Using Research to Inform Bystander Intervention Approaches to Prevent School-based Bullying

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University of Illinois Anti-Bullying Program

- **Indiana University Teen Conflict Survey** (Bosworth, Espelage, & Simon, 1999; Espelage et al., 2000, 2001)

- **University of Illinois Bullying Research Program**
  - INTERVIEW STUDY (Espelage & Asidao, 2001)
  - EXPOSURE TO VIOLENCE STUDY (Espelage, 1998)
  - SOCIAL NETWORK ANALYSIS STUDY (Espelage, Holt, & Henkel, 2003; Espelage, Green, & Wasserman, 2007; Espelage, Green, & Polanin, in press)
  - SEXUAL HARASSMENT, DATING VIOLENCE, & BULLYING STUDIES (Holt & Espelage, 2003; Holt & Espelage, 2005; Espelage & Holt, 2006)
  - ATTRIBUTION, COPING STYLES, & BULLYING (Kingsbury & Espelage, 2006)
  - THEORY OF MIND, EMPATHY, & BULLYING (Espelage et al., 2004; Mayberry & Espelage, 2006)
  - HOMOPHOBIA, SEXUAL VIOLENCE, & BULLYING (Poteat & Espelage, 2006; Espelage et al., 2008; Espelage, Basile, et al., 2011)
  - Sexual Orientation, Bullying, & Mental Health Outcomes (Espelage, Aragon, Birkett, & Koenig, 2008; Poteat, Espelage, & Koenig, 2009; Birkett, Espelage, & Koenig, 2009; Robinson & Espelage, 2011)

- **Federally-funded Grants:**
  - Bullying & SV Overlap (CDC 2007 – 2010; 2012-2014)
  - Randomized Clinical Trial of Middle School Second Step Program in Reducing Bullying & SV (CDC 2009-2013)
  - Social Network (Complete & Personal Network) Study to Examine Transitional Peer Influences on Aggression, SV, TDV, and AOD (NIH 2012-2016)
  - GroupScoupers Observational Studies of Playgrounds (NSF)
  - Tele-immersive Study of Bystander Intervention (NSF)
University of Illinois Anti-Bullying Program

- CDC randomized clinical trial of a socio-emotional learning bullying prevention program in 36 middle schools

- Risk & protective factors predicting bullying, sexual violence, and dating violence from middle school through high school.

- Bullying victimization and the link to later AOD use

- The impact of polyvictimization – youth victimized in multiple areas / multiple ways

- The experience of youth involved in gangs – exploring the role of gender, victimization, peer networks, etc.

- African-American oral tradition of *roasting* and its influence on bullying behaviors

- Two NSF-funded projects to: (1) test Hawley’s bi-strategic aggression theory in collaborative and competitive computer games with youth; (2) develop efficient ways to collect playground observations (NSF PI: Scott Poole, UIUC)
Evolutionary Insights Into Risky Adolescent Behavior (Ellis et al., 2011)

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<th>Domain of Study</th>
<th>Sample Insights</th>
<th>Sample Implications for Intervention</th>
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| Functions of risky and aggressive behavior | • Both Prosocial and antisocial behavioral strategies function to control resources  
• Bullying is a common behavior that increases access to physical, social, and sexual resources  
• Adolescents are adapted to engage in bullying when the conditions are right | • Many antibullying interventions fail because they are based on false stereotypes about the social incompetence of bullies.  
• Interventions need to alter the cost-benefit ratio of bullying so that it is no longer an adaptive strategy in the school ecology.  
• Interventions should try to substitute more prosocial strategies that yield outcomes that are comparable to those achieved through bullying |
Definition of Bullying
(Espelage, 2007)

• Bullying happens when someone hurts or scares another person on purpose and the person being bullied has a hard time defending himself or herself. Usually, bullying happens over and over.
  ▫ Punching, shoving and other acts that hurt people physically
  ▫ Spreading bad rumors about people
  ▫ Keeping certain people out of a “group”
  ▫ Teasing people in a mean way
  ▫ Getting certain people to “gang up” on others
  ▫ Use of technology
Bullying Prevalence
(Espelage & Low, 2012)

Among 3rd – 8th graders:
- 15% Chronically Victimized
- 17% Ringleader Bullies
- 8% Bully-Victims
- 60% Bystanders
Bullying Prevention - Meta-analysis (Merrell et al., 2008)

• Evaluated effectiveness of 16 bullying efficacy studies across some six countries (six studies in US).
• Only two of six US studies published.
• All showed small to negligible effects.
• Small positive effects found for enhancing social competence and peer acceptance, and increasing teacher knowledge and efficacy in implementing interventions.
• Reality—No impact on bullying behaviors.
• Farrington & Tfoti (2009) – programs that are effective in European countries include parents, use of multimedia, playground interventions, and target teacher’s competence in responding to bullying.
The Ship Has Sailed

School-based Bullying Prevention Programs

Developmental Scientist
Bullying Prevention - Challenges

• All programs fail to address the extent to which demographic variables (such as gender and race) impact efficacy.
• Need to consider how classroom management skills and implementation levels impact a program’s effectiveness.
• Need to seriously consider how to motivate schools to engage in a serious conversation about bully prevention.
• REALITY – Developmental science MUST inform the next generation of prevention efforts; by contributing to modifications, enhancements, implementation issues, and must infuse INNOVATION into basic and applied scholarship.
• One example is provided here to illustrate – Bystander Intervention Scholarship.
Willingness to Intervene in Bullying Episodes Among Middle School Students: Individual and Peer-Group Influences

**Journal of Early Adolescence (2012)**

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Joshua Polanin, M.A., Loyola University, Chicago

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Network Structure & Aggression

- **Friendship studies** – find that children who have friends generally have more social, cooperative, less lonely etc. (Hartup, 1996)
- **Social network studies** – friendship networks are similar on antisocial behavior, including aggression (Cairns et al., 1988); heterogeneity among aggressive youth along popularity dimensions (Farmer et al., 2003; Rodkin et al., 2000), homophily for bullying (Espelage et al., 2003; 2007).
- **Observational studies** – have found that aggression (especially bullying) is often perpetrated by groups of students (O’Connell, Pepler, & Craig, 1999; Faris et al., 2011); students play various roles (Salmivalli, 2011)
- **Social Identity Theory** (Tajfel & Turner, 1979)– Applied in studies of in-group and out-group norms related to bullying; more likely to retain member if attitudes/behaviors consistent with norms (Duffy & Nesdale, 2008; Nipedal, Nesdale, & Killen, 2010; Ojala & Nesdale, 2004)
Bystander Intervention

• Scholars suggest that including bystanders increases school-based bullying programs’ effectiveness (Newman, Horne, & Bartolomucci, 2000; Olweus, 1993; Rigby & Johnson, 2006).

• These researchers advocate encouraging bystanders to create a more positive school climate through intervening (e.g., reporting an incident, confronting the bully).

• Self-declared bullies and bystanders sometimes report feeling sorry after bullying their peers though they rarely intervene in bullying episodes (Borg, 1998).
Bystander Intervention

• Observational data indicated a stark contrast in outcome. O’Connell, Pepler and Craig (1999) videotaped 1st through 6th graders ($n = 120$) during recess:
  ▫ 54% of peers spent their time reinforcing bullies by passively watching, 21% actively modeled bullies, and only 25% intervened.
  ▫ Older boys (grades 4-6) were more likely to join actively with the bully than were younger boys (grades 1-3) and older girls.
  ▫ Younger and older girls intervened on behalf of victims more often than older boys.
  ▫ 88% of bullying episodes involved multiple children, but only intervened 19% of the time.
  ▫ 57% of the interventions effectively stopped the bullying (Hawkins, Pepler, & Craig, 2001).
• Australian primary and secondary students (n = 400) viewed a videotape of a bullying situation and were subsequently asked what they would do.
• Multiple regression analysis indicated that greater willingness to intervene was associated with: being younger, having rarely or never bullied others, having been victimized, and having a positive attitude toward victims.
• Students were more likely to intervene if they believed their friends expected them to support victims.
• Friends’ attitudes weighed heavily in a student’s decision to intervene, highlighting the need for research that addresses peer influence.
Empathy & Bystander Intervention

• Recently studies specifically extended empathy to willingness to intervene in bullying scenarios or defender behavior (Caravita, DiBlasio, & Salmivalli, 2009; Espelage, Green, & Polanin, 2012; Gini, Albiero, Benelli, & Altoe, 2007; Gini, Pozzoli, & Haiser, 2011; Gini, Pozzoli, Borghi, & Franzoni, 2008; Pozzoli & Gini, 2010; Nickerson, Mele, & Princiotta, 2008; Stavrinides, Georgiou, & Theofanous, 2010; Pöyhönen, Juvonen, & Salmivalli, 2010).

• Overall, these studies find that among early adolescent samples, defending behavior is associated with greater empathy (Gini et al., 2007; Gini et al., 2008; Nickerson et al., 2008; Stavrinides et al., 2010).

• Pöyhönen and colleagues (2010) found that defending was associated with vicarious understanding (emotional dimension) of victims, rather than a cognitive understanding of the victim.

• Girls and younger kids tend to defend/intervene more often.
Research Questions

• Are middle school male and female peer groups similar in their level of willingness to intervene?

• Is willingness to intervene stable over 1-year period?

• Do attitudes supportive of bullying, empathy, and perspective-taking predict willingness to intervene over time?

• Does peer-group level bullying predict willingness to intervene over time?
Participants

• 210 middle school students (grades 6 – 7)
• 117 males; 93 females
• One mid-western middle schools
• 94% White, .5% Black, .5% Asian, 2.3% Biracial, 2.7% Other
• Survey completed Spring 2003 & Spring 2004
Measures

Positive Attitude Toward Bullying (Espelage et al., 2004)

- Four item-scale developed from in-depth interviews with middle school students (Espelage & Asidao, 2001).
- Students asked how much they agree or disagree with statements related to their attitude toward bullying (e.g., “A little teasing doesn’t hurt anyone.”). Response options were “Strongly Disagree”, “Disagree”, “Agree”, and “Strongly Agree.”
- Higher scores on this scale were interpreted as having a favorable or positive view of bullying.
- Alpha coefficients = .81
Measures

Interpersonal Reactivity Scale (Davis, 1983)

- *Perspective-taking* (PT) scale consisted of seven items that assessed the “tendency to spontaneously adopt the psychological point of view other others” (Davis, 1983, p. 114). An example item is “I try to look at everybody’s side of a disagreement before I make a decision.”

- *Empathic Concern* (EC) scale assessed empathy and concern for others, and an example item is “When I see someone being taken advantage of, I feel kind of protective towards them.”

- Response options ranged from “Does not Describe Me Well” through “Describes Me Very Well.”

- Alpha coefficients = .79
University of Illinois Bully Scale (UIBS; Espelage & Holt, 2001)

- Assesses behavior such as teasing, social exclusion, name-calling, and rumor spreading (Espelage, Bosworth, & Simon, 2000; Espelage et al., 2003).
- Convergent validity with peer-reports of bullying.
- Students are asked to indicate how often in the past 30 days they have engaged in each behavior (e.g., “I teased other students.” and “I upset other students for the fun of it.”).
- Response options include “Never”, “1 or 2 times”, “3 or 4 times”, “5 or 6 times”, and “7 or more times.”
- Alpha coefficients = .88.
Measures

University of Illinois Willingness to Intervene in Bullying Episodes (Espelage, Mebane, & Adams, 2004)

- 5-item scale developed from a series of interviews and surveys of students with children in grades 3rd through 8th grade.
- Students are asked how much they agree with statements about intervening directly or indirectly when they encounter bullying (e.g., “If a kid is being teased, I will stick up for him/her.”, “I will tell an adult if a kid is being teased a lot.”).
- Response options were “Strongly Disagree”, “Disagree”, “Agree”, and “Strongly Agree.”
- Factor loadings of the five items ranged from .71 through .43, no cross-loadings on the bully factor were greater than .30.
- Cronbach’s alpha coefficients were .75 for Waves 1 and 2.
Friendship Nominations

• “Kids you hang out with the most in this school.”

• Given up to eight spaces for first and last name

• Asked not to put siblings OR kids outside of school
Data Analysis

• ANOVAs to examine gender differences on study variables.
• Social Network Analysis via Negopy to identify peer networks
• HLM – to examine individual empathy, perspective-taking, and bullying perpetration as predictors of willingness to intervene among boys and girls
• HLM – to examine homophily of peer groups on willingness to intervene perpetration scale for boys and girls
Gender Differences*

*\( \eta^2 = .27 \); individual \( \eta^2 \)s = .25, .13, .27
Gender Differences*

*$\eta^2 = .27$; individual $\eta^2$s = .12, .16, .08
Friendship Nomination Data

- 2,527 pair-wise reciprocated friendship nominations were input to NEGOPY program (Richards, 1995)
- Only 11% included names of students not enrolled in this study.
- Ninety-eight percent of the students identified at least one friend [(range from 0 to 8; mean # of friends = 5.90 friends (SD = 2.05)].
- 9% of the nominations were pairs of students not within the same grade; therefore, peer groups were modeled within grade
- No significant differences between 6th and 7th graders on the number of friends nominated (p > .05).
Negopy Results - 6th Graders

- **Peer Groups:** For the 178 sixth graders, eigenvector decomposition via NEGOPY yielded 14 peer groups (including dyads; \(n = 98, 55\%\)) ranging in size from two members to 41 members (\(M = 6.57; SD = 10.05\)).

- **Isolates:** Twenty-four students (13%) were nominated by other students but none of their nominations were reciprocated and sixteen (9%) did not nominate anyone, but were nominated by other students. Both groups excluded from analyses.

- **Liaisons:** Forty students (22%) were defined as liaisons because they had indirect links to several groups but appeared to have no primary peer group affiliation. These liaisons were also not included in subsequent analyses.
Peer Groups: For the 168 seventh graders, eigenvector decomposition via NEGOPY yielded 17 peer groups (including dyads; \( n = 113, 67\% \)) ranging in size from two members to 20 members (\( M = 6.40; SD = 5.24 \)).

Isolates: Eighteen students (11%) were nominated by other students but none of their nominations were reciprocated and twelve (7%) did not nominate anyone but were nominated by other students. These two groups were categorized as isolates and were not included in subsequent analyses.

Liaisons: Twenty-five students (15%) were defined as liaisons because they had indirect links to several groups but appeared to have no primary peer group affiliation. These liaisons were not included in subsequent analyses.
HLM: Willingness to Intervene (Males)

- Unconditional Null Models:
  - ICC indicated homophily; peer group homogeneity
  - **32% variance in willingness to intervene wave 2 (WTI) between peer groups**
  - indicated multilevel modeling appropriate

- Level-1 Models:
  - Wave 1 and Wave 2 self-reported WTI positively related; Perspective-taking was significantly associated with greater WTI at Wave 2 (controlling Wave 1 WTI)
  - Deviances indicated better model over the null model

- Level-2 Models: **Peer-level bullying perpetration significantly predicted individual level WTI at Wave 2 when controlling for Wave 1 WTI. 57% of variance explained.**
HLM: Willingness to Intervene (Females)

- Unconditional Null Models:
  - ICC indicated no homophily
  - 5% variance in willingness to intervene wave 2 (WTI) between peer groups
  - Indicated multilevel modeling not appropriate; WTI Wave 2 scores did not vary across female peer groups

- Regression Model:
  - Empathy, perspective-taking, and willingness to intervene Wave 1 explained 42% of willingness to intervene Wave 2
  - Only WTI Wave 1 predicted WTI Wave 2 scores.
Limitations

• Data collected from one middle school
  ▫ Future studies should include more schools and assess factors such as school climate, teacher’s attitudes toward bullying, bullying policies etc.

• Data were self-report
  ▫ Future studies should incorporate behavioral measures of willingness to intervene (or actual intervention) to evaluate whether attitudes to intervene are correlated with behaviors, and further explore possible bystander effects (Darley & Latané, 1968, Latané & Darley 1970).

• Lack of homophily among female groups in their willingness to intervene should be replicated.
Conclusions

- Findings suggest importance to explore predictors of attitudes and behaviors across multiple levels, including individual and peer groups.
- Lack of attention to peer group influences on bullying attitudes and behaviors is an unfortunate phenomenon because bystander intervention is emphasized within some of the most commonly utilized bullying prevention programs (Newman et al., 2000; Olweus, 1993).
- These findings provide support for the practice in many of these programs to teach students perspective-taking skills.
- In this study (at least for boys) efforts to influence an individual’s willingness to intervene will be more successful with careful consideration of the bullying perpetration level among friendship groups.
Meta-analysis synthesized the effectiveness of bullying prevention programs in altering bystander behavior to intervene in bullying situations.

Evidence from twelve school-based interventions, involving 12,874 students, revealed that overall the programs were successful (ES = .21, C.I.: .12, .30), with larger effects for high school samples compared to K-8 student samples (HS ES = .44, K-8 ES = .14; p = .001).

Analysis of empathy for the victim revealed treatment effectiveness that was positive but not significantly different from zero (ES = .05, CI: -.07, .17).

Nevertheless, this meta-analysis indicated that programs were effective at changing bystander behavior both on a practical and statistically significant level.
# Bystander Intervention Studies

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<tr>
<th>Study (DoP)</th>
<th>Publication Type</th>
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<th>N (% male)</th>
<th>Grade range</th>
<th>Intervention Program</th>
<th>Intervention Type &amp; Duration (in months)</th>
<th>Research Design</th>
<th>Intervention E.S.</th>
<th>Empathy E.S.</th>
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<td>Andreou, Didaskalou, &amp; Vlachou (2008)</td>
<td>Journal</td>
<td>Greece</td>
<td>418 (60)</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;-6&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Curriculum-Based Anti-Bullying</td>
<td>Group; 1</td>
<td>Quasi-experimental; one treatment and one control</td>
<td>-.01</td>
<td>-.19</td>
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<td>Evers, Prochaska, Van Marter, Johnson, &amp; Prochaska (2007)</td>
<td>Journal</td>
<td>Multiple US states</td>
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<td>9&lt;sup&gt;th&lt;/sup&gt;-12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Build Respect</td>
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<td>Fonagy et al. (2009)</td>
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<td>Kansas</td>
<td>578 (46)</td>
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# Bystander Intervention Studies

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## Moderators of Efficacy

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Rethinking Bystander Interventions

- Need to consider the following when considering a bystander intervention:
  - Age of target population
  - Gender of target population
  - Peer norms around intervention: Including In-group and out-group norms, justification for bullying
  - Level of bullying and peer victimization experiences in the school
  - Length of intervention & who to deliver
  - Components of intervention (behavioral modification, modeling with media, awareness raising, parent training)
  - Need to assess outcomes via observation or more real-time assessments