t(27) = 2.07, p < .05$
Farrell, Henry, & Bettencourt (2012) in a review of subgroup effects in universal school-based youth violence prevention trials identified factors within the individual, school, and community that moderate the outcomes of preventive interventions.

- Inconsistent support was found for a variety of moderators.
- The most consistent support was found for baseline aggression or risk such that effects were most evident for those at highest baseline aggression or risk.

We need a better understanding of how individual and contextual factors influence intervention effects so that we can better tailor interventions to the needs of the population of interest.

What Can Participants Tell Us About the Relevance of Our Interventions?

Focus of a qualitative Study to examine the relevance of Second Step for urban adolescents:

1. What did participants learn and retain from the intervention?
2. Have they attempted to use any of the skills taught and what happened when (if) they did?
3. What are their perceptions of the relevance of the intervention and the skills it attempts to teach?
4. What factors inhibit and what factors support the use of these skills?
Methods

• Interviews with 42 students at two urban schools who participated in Second Step earlier in the school year.

• Interviews with 99 students at two urban and one rural fringe middle school who participated in Second Step the previous school year.

• Focus on
  – participants’ perceptions of intervention.
  – Use of skills to handle a problem situation involving peers.
  – Efforts to apply specific skills.

• Several iterations of coding (still ongoing).
### Participants’ Use, Self-Efficacy, and Perceived Outcomes for Specific Intervention Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>% used</th>
<th>% used correctly</th>
<th>Outcome (1-5)</th>
<th>Self-efficacy (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Used</td>
<td>Didn’t</td>
</tr>
<tr>
<td>Anger management</td>
<td>82.1</td>
<td></td>
<td>3.82</td>
<td>3.55</td>
</tr>
<tr>
<td>Problem solving</td>
<td>57.9</td>
<td></td>
<td>3.91&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.50&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Empathy</td>
<td>71.2</td>
<td></td>
<td>3.85</td>
<td>3.63</td>
</tr>
<tr>
<td>Making a complaint</td>
<td>64.0</td>
<td></td>
<td>3.97&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.39&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Resisting peer pressure</td>
<td>53.2</td>
<td></td>
<td>4.00</td>
<td>3.79</td>
</tr>
<tr>
<td>Resisting gang pressure</td>
<td>13.0</td>
<td></td>
<td>3.64</td>
<td>3.67</td>
</tr>
<tr>
<td>Dealing with bullying</td>
<td>50.0</td>
<td></td>
<td>3.87</td>
<td>3.62</td>
</tr>
<tr>
<td>Diffusing a fight</td>
<td>64.5</td>
<td></td>
<td>4.02</td>
<td>3.69</td>
</tr>
</tbody>
</table>
Debriefing Themes:
General Reactions and Examples

• Positive Reactions To The Intervention
  — Learned a specific skill

• Negative Reactions To The Intervention
  — Found intervention boring

• Friends’ Reactions To The Intervention
  — Negative Friends’ Reactions

• Reasons For Not Using Skills
  — Intervention not relevant or not needed

• Suggestions For Improving The Intervention
  — More variety / relevant problems discussed

• What Students Have Done Differently After Intervention
  — Controlled anger
Debriefing Theme
Categories for Intervention Skills

- **What Students Have Done Differently – Handling situation**
  - Sought support from peers or adults

- **Understanding Of Skill**
  - Misuse of a skill

- **Barriers And Supports For Use Of Intervention Skill**
  - Internal Factors
  - Peer/Friends’ Reactions
  - Contextual/Situational Factors

- **Relevance of Skill**
  - Own way of handling things

- **Positive Outcomes Of Using Skill**
  - Achieves immediate positive outcomes
  - Avoided Negative Outcomes

- **Negative Outcomes Of Using Skill**
  - Made situation worse
# Internal Factors Influencing Use of Skills

<table>
<thead>
<tr>
<th>Theme</th>
<th>Examples as a Barrier</th>
<th>Examples as a Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>“Because me being quiet and me not saying much, people usually pick on me before they pick on someone else…so it might be hard for me to deal with that…”</td>
<td>“Because it was giving me confidence to back away from it”</td>
</tr>
<tr>
<td>Beliefs about aggression</td>
<td>“Gotta defend yourself…if you don’t want to get hurt”</td>
<td>“I don’t want to get into a fight with no bully…that’s stupid”</td>
</tr>
<tr>
<td>Values and sense of self</td>
<td>“I won’t feel right going to go tell, I’d feel like a little baby”</td>
<td>“I know what’s right and wrong”</td>
</tr>
<tr>
<td>Emotion regulation skills</td>
<td>“If you make me real mad I get to the point where I won’t stop”</td>
<td>“I calmed down and thank of other thoughts”</td>
</tr>
<tr>
<td>Remembering to use a skill</td>
<td>“If I ain’t think about it, I ain’t gonna do it”</td>
<td>“It just popped into my head that I could use these steps”</td>
</tr>
</tbody>
</table>
## Contextual Factors Influencing Use of Skills

<table>
<thead>
<tr>
<th>Theme</th>
<th>Examples as a Barrier</th>
<th>Examples as a Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Closeness or history to the other person</strong></td>
<td>“If I like two people that I don’t really know like that, I ain’t going to just jump in there”</td>
<td>“Because I could just tell everybody I’m not gonna fight my friend because he been my friend since, um, third grade”</td>
</tr>
<tr>
<td><strong>Presence of bystanders</strong></td>
<td>“The whole school keep on saying fight, fight, fight and the other dude go in”</td>
<td>“Everyone was trying to stop [the fight]…there were like 5 people there trying to stop it”</td>
</tr>
<tr>
<td><strong>Peers’ reactions to use of skills</strong></td>
<td>“They would’ve thought I was scared”</td>
<td>“She’s understanding…she understands how I feel”</td>
</tr>
<tr>
<td><strong>The other person crossed the line</strong></td>
<td>“If he says something crazy…then [fight] is all I could do”</td>
<td>N/A</td>
</tr>
</tbody>
</table>
#3: Intervention Strategies Should Focus On Promoting Positive Development
Making a successful transition to adulthood requires more than simply avoiding behaviors such as drug use, violence, and precocious sexual activity (Catalano et al., 2002).

The most effective approaches to reducing problem behaviors promote the development of positive social, emotional, cognitive, and behavioral skills (Catalano et al., 2002).

Outcomes for positive youth development should focus on improving long term chances to:
- Become economically self-sufficient.
- Be healthy and have good family and social relationships.
- Contribute to their community (Connell, Gambone, & Smith, 2008).
There is a wealth of information about factors associated with aggression, but far less is known about the specific factors that influence effective behavior. Effective behavior is not simply the opposite of problem behaviors such as aggression. The effectiveness of a response is heavily influenced by contextual factors (what is effective in one context may not be in another). Much can be learned from youth who have developed effective strategies for coping with challenging environments.
Aggressive vs. Non-Aggressive Comparisons Do Not Differentiate Between Competent and Incompetent Nonviolent Responses

Dodge et al. (2002) coded responses to problem situations.

<table>
<thead>
<tr>
<th>VIOLENT</th>
<th>NONVIOLENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>Competent</td>
</tr>
<tr>
<td>Authority-Punish</td>
<td>Authority-Intervene</td>
</tr>
<tr>
<td></td>
<td>Passive-Inept</td>
</tr>
<tr>
<td></td>
<td>Irrelevant-Other</td>
</tr>
</tbody>
</table>
Not All Youth Low on Aggression Are Well Adjusted

Hanish & Guerra (2002) identified clusters of youth.

High Aggressive Externalizing Symptomatic vs. Low Aggressive Popular High Achieving Internalizing Disliked Low Achieving Absent
Confirmatory factor analyses of measures with distinct scales reflecting aggressive versus effective nonviolent responses to problem situations (N = 183) found support for separate factors. Scales representing aggressive vs. effective nonviolent responses had low to moderate correlations:

- Behavioral Intentions $r = -0.31$
- Perceived Effectiveness $r = -0.17$
- Normative Response $r = -0.10$
- Peer reactions $r = +0.20$
- Parental messages $r = +0.18$

Effective Nonviolent Behavior is Not Just the Opposite of Aggression
Four Questions for Developers of Interventions Focused on Skill Development

1. What types of problem situations will participants need skills to address?
2. What are effective nonviolent approaches to addressing these situations?
3. What factors inhibit youth from using these approaches?
4. What factors facilitate their use?
• Purpose: To identify problem situations for middle school students.

• Problem: “any type of situation that doesn’t feel good or comfortable to you. It’s something that might make you feel angry, sad, scared, disappointed, or worried.”

• Participants asked to identify a recent problem, a problem encountered in the sixth grade, and a problem that was really difficult.

Participants

• 30 7th and 8th grade students.
• 9 peer mediators
• 30 parents of middle school students.
• 18 school staff (i.e., 3 teachers, 3 bus drivers, 3 cafeteria workers, 3 security staff, 3 prevention staff, and 3 vice-principals).
• 30 adolescents at community centers.
• 10 community center staff.
<table>
<thead>
<tr>
<th>Category</th>
<th># Situations</th>
<th># Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer</td>
<td>487</td>
<td>25</td>
</tr>
<tr>
<td>Student-Teacher</td>
<td>325</td>
<td>5</td>
</tr>
<tr>
<td>Environment</td>
<td>300</td>
<td>13</td>
</tr>
<tr>
<td>Student - Adult</td>
<td>265</td>
<td>17</td>
</tr>
<tr>
<td>Internal</td>
<td>187</td>
<td>6</td>
</tr>
<tr>
<td>Observed</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>Health</td>
<td>67</td>
<td>9</td>
</tr>
</tbody>
</table>
Internal Child Problems

- Negative view of self
- Emotional dysregulation
- Generalized worry and rumination
- Health-related problems
- Sexuality and relationships
Peer provocation (e.g., being picked on, teased, physical harassment, unwanted sexual contact).

Larger peer group (e.g., rumors and gossip, being “set up,” peer pressure).

Managing peer relations (e.g., shifts in social networks, triangular conflicts).

Peer interactions in the broader social environment (e.g., older students, exposure to drugs, insufficient adult supervision).
Examples of Peer Themes

- **Peer Instigation**
  “Somebody told the other boy that I was talking about his mother and I wasn’t. So somebody set that up and I don’t know who it was.”

- **Peer Acceptance**
  “Sometimes you are willing to do anything to fit in . . . I tried everything I could. I used to give them my lunch money, do everything just to get them to be my friend…”
“If my shoes aren’t Nikes . . this group do a lot of cracking and jokes. . . Ha ha look at shoes, look at clothes you know because they have something and another person don’t.”

“When someone hits you all the time you cannot just walk away. . all the time. . . and now no one here messes with me after that fight. . . Because here, when you win a fight you are popular.”
Peer Theme: Quick Escalation to Violence

“One person hit the other boy and said that the other guy did it. So he walked over there and pushed him. He pushed him back. He pushed him again. Then all you saw was fists flying.”
Problems in Family Domain

- Poor parenting
- Lack of close relationship with parent
- Intrafamily conflict
- Resource deficiency
- Assuming adult roles for decisions
- Change or loss of proximal family relationship
“His mother high and when she come in the house he like, “Why you high?” And then she be going off, cursing at them, beating them up, fussing at them because she have a problem. . . So he’s getting stressed out because he’s having to raise his little brother because she’s not doing it, she’s high all the time. So then he started selling drugs so he could make him money so he can help raise his little brother.”

– (Peer mediator)
Victimization

- Social victimization
- Destruction of property
- Sexual victimization
- Physical victimization
- Chronic victimization
“Girls tend to bring in so many other parties into their conflict that even though they might be willing to let it die down, you’ve got all these other friends who keep things stirred up by telling them things...telling this one, telling that one and then it gets spread around and then they all start telling the person and it keeps things spiraling until it goes on way too long.”

– (Female Vice Principal)
Problem with Adults

- Lack of advocacy and support
- Witnessing and dealing with adults’ adjustment problems
It’s difficult to talk to the parents because the parents are just as childish as the children, you don’t know how to come to them…Well I was shocked at what I saw. I said, “Wait, the mom is sitting on the porch egging them on.” Not even saying anything to them. She’s egging them on. Call him this, you know, and I’m going good gracious.

– (Mother)
Observed Events

- Exposure to drug and alcohol use
- Witnessing physical violence
- Witnessing verbal aggression
- Observing other upsetting events (e.g., visiting jail, witnessing a shooting, car crashes)
I went to my uncle’s house and he had a party and they got into a fight. And the man was ready to cut the other man and hit him with a beer bottle...the other man came in the room and said, “Get out, get out, get out.” And he said, No, I’m not leaving...” So the man said, he pulled out his knife and said “He not leaving?” And he said, “No, I’m not leaving.” Then put the knife to his throat and then he put it to his cheek...and then he pushed him out the thing. And then I think he hit my uncle.
Purpose: To determine the relevance of situations identified in qualitative study.

68 Problem situations identified based on qualitative study.

Method: Measures administered to sample of 176 7th and 8th graders.

Identified 25 most relevant problem situations based on reported frequency of occurrence and difficulty of handling each situation.

Relevance of Problem Situations

- Students experienced on average 35 different problem situations (SD = 12.8).
- All but one situation experienced by 20% or more of the sample at least once a year (range of 18-89%; \( M = 52\% \))
- 54 situations experienced by 20% or more of the sample at least monthly.
- All but two situations were rated as difficult (i.e., 3 or 4) by at least 40% of the sample.
- There were few gender differences on frequency, and none on difficulty ratings.
Problem Situation Frequency and Difficulty Were Correlated with Adjustment

- Physical Aggression
- Relational Aggression
- Delinquent Behavior
- CDI
- RCMAS

# Different situations
Mean difficulty
Response Enumeration Study

- **Purpose**: to generate responses to problem situations.
- **25 Problem situations** selected based on survey study.
- **Method**: Interviews with 122 students representing 4 clusters.
- **Described what they would do, what most kids would do, what they should do** in response to each situation (3 per student).
• Coding of responses resulted in between 12 and 34 different responses to each of the 25 situations.
• Represented broad range of responses.
• Responses collapsed into broader coping categories.
Example of Situations and Responses Generated

“You and another kid get into an argument at school. Other students are there boosting it up saying, “Fight, fight, fight.”
- I would tell the other person that I want to talk later and then walk away.
- I would throw the first punch. I’d hit them before they have a chance to hit me.
- I would tell the people yelling, 'fight, fight,' that there isn't going to be a fight.
- I would threaten the other person.
- I would tell an adult at home.
- I would stand there and wait for them to swing first and be ready to fight.
- I’d get my friends to fight the person.
Response Evaluation Study

- Purpose: to assess effectiveness of responses to problem situations.
- 25 Problem situations and 8-9 responses per situation selected.
- Ratings completed by 61 middle school students, 27 community experts, and 9 investigators.
- Rated effectiveness of each response on a 5-point scale (really bad to really good)
Someone started a rumor about you and other students are keeping it going and making the rumor worse. Now it seems like all the kids are talking about you.

<table>
<thead>
<tr>
<th>Response</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would talk to the person and work it out.</td>
<td>4.31</td>
</tr>
<tr>
<td>I would go to peer mediation with the person.</td>
<td>4.15</td>
</tr>
<tr>
<td>I would tell an adult about it.</td>
<td>4.09</td>
</tr>
<tr>
<td>I would tell my friends to stop spreading the rumor.</td>
<td>3.81</td>
</tr>
<tr>
<td>I would try to stop the rumors and tell people that it wasn't true.</td>
<td>3.65</td>
</tr>
<tr>
<td>I wouldn't let the rumors bother me.</td>
<td>3.52</td>
</tr>
<tr>
<td>I would leave it alone.</td>
<td>3.35</td>
</tr>
<tr>
<td>I would find out who started the rumor.</td>
<td>3.03</td>
</tr>
<tr>
<td>I would cut off all ties and ignore him or her.</td>
<td>3.01</td>
</tr>
<tr>
<td>I'd confront the person.</td>
<td>2.78</td>
</tr>
<tr>
<td>I would transfer to a different school.</td>
<td>1.69</td>
</tr>
<tr>
<td>I would get even and tell a rumor about that person.</td>
<td>1.52</td>
</tr>
<tr>
<td>I'd go up and cuss out the person.</td>
<td>1.31</td>
</tr>
<tr>
<td>I would fight the person who started the rumor.</td>
<td>1.16</td>
</tr>
</tbody>
</table>
Barriers and Supports Study

- Purpose: to identify factors that inhibit use of effective prosocial responses (and fighting) and those that encourage their use.
- 20 Situation-response pairs representing effective responses; 4 situation-response pairs representing fighting.
- Interviewed 106 6th and 7th graders (61% female, 39% male) at 3 urban public schools.
- Each asked about 3 situation-response pairs.


• Started with an a priori list of 52 themes from existing literature representing different domains of barriers and supports.
• Emergent themes from focus groups with adults were incorporated into existing structure
• Final list of themes emerged through a process of constant comparison between all data and theme definitions. Quotes were selected.
• Multiple researchers analyzed data.
Themes Generated from Barriers and Supports
(Based on interviews with 106 adolescents)

**Personal Resources, Beliefs & Values**
- Self-efficacy
- Emotion regulation
- Problem-solving skills
- Internalized values, goals, and motivations
- Beliefs supporting fighting
- Beliefs about the world

**Consequences**
- Threat of physical harm
- Fighting now prevents future fighting
- Perceived ineffectiveness of responses
- Fear of negative outcome
- Escalation of Problem

**Situational Factors**
- Closeness/connection to person
- Attributions of the other person
- Alone, not in a crowd

**School**
- Proximal support and supervision
- Consequences

**Family**
- Support, supervision, and monitoring
- Consequences
- Parental values about fighting
- Parental modeling

**Peers**
- Proximal peer or sibling support
- Bystander pressure to fight
- Instigation
- Peer pressure
- Direct verbal victimization
- Image and reputation

**Neighborhood/Mesosystem**
- Support, supervision, and monitoring
- Exposure to violence/trauma, delinquency, substance abuse
- Longevity/consistency of relationships
- Spirituality
- Media violence
- Generational history
A female student talks about the common button pusher:

I: “OK...Another kid at school said something that’s disrespectful about your family?”
S: “I’m going to punch her in her face. (laughter)”
I: “OK...The first question is what would you be thinking? If somebody...”
S: “(interrupts) I wouldn’t be thinking nothing, no way. I’d just punch her.”
I: “There’s nothing you’d be thinking in your head?”
S: “Naw. and then I’d hurt her good. I would punch her in her eye. And I’m dead serious.”
I: “umm...So nothing’s in your head like no thoughts about it?”
S: “I’d be ready to fight. I’d be too mad to stop. It’s that simple.”

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Belief That Fighting is Sometimes Necessary or Inevitable

- One girl indicated that saying “I’m not going to fight” would not be an effective response because:
  
  “The person would keep on picking with them until they fight.”

- The belief that fighting now prevents fighting in the future. One girl explained that most kids would fight in response to teasing and name-calling because:
  
  “They will probably be like that person said they'll fight you later on and they will look around for you and they will fight you but they will see you somewhere else they will fight you, but they are gonna fight you.”
Peer Pressure as a Barrier to Nonviolent Responses

- Reasons some students might not go to peer mediation:
  “That person that they went to peer mediation with would be just talking about them more, just calling them names and saying they’re scared because they had to go to peer mediation.”

- One girl explained why walking away from a fight would be hard:
  “[Friends would give] . . .that look where they think you are all scared and stuff and therefore they don’t like you anymore.... If I didn’t fight then my friends would be all mad.”

- One boy explained how a peer audience would make it hard to act as peacemaker between two friends:
  “People at my school, they are in a circle, one that nobody breaks it up. They just still want to fight. They will think it is stupid trying to break it up.”
One boy indicated why he would fight if other kids were teasing or picking on him:

“Causes you know your family say, ‘Somebody hit you, hit them back.’...So you gotta do what they say even if you do get in trouble.”

Another boy explained what would make it hard for him to tell the teacher or principal when other kids are teasing him:

“My parents, they’ll force me to fight them. Well, they don’t force me, they’re like, like if a teacher don’t do nothing I might as well do it on my own, like fight.”
Perceived Ineffectiveness of Nonviolent Responses

• One boy explained why he would not go talk to an adult about a friend who was acting fake.
  “I just don’t think they’ll be able to help.”

• One girl explained how confronting a friend even in a positive way could increase the likelihood of fighting.
  “I go up to them and be like, ‘Why you acting fake? Sometimes in the next minute you be in my face, or whatever.’ And somebody right there would be like, ‘Maybe ‘cause I want to.’ Or something like that. And then I be like, ‘You ain’t got to get smart.’ And they be like, ‘I wasn’t getting smart.’ And it keep going on and on and on and somebody probably end up hitting somebody.
A focus group participant explained that fighting to project a tough image can be important in urban neighborhoods:

“They may not really wanna fight, but if they don't, they won't survive, and that makes it easier to commit an act of violence than it would for them to walk away because they feel like if I go ahead and get it over with now, nobody else will mess with me.”
Measure Development Study: Goals and Objectives

1. To develop a battery to assess factors that influence urban adolescents’ effective nonviolent behavior and aggressive behavior in problem situations.
2. To determine the relative influence of these factors on aggressive behavior, victimization, and effective nonviolent behavior within our target population.
3. To identify subgroups who differ in patterns of risk and promotive factors and who may thus be suited to different intervention strategies.
4. To use this information to improve the relevance of our current prevention efforts and provide measures to evaluate the success of this effort.
## R&P Constructs

### OUTCOMES
- Physical Aggression
- Nonphysical Aggression
- Relational Aggression
- Cyber Aggression
- Overt Victimization
- Relational Victimization
- Cyber Victimization
- Nonviolent Delinquent Behavior
- Drug Use
- Effective Nonviolent Behavior
- Prosocial Activity

### FAMILY DOMAIN
- Family Structure
- Felt Acceptance
- Parental Monitoring
- Parental Messages Supporting Fighting
- Parental Messages Supporting Effective Nonviolent Behavior
- Antisocial Parental Modeling
- Prosocial Parental Modeling

### INTERNAL DOMAIN
- Internalized Values/Schemas
- Beliefs about Fighting
- Self-efficacy for Fighting and Other Behaviors
- Perceived Effectiveness for Fighting
- Perceived Effectiveness of Effective Nonviolent Responses
- Behavioral Intention for Fighting and Other Behaviors
- Experienced Problem Situations
- Emotional Response to Problem Situations
- Problem-Solving

### PEER DOMAIN
- Expectations of Peer Reactions
- Peer Pressure
- Peer Deviance
- Presence of Prosocial Peers

### NEIGHBORHOOD DOMAIN
- Exposure to Violence
Steps in Measure Development

1. Determine most appropriate format.
   a. Traditional “paper-and-pencil”
   b. Articulated thoughts in simulated situations
   c. Problem Situation Interview

2. Develop item pool based on review of literature and qualitative work.

3. Pilot test.

4. Evaluate internal structure and finalize item selection.

5. Evaluate distribution (prevalence) and validity (relation to aggression) in larger scale study.
Latent Class Analysis of Beliefs Measure

Analysis of Perceived Effectiveness Measure

- Physically aggressive response
- Relationally aggressive response
- Effective nonviolent response
- Ineffective nonviolent response

Perceived Effectiveness

Low Aggression

High Aggression
#4: Comprehensive Efforts are Needed to Address Factors Across Multiple Contexts.

- Different sets of risk factors emerge during different periods of development.
- Violence is determined by multiple causes and youth experience different patterns of risk and protective factors.
- Intervention strategies that vary in intensity may be needed for different subgroups of adolescents.
- Factors that influence adjustment are not all within the individual - Interventions that focus on promoting individual level skills will have limited success if they are not supported by the environment.
Crick & Dodge (1994) Social-Information Processing Model

Need to Address Factors Outside the Box
1. Components directed at universal and high-risk populations within the defined community.

2. Components directed at risk factors from each of the following levels of influence: individual, relationship, and community.

3. The components of the multifaceted approach should be complementary and have the reach and dosage necessary to have a community-wide effect.

4. Components must have documented evidence of effectiveness.
VCU ACE: Project Goals

- Develop an effective, comprehensive approach to positive youth development
- Implement it in collaboration with community partners
- Evaluate its impact
- Sustain this effort locally
- Transport lessons to other communities
Faculty Collaborators

Research and Evaluation Core
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Torey Edmonds, CIT Associate Director and Community Liaison

Family Intervention Team (FIT)
Rosalie Corona, Ph.D., FIT Director
Wendy Kliewer, Ph.D. Co-investigator
Community Partners

- Richmond Public Schools
- Communities in Schools
- City of Richmond (Office of Deputy CAO for Human Services)
- United Way (POST/Readyby21)
- Community Foundation
- Clark-Hill Community Advisory Council
Richmond, Virginia

- Population of 200,979
  - 21% are 10-24 years of age
- Race/Ethnicity
  - 53% are African-American
  - 5% are Hispanic
- Half of households with children are female-headed households with no husband present
- 10% of the labor force is unemployed
- 22% of the population is below the poverty level
  - 48% of female-headed households with children < 18 years and no husband present are below poverty
Youth Violence in Richmond

- Between 1999 and 2006, 92% of all intentional injury deaths were among youth between 15 and 24 with homicide the leading cause of death for this age group.
- From 1999 to 2007, the homicide rate among 15 to 24 year olds in Richmond ranged from 5 to 9 times the national average.
- The proportion of intentional injury visits to emergency rooms is gradually increasing. For youth the average age for intentional injuries was between 18 and 19 years.
- Annually, over 6,000 Richmond youths between 5 and 19 years old are referred to the City of Richmond's Department of Justice Services. Truancy and assault are the two top reasons for referral.
Criteria for Identifying Communities

- High risk based on meetings with our community partners and review of surveillance data
- Reasonably intact to minimize diffusion of intervention effects
- Size: not exceed the resources needed to implement intervention activities with adequate dosage
- Absence of other planned activities
- As similar as possible in terms of current resources and risk level
- Identified higher risk neighborhoods within each community to focus community intervention efforts
Identified Communities
Addressing Influences at Multiple Levels

- Community Building PYD Capacity
- Youth-Serving Agencies
- Outreach & Conversations

- Family Check-Up
- Self-Directed

- School-Wide Skills

- Child, Teen, Young Adult
Community Intervention

- Focus on youth 10 to 19 years of age in identified neighborhoods within each community
- Represents Collaborative Coalition-Based Effort
- Building Community Capacity for Positive Youth Development
  - Increase availability of evidence-based resources
  - Builds upon existing resources
  - Youth program quality assessments (Weikart Center Assessment Tool)
  - Solicit proposals from community organizations for technical assistance, training and funding for program implementation
- Increase Social Capital for Positive Youth Development
  - Community Network Engagement (Community Intervention Team)
  - Community Outreach Through Walker-Talkers
  - Community Conversations (4-6 per year)
School Intervention

• Individual Level
  – Integrated classroom meetings for sixth, seventh, and eighth graders
  – Individual referrals to the Family Check Up, Staying Connected with Your Teen, and other community interventions

• Classroom and School Level
  – Teacher training on issues such as classroom management and violence prevention
  – School-wide intervention focused on promoting a warm and responsive school environment
Family Intervention

- Help Families of Middle School Students
- Coordinated Effort with School and Community Interventions
  - Referrals through school-based intervention
  - Referrals through truancy
  - Referrals through Walker Talkers
- Family Check Up
  - 3 session strength-based assessment to motivate caregivers to change parenting behaviors and engage in parenting program
- Staying Connected with Your Teen
  - Self-directed with telephone support
Evaluation Plan Must Include:

1. A plan to assess specific youth violence outcomes over time to detect the community-wide impact of the multifaceted approach on a range of youth violence outcomes.

2. Evaluation of effects of specific components on those who were directly exposed is also appropriate but not required.

3. A single high-risk community to receive the multifaceted prevention approach *and* one or more comparison communities that are appropriately matched to the treatment community.

4. An evaluation design and analysis plan with the greatest methodological rigor feasible, including matching of intervention and comparison communities.
#5: Traditional Designs May Not Be Well Suited to Evaluating Comprehensive Strategies

1. Focus is on the level of the unit targeted by the interventions.

2. Demonstrates that a change has occurred.

3. Rules out other plausible explanations for the change.

4. Demonstrates that the change is statistically and practically significant.

5. Has the flexibility to adapt the intervention to address specific needs.

6. Documents what was done so that it can be replicated.
Design: Multiple Baseline Approach

1. Identify units that will be the focus of intervention efforts
2. Collect baseline data on targeted outcomes for each unit
3. Stagger implementation and timing of intervention across units in a random order
4. Collect continuous data on targeted outcomes throughout the project
5. Evaluate relation between timing of implementation and changes in outcomes
Multiple Baseline Design Example

![Graph showing quarterly assessments of Violence-Related Emergency Dept. Visits in three communities: Community A, Community B, and Community C. The graph displays the baseline phase with interventions implemented in Community A and Community B. The data shows a decrease in visits post-intervention.]
## Indicators to Evaluate Impact

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Sample</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide rate for intentional injury</td>
<td>Community residents age 10-24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Virginia Department of Health Division of Vital Records and Health Statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Virginia Office of the Chief Medical Examiner</td>
</tr>
<tr>
<td>Referrals to Justice Services for violence related incidents</td>
<td>Community residents age 10-24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Richmond Department of Justice Services</td>
</tr>
<tr>
<td>Intentional injury visits to VCU’s ED (assault, abuse, and firearm related)</td>
<td>Community residents age 10-24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>VCU’s Emergency Department</td>
</tr>
<tr>
<td>Violence-related incidents</td>
<td>Community residents age 10-24&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Richmond Police Department</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Richmond Ambulance Authority</td>
</tr>
<tr>
<td>Discipline incidents for violence related offenses in schools</td>
<td>School-aged youth in community</td>
<td>Virginia Department of Education</td>
</tr>
<tr>
<td>Student reports of aggression and victimization, and school climate and positive outcomes.</td>
<td>Random sample of middle school students from each community (225 per wave).</td>
<td>Problem Behavior Frequency Scale Exposure to Community Violence Scale Dieting Violence Scale School Climate and Supports Risk and Protective Factors</td>
</tr>
<tr>
<td>Teacher ratings of students’ aggression and school climate and positive outcomes.</td>
<td>Teacher ratings of a random sample of middle school students from each community (225 per wave).</td>
<td>Problem Behavior Frequency Scale School Climate and Supports</td>
</tr>
<tr>
<td>Youth and parents in targeted neighborhoods reports of aggression and victimization.</td>
<td>Survey of youths aged 11 to 15 from high-risk neighborhoods within each community (60 per wave).</td>
<td>Problem Behavior Frequency Scale Exposure to Community Violence Scale Dieting Violence Scale.</td>
</tr>
</tbody>
</table>
Youth Surveys

**Middle School Student Survey**
- 630 students from grades 6-8 from three participating schools.
- Randomly assigned to 2 waves of data per year.
- Replacements recruited each year.
- Cohort entering 6th grade in 2011 followed for 4 years.
- Teacher ratings of students obtained three times per year.

**School Climate Survey**
- Completed by 75 teachers three times per year.

**Community Youth Survey**
- 255 11-15 year old youth in the high-risk neighborhoods within each community.
- Randomly assigned to 2 waves of data per year.
- Replacements recruited each year.

**Survey of Youth Meeting Selective Criteria**
- 30 Yoked-pairs of youth referred through truancy.
- Parents participating in family intervention.
Youth Surveys: Common Measures

Primary Outcomes
• Dating Violence Scale
• Problem Behavior Frequency Scales-Revised
• Behavioral Intentions Measure
• Survey of Children’s Exposure to Community Violence

Potential Mediators
• Achievement Motivation
• Checklist of Children’s Distress Symptoms
• Parental Messages About Fighting and Nonviolence

• Parental Practices Scale
• Peer Behaviors Scale
• Peer Support for Aggression and Nonviolence Scale
• Perceived Effectiveness Measure
• Positive Outlook
• Revised Urban Adolescents Life Experiences Scale
• Self Efficacy for Nonviolence
**Youth Surveys: Sample Specific Measures**

**Middle School Youth Survey**
- Beliefs about Fighting and Nonviolent Alternatives
- Dating Violence Problem Situations
- Inventory of School Climate
- Presence of Caring
- School Safety Problems

**Teacher Ratings**
- Teacher Demographics
- Emotion Regulation Checklist
- School Norms for Aggression and Nonviolence
- School Safety Scale
- Problem Behavior Frequency Scale

**Community Youth Survey**
- Attitudes Toward Employment
- Collective Efficacy
- Community Resources in Neighborhood
- Delinquent Beliefs
- Developmental Assets Profile
- Perception of Parent Management of Free Time
- Richmond Youth Community Resource Interview Survey
## Project Timeline

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomization of communities</td>
<td>Data collection continues in all communities</td>
<td>Data collection continues in all communities</td>
<td>Data collection continues in all communities</td>
<td>Data collection continues through midyear</td>
</tr>
<tr>
<td>Baseline data collected in all communities</td>
<td>Intervention initiated in Community A</td>
<td>Intervention continues in Community A</td>
<td>Intervention continues in Community A</td>
<td>Intervention continues in Community A</td>
</tr>
<tr>
<td>Intervention plans finalized and training conducted in Community A</td>
<td>Intervention initiated in Community B</td>
<td>Intervention continues in Community B</td>
<td>Intervention continues in Community B</td>
<td>Intervention continues in Community B</td>
</tr>
<tr>
<td>Data analyses conducted and reports prepared</td>
<td></td>
<td></td>
<td></td>
<td>Intervention plans finalized and training conducted in Community C</td>
</tr>
</tbody>
</table>

**VCU Clark-Hill Institute for Positive Youth Development**
**School Intervention:** Surveys of random sample of middle school students conducted quarterly with measures of individual- (e.g., beliefs supporting nonviolence) and school-level (e.g., school climate) factors targeted by intervention.

**Community Intervention:** Surveys of random sample of youth in targeted communities conducted quarterly with measures of factors targeted by the intervention (e.g., social capital, use of resources).

**Selective Parenting Intervention:** Measures of processes targeted by the intervention will be collected from intervention participants and yoked controls (N = 60) at pre, post and follow-up.
Overview of Samples

- Community Residents 10-24 years old
  - Middle School Students at Intervention Schools ~11-14 year olds
  - Focus Neighborhood Youth^a 11-19 yr olds
  - Selective Intervention Participants^b
  - Community Intervention Participants

^a Neighborhood youth sample will only include those on food stamp rolls.
^b Selective sample will only include those identified based on truancy.
• Randomization of 6 possible orders x 4 possible timings of intervention = 24 possible random assignments
• Compare obtained result to distribution of test statistic (e.g., post-pre means) under null for each of 24 possible random assignments
• Makes few assumptions regarding distribution
• Will supplement with interrupted time series analysis via multi-level modeling
• Power calculations based on Monte Carlo simulations indicated adequate power using various parameter estimates (e.g., .77 assuming autocorrelation of .20 and effect equivalent to 21% reduction in ED intentional injury visits)
• Power calculations were slightly lower for randomization test
Conclusions Revisited

1. Early adolescence is a peak period for development of aggression and exposure to risk.
   - Growth curve trajectories for aggression and risk and increase.
   - Promotive factors decrease.
   - There may be critical times to address specific factors.

2. Violence prevention efforts for early adolescents have had limited success.
   - Interventions are needed to address specific risk and protective factors that emerge during this period of development.
   - We need a clearer understanding of strategies to address these factors.
   - Interventions need to take into account different patterns of risk.

3. The focus of intervention strategies should be on promoting positive development, not simply avoiding problem behaviors.
   - We need a better understanding of factors that promote positive adjustment, particularly among youth exposed to high levels of risk.
4. Comprehensive efforts are needed to address factors across multiple contexts.
   - Factors that influence adjustment are not all within the individual
   - One size is not likely to fit all – we need a clear understanding of the factors most relevant to our target population.
   - Intervention strategies that vary in intensity may be needed for different subgroups of adolescents.

5. Traditional designs may not be well suited to evaluating comprehensive prevention strategies.
   - We need to develop alternative designs that do not require us to modify the intervention to fit the design or compromise methodological rigor.


Questions?