‘The Heart and Soul of the Matter:’ Contexts of Risk and Prevention

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“Context is not just something, it is the heart and soul of the matter” (Kelly, 1998)

1. How do youth relate to peer context?
2. How should peer context be measured?
3. Contextual levers and moderators for intervention
4. Intervening to change context
   - Normative feedback in schools
   - Changing families to change aggression
What contextual characteristics should we measure?

1. **Typical beliefs predict risk more strongly than typical behavior.** (Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000; Henry, Deptula, Schoeny, & Slavick, 2007; Henry, Schoeny & Deptula, in press)

2. **Neighborhood Matters Study**
   1. 30 non-contiguous neighborhoods defined by census tracts
   2. 20 informants from each neighborhood (gender and age balanced)
   3. **Neighborhood characteristics sample**
      1. Norms
      2. Informal Social Control
      3. Social Cohesion
      4. Routine Activities
   4. **Developmental sample**
      1. Neighborhood measures
      2. Positive prosocial and antisocial behavior
How do youth relate to peer context?

How do youth relate to peer context?

1. Typical beliefs predict risk more strongly than typical behavior.  
   (Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000;  
   Henry, Deptula, Schoeny, & Slavick, 2007; Henry, Schoeny & Deptula, in press)

2. The liaison position in social networks is associated with greater risk for substance use than other network positions.  
   (Henry & Kobus, 2007; Kobus & Henry, 2009)
Peer Networks and Substance Use

- **Liaisons** > **Members** or **Isolates** on tobacco and alcohol use (2 studies)
- **Members** and **Isolates** more influenced by peer substance use than **Liaisons**.
How do youth relate to peer context?


2. The liaison position in social networks is associated with greater risk for substance use than other network positions. (Henry & Kobus, 2007; Kobus & Henry, 2009)

3. Middle school students incorrectly perceive peer norms for aggression and nonviolence. (Henry, Dymnicki, Schoeny, Meyer, Martin, & MVPP, in press)
Figure 1: Distribution of approval of aggression and nonviolence by cohort and source.

Cohort 1

Cohort 2

Note: The dotted line is the point of neutrality.

(Henry, Dymnicki, Schoeny, Meyer, Martin, & MVPP, in press)
How should context be measured?

1. Variability adds value beyond mean as measure of norms. (Henry, Cartland, Ruchross, & Monahan, 2004; Henry & Chan, 2010)
Enriching Measures of Norms

Figure 1. Three types of setting level norms, all with mean approval of 1.2, based on March, 1954
Enriching measures of Norms

- How strongly do people feel about the behavior?
- Are norms enforced by approval or disapproval?
- Does the norm apply to a wide or narrow range of behaviors?
- How much agreement is there in the setting?
- What are the consequences for the individual?
<table>
<thead>
<tr>
<th></th>
<th>Behavior</th>
<th>Feedback (Approval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a kid ignored a rumor that was being spread about him or her?</td>
<td>They wouldn’t like it (-1)</td>
</tr>
<tr>
<td>2</td>
<td>a kid asked a teacher or another adult for help when challenged to a fight after school?</td>
<td>They wouldn’t like it (-1)</td>
</tr>
<tr>
<td>3</td>
<td>a kid apologized to someone that he or she accidentally bumped into in the hall?</td>
<td>They wouldn’t like it (-1)</td>
</tr>
</tbody>
</table>
Measuring Normative Feedback in Social Settings

Intensity = mean(□, ▢)
Enforcement = □ - ▢ = Consensus

Potential Cost/Benefit

Most approved behavior

Range of Acceptable Behavior

Behavior

Feedback (Approval)

Average approval for behavior
School Norms for Nonviolence Items

How would the kids in your school feel if

1. a kid ignored a rumor that was being spread about him or her?
2. a kid told another student who was starting to get into a fight that there's a choice between fighting and other ways of solving problems?
3. a kid asked a teacher or another adult for help when challenged to a fight after school?
4. a kid apologized to someone that he or she accidentally bumped into in the hall?
5. a kid told another student to “stop and calm down” when the other student started to get into a fight?
6. a kid avoided a fight by walking down a different hall to class?
7. a kid listened to a friend's side of the story, even though the two were in an argument?
8. a kid took a deep breath when he or she started to lose his temper?
Distributions of School Mean Approval Ratings for Nonviolent Strategies Items

(Henry & Chan, 2010)
Added value of variability measures for predicting aggression

- Cross-sectional
  - Mean Approval: $d = .03$
  - Range of Acceptable Behavior: $d = .12^{**}$
  - Consensus: $d = .13^{**}$

- Longitudinal
  - Mean Approval: $d = .07^{*}$
  - Range of Acceptable Behavior: $d = .03$
  - Consensus: $d = .02$

$p < .05. \; **\; p < .01.$

(Henry & Chan, 2010)
Contextual Levers and Moderators for Intervention (The IPFS Study)
Multisite Violence Prevention Project (MVPP)

- Funded by CDC
- 2000-2005
- 2 grade cohorts
- 37 middle schools randomly assigned to 4 conditions
- 4 sites: Northeastern GA, Chicago, IL, Durham, NC, Richmond, VA
- Cohort-wide (General Population) and High Risk Samples
  - Cohort-wide sample: ~ 80 students/school
  - High Risk: > 25th %ile on aggression with high social influence.
- Assessments: 6th grade fall and spring, 7th and 8th grade spring
Contextual Levers: Norms

- School-level factor structure: single dimension from support for aggression to support for nonviolent alternatives.
- Entered over individual scores to predict aggressive behavior, beliefs supporting aggression, self-efficacy for nonviolence.
- Significant associations at 6th grade entry.
- Little developmental or gender variation.
Contextual Levers: Quality of Interpersonal Relationships

- Quality of student-teacher relationships associated with aggression, normative beliefs, and self-efficacy for nonviolence.
- Quality of student-student relationships associated with aggression and normative beliefs.
- Males more influenced by interpersonal relationships than females.
- Some developmental variation – weakening of effects during middle school.

(Henry, Farrell, Schoeny, & Tolan, in press)

Figure 1. Effects of positive student–student relationships on individual aggressive behavior, by gender at 6th–grade fall and 8th grade spring, in units of the pooled Wave 1 standard deviations, with 95% confidence intervals.
Contextual Levers: Attentiveness to Violence

- Qualitative studies
  - lack of teacher support for nonviolent strategies.
  - School staff unaware or unresponsive to violence
- Teacher Awareness and Reporting of violence predicted aggression throughout middle school, particularly among females.
- School Safety Problems predicted aggression later in middle school.

(Henry, Farrell, Schoeny, & Tolan, in press)
Contextual Moderators: MACS

Metropolitan Area Child Study
Design of the Study and School Assignment to the Treatment Conditions

- Level A: No Treatment
- Level B: High Risk Small Group Intervention
- Level C: General Enhancement Classroom Intervention

4 Schools

High Risk Family Intervention
High Risk Small Group Intervention
General Enhancement Classroom Intervention
No Treatment
MACS Mean Aggression Scores in Aurora for Early Intervention Children

![Composite Aggression Graph](image-url)

- **Control** Condition
- **Level A** Condition
- **Level B** Condition
- **Level C** Condition

**Y-axis:** Composite Aggression

**X-axis:** Intervention Condition

- **Pre-test**
- **Post-test**
Intervening to Change Context
Intervening to change context

- Normative Feedback Intervention
  - Part of CDC ACE comprehensive community initiative involving schools, high schools, families
  - Used successfully for substance use
  - Not yet tested in relation to violence
  - RCT in AY 2011-2012
    - Assessment in fall and spring
    - 2\textsuperscript{nd}-8\textsuperscript{th} grade classrooms randomly assigned to NF+Poster contest or Poster contest w/o NF
    - ~110 classrooms and 2400 students
Intervening to change context

- ‘Sentinel’ Surveillance System
  - Part of CDC ACE
  - Observers geographically distributed in communities
  - Collect reports of precursors of youth violence
    - New graffiti
    - Harassment
    - Weapons
  - Combine with geocoded police crime data to predict future change in youth violence
- Current model (w/o observers)
  - PPV=.75, NPV=.57, Sensitivity=.24, Specificity=.93
Intervening to change context

- Multiple tests of intervention to change family relationships and parenting practices

- 1991-present
  - Metropolitan Area Child Study (MACS)
  - SAFEChildren I
  - SAFEChildren II
  - SafeChildren-E
  - SafeChildren III
  - Multisite Violence Prevention Project (MVPP)
  - Chicago Center for Youth Violence Prevention (ACE)
SAFEChildren Studies

SAFE-I:
1. Multiple-Family groups
   - 20 weekly multiple family group meetings
   - Addressed parenting, family relationship characteristics, parental involvement and investment in education, and managing child development in the social ecology of the inner-city
2. Tutoring
   - 30 weeks, individual 1/2 hour sessions, 2x/week
   - phonics-based
   - literacy education through reading of books

SAFE-II:
1. Multiple-Family groups
   - 19 weekly sessions
   - Reading Club integrated in family sessions

SAFE-III: Late/post high school followup

SAFE-E: Implementation with community providers
SAFEChildren Participants

- High Family Risk (N=100)
- High Child Risk (N=86)
- Recruited (N=424)
- SAFE I Intervention (N=217)
- SAFE I Control (N=207)
- SAFE II Booster (N=101)
- SAFE II Booster Control (N=95)

Kindergarten Grades 1-2 Grades 4-6
SAFEChildren I Effects

- **Overall**
  - I > C on reading achievement $(d = .17)$
  - I ~> C on parent involvement $(d = .10)$

- **High Risk Families**
  - I < C on aggression $(d = .12)$
  - I > C on concentration $(d = .13)$
  - I > C on parental monitoring $(d = .14)$

- **High Risk Children**
  - I < C on aggression $(d = .16)$
  - I ~< C on hyperactivity $(d = .10)$
  - I > C on parent involvement $(d = .14)$

(Tolan, Gorman-Smith, & Henry, 2004)
SAFEChildren II Effects

- Overall
  - $B < I$ on aggression ($d = .19$)
  - $B < I$ on Impulsivity ($d = .29$)
  - $B \sim I$ on concentration ($d = .21$)

- High Risk Families
  - $B < I$ on aggression ($d = .29$)
  - $B > I$ on family organization ($d = .24$)

- High Risk Children
  - $B > I$ on reading ($d = .31$)
  - $B < I$ on impulsivity ($d = .22$)

(Tolan, Gorman-Smith, Henry, & Schoeny, 2009)
Multisite Violence Prevention Project (MVPP)

![Diagram showing the Multisite Violence Prevention Project (MVPP) with different intervention types and outcomes.](image)
MVPP Participants

Recruited (n = 37 schools) from 4 sites

Enrollment

37 schools randomly assigned to conditions within sites

Allocation

9 schools allocated to control condition. Random sample of 1,748 eligible students identified. Consent not obtained (n = 419). Consented (n = 1,329).

9 schools allocated to universal intervention. Random sample of 1,875 eligible students identified. Consent not obtained (n = 424). Consented (n = 1,451).

10 schools allocated to selective intervention. Random sample of 1,945 eligible students identified. Consent not obtained (n = 443). Consented (n = 1,502).

9 schools allocated to combined intervention. Random sample of 1,796 eligible students identified. Consent not obtained (n = 453). Consented (n = 1,343).

Follow-Up

Not assessed (student/teacher report) Wave 1 (n = 60/68)
Wave 2 (n = 93/160)
Wave 3 (n = 125/274)
Wave 4 (n = 325/325)
Wave 5 (n = NA/453)
Wave 6 (n = 466/482)

Not assessed (student/teacher report) Wave 1 (n = 53/88)
Wave 2 (n = 151/151)
Wave 3 (n = 204/440)
Wave 4 (n = 457/451)
Wave 5 (n = NA/552)
Wave 6 (n = 582/594)

Not assessed (student/teacher report) Wave 1 (n = 42/88)
Wave 2 (n = 141/119)
Wave 3 (n = 203/305)
Wave 4 (n = 358/335)
Wave 5 (n = NA/546)
Wave 6 (n = 494/503)

Not assessed (student/teacher report) Wave 1 (n = 41/48)
Wave 2 (n = 164/161)
Wave 3 (n = 176/357)
Wave 4 (n = 392/398)
Wave 5 (n = NA/522)
Wave 6 (n = 545/558)

Analysis

Analyzed Student reports (n = 1,322) Teacher reports (n = 1,307)

Analyzed Student reports (n = 1,439) Teacher reports (n = 1,424)

Analyzed Student reports (n = 1,491) Teacher reports (n = 1,482)

Analyzed Student reports (n = 1,329) Teacher reports (n = 1,316)
MVPP Interventions

- Universal
  - 20-session social-cognitive curriculum
  - 12-hour teacher workshop
  - 10 consultation/support meetings for teachers

- Selective
  - 15 week group-based family intervention
    - Similar content to MACS and SAFE

- Combined
MVPP Results

● Cohort-wide Sample
  ● Selective < Control on aggression growth ($d = .05$)
  ● Universal < Control on relational victimization growth ($d = .04$)
  ● Universal > Control on teacher-report aggression ($d = .06$)

● Effects stronger among higher risk youth
MVPP Results

- Targeted Sample
  - Youth outcomes
    - Selective < control on violence ($d = .07$)
    - Selective < control on aggressive strategies ($d = .08$)
    - Combined < control on aggressive strategies ($d = .07$)
    - Universal > control on achievement values ($d = .15$)
    - Combined > control on achievement values ($d = .12$)
  - Family Outcomes
    - Selective > other on parental monitoring ($d = .06$)
    - Selective > other on family cohesion ($d = .22$)
    - Selective > other on family problem solving ($d = .08$)
MVPP Targeted Mediation

Baseline Mediator

Gender, Ethnicity, Cohort, Site

Selective Intervention

Posttest Mediator

Posttest Outcome

Baseline Outcome

$\text{Baseline}$

$\text{Posttest}$

$\text{Gender, Ethnicity, Cohort, Site}$

$\text{Mediator}$

$\text{Intervention}$

$\text{Outcome}$

$a$

$b$

$c'$
MVPP Mediation Results

Diagram:

- Intervention → Discipline: 0.06*/0.08*
- Discipline → Aggression: -0.07*/-0.09*
- Intervention → Aggression: -0.05/-0.16*
- Discipline → Aggressive Strategies: -0.07*/0.09*
- Intervention → Aggressive Strategies: -0.01*/-0.04
- Aggression → Aggressive Strategies: -0.15**/-0.05
- Aggressive Strategies: -0.06/-0.14*
MVPP Selective Intervention

Family Context

Child Behavior

Student Body Aggression
Discussion

- Beliefs are important in contextual effects.
- Incorporating variability into measurement of context adds value.
  - Variability predicts cross-sectionally.
  - Mean predicts longitudinally.
- Norms, interpersonal climate, and attentiveness to violence at school entry affect behavior and beliefs throughout middle school.
- Suggests intervention leverage
Discussion

- Although only 4% of MVPP sample exposed to selective intervention, an effect on aggression in the total student population was observed.
- Targeted MVPP Effects were mediated through changes in family context.
- Cohort-wide MVPP Effects were not attributable to effects on targeted students.
- In late adolescence, there appear to be positive effects of SAFE-II booster condition on externalizing and delinquency.