Bullying, revenge & bystanders: Intervening in aggression cycles

Karin S. Frey, Ph.D.
Educational Psychology
Why do we care about bullying?

Bullying behavior uses covert (e.g., gossip) & overt tactics (insults, assault) to harm those of less power.

Chronic bullying repeatedly targets individual(s)

- Predicts increased physical illness (Rigby, 199)
- Predicts increased aggression even when controlling genetic disposition for aggression (Brendgen, Vitaro, et al., 2011)
- Predicts increased depression & suicide
- Depression lifts when abuse stops, supporting causal influence
Experimental Social Exclusion

• Causes loss of self-regulatory ability
• Elicits a state of cognitive deconstruction
  – Typical of suicidal individuals
  – Emotional blunting
  – Avoidance of self-awareness
  – Slowed reaction times & reduced task effort
  – Lack of future orientation
  – Impulsivity, attraction to immediate gratification
Victimization reduces access to educational opportunity

- Class participation declines
- Academic achievement declines; rebounds when victimization ends
- Participation in extracurricular activities declines (sports, school dances)
- School ‘shopping,’ drop-out increases
- Increases all students’ anxieties about safety
Separate Traditions: Aggression & Bullying

Social cognitive theories of aggression (Dodge)

- **Reactive or retaliatory aggression** (Miller, Dodd)
  - ‘frustration aggression,’ originally a cartharsis model
  - Goal: ‘even the score’
  - High arousal & dysregulation (Hubbard et al., 2002)

- **Proactive or instrumental aggression** (Bandura)
  - ‘social learning’ that aggression will be rewarded
  - Goals: Obtain status and / or material resources
  - Calm demeanor, Masked anger (Hubbard et al., 2002)
Bullying: Power the means & end

• Goal: Acquisition of power justifies the means
• Strategic use of power is the means to the goal
• Choice of target often strategic
• Cut down a potential rival for dominance
• Demonstrate superiority to one’s audience
• ‘Entertain’ please audience by targeting a disliked and rejected peer
Socio-ecological Perspective

Bullying is the means for attaining power, a construct that only makes sense in relation to the social context.
US Bullying Ecology

• Israel > US > most Euro > Sweden
  – No national differences in fighting (Smith-Khuri et al., 2004)

• Compared to European countries, US citizens value
  • equalitarian organizational structures the least
  • dominance structures the most (Schwartz, 2007)

• Bullying aligned with levels of income inequality
  – Between nations and between schools (Due et al., 2009)
  – Within schools, poor kids targeted & harmed most
Cultural Variation within US

- So-called cultures of ‘honor’ privilege retaliation
- White males in US south
  - Committed more homicides during conflicts
  - No differences in theft-related homicides
  - Masculinity threatened by insults & failure to respond
  - Respond more aggressively to experimenter insults if born in south or south-settled states (Cohen & Nisbett, 1996)

- Some immigrants to US may have similar beliefs
Likely Species-Wide Revenge Patterns

- **Victims**
  - Feel entitled to behave just a little more selfishly
  - Believe their retaliation is equal to original offense
  - Often escalate somewhat

- **Responses appear excessive to offender**
  - ‘Evening the score’ can → endless retaliation cycles
  - Everyone feels like a victim
Endless Retaliation Cycle

Revenge appears just to the actor

But is perceived as excessive

Begets an aggressive response
People Misperceive Consequences

People who retaliate:

- Expect retaliation to improve their mood
- Become more angry as soon as they act
- Often escalate the conflict
- Ruminate more about the offender afterward
- Have more trouble moving on from their victimization experience
Ecology of My Research

- Pacific Northwest
- Elementary schools randomly assigned to group
- Differences between classrooms large
- Differences between schools relatively small
- Drawn to observation methodologies
  - Playground & Problem-solving sessions
  - Observers blind to group assignment
- Multi-level analyses to control shared variance
Teacher
- Goals and beliefs
- Decision-making
- Performance skills

Teacher influences on individuals
- Scaffolding
- Recognition
- Coaching

Teacher influences on class
- Monitoring
- Group instruction
- Skill practice
- Modeling

Peer influences on teacher
- Aggression, disrespect
- Instructional support v. sabotage

Peer group influences on classmates
- Acceptance or rejection
- Modeling
- Mutual reinforcement
- Direct training

Student
- Goals and beliefs
- Decision-making
- Performance skills

Frey & Nolen, 2010
Playground Observations

- Six schools
- Grades 3 – 6
- Behavior codes entered into electronic devices
- 5 minutes, once / week,
- 10 – 12 weeks, Oct – Dec, Mean = 50 minutes
- Repeated after intervention, Mar – June
Most Kids Experiment with Bullying

• Bullying = Power
  – Power itself isn’t bad
  – Most people would like a little more

With just over 1.5 hours of observation on each child, we observed 68% initiate bullying behavior at least once.
Compare to Tantrums

• Developmentally normal for two-year-old
• But continuing would be a problem

• If bullying is rewarded, the behavior increases
• Peers reward bullying
  – Pay more positive attention to kids who bully
  – Later bullying is linked to social status
  – Adults’ job is to reduce opportunities for reward
Dysregulated Victim Response

Peer Rejection

Strategic Choice of Victim
Power Comes From Bystanders

• Bullying attract bystanders, 85% of episodes
• Some actively assist, some cheer or laugh
• Others may empathize, feel guilty, afraid
  — To a victim, passivity looks like agreement
  — Humiliation becomes very public
• Defense of victim is rare, potentially risky
  — Bullying usually stops within 5 sec (Craig & Pepler, 1997)
  — Defenders tend to be high status (Salmivalli)
What is Popularity?

- Researchers used to think it meant well-liked
- Popular means socially dominate
  - Liked by some
  - Also disliked because of aggression & exclusion
  - Fun, but high maintenance friends
- Well-liked = socially accepted = nice to everyone
- Popular kids must coordinate goals
  - Status & social acceptance
  - Requires social skill and subterfuge
Limited Teacher Awareness

- Transactional relationships:
- Cooperative students, not disruptive in class
- But cruel on the playground
- Create emotional turmoil in peers
- Who are often disruptive in class
- “trouble-makers”
Playground profiles of proactive gossips, overt reactors, and pervasive aggressors: Links to experienced aggression, social behavior, and bystander actions

Frey, Newman & Onyewuuenyi (2012)

- 3rd – 6th grade students
- 300 boys and 300 girls
Aggression

• Goals
  – Retaliatory or Reactive
  – Instrumental or Proactive

• Forms
  – Overt
  – Relational, e.g., malicious gossip
Predicted subtype I: Proactive Gossip

• Proactive aggression, ‘bullying’
• Agreeable social behavior
• Gossip
  – Initiators
  – Listeners
• Relatively little overt aggression or victimization
• Rarely identified as aggressive
Predicted subtype II: Pervasive

- Pervasively aggressive, both proactive & reactive
- Low levels of agreeable interaction
- Argumentative
- Frequently targets of aggression
- Not isolated
- Listeners, not initiators of gossip
- Identified as highly aggressive by teachers
Predicted subtype III: Overt reactors

- Reactively aggressive
- Frequently targeted for aggression
- Somewhat agreeable
- Moderately argumentative
- Identified as aggressive by teachers
Other Behaviors

• Bystander behavior
  – Watching aggression
  – Listening to gossip

• Social context
  – Agreeable interactions
  – Argumentative interactions
  – Rough play
  – Time alone
Inter rater Agreement

- Coders made second by second entries
- Overall $kappa = .80$
- Range .55 (watching) - .81 (agreeable)
- Discriminating overt aggression & gossip,$kappa = .93$
- Discriminating proactive & reactive aggression,$kappa = .80$
# 2-Step Cluster Parameters

<table>
<thead>
<tr>
<th># of Clusters</th>
<th>Schwarz's Bayesian Criterion (BIC)</th>
<th>BIC Change$^a$</th>
<th>Ratio of BIC Changes$^b$</th>
<th>Ratio of Distance Measures$^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1284</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>862</td>
<td>-422</td>
<td>1.00</td>
<td>1.90</td>
</tr>
<tr>
<td>3</td>
<td>658</td>
<td>-204</td>
<td>.48</td>
<td>1.50</td>
</tr>
<tr>
<td>4</td>
<td>534</td>
<td>-124</td>
<td>.29</td>
<td>2.18</td>
</tr>
<tr>
<td>5</td>
<td>498</td>
<td>-36</td>
<td>.08</td>
<td>1.82</td>
</tr>
</tbody>
</table>
% of Boys & Girls in Subtypes

- Gr 3 & 4 boys
- Gr 3 & 4 girls
- Gr 5 & 6 boys
- Gr 5 & 6 girls
% Agreeable Interaction

- Proactive: 50%
- Pervasive: 40%
- Reactive: 40%
- Non: 40%
% Argumentative Interaction

- Gossips
- Pervasive
- Reactors
- Non
% Rough Play by Subtype

- Gossips
- Pervasive
- Reactors
- Non
% Time Alone by Subtype

- Gossips
- Pervasive
- Reactors
- Non
Bystander Behavior / Hour

- Gossips
- Pervasive
- Reactors
- NA

Bars represent the percentages of listening and watching behaviors over an hour.
Targeted for aggression/ hr, 5th & 6th grade

Estimated Means control for aggression

Overt Retaliation
Overtly Proactive
Proactive Gossip

PA  PRA  RA  NA
Teacher Awareness of Aggressive Subtypes

Newman & Frey (2012)
Teacher Ratings by Subtype

- **Social Competence**
- **Reactive Aggression**
- **Proactive Aggression**

![Bar chart showing ratings for different subtypes of aggression](chart.png)
Failure to identify socially adept aggressors

- Dodge & Coie measure (1987) doesn’t measure gossip although items are compatible
- Students rated as “nonaggressive” are more aggressive on the playground than in class
- “Halo” effect based on the high perceived social competence of the proactive gossips

- What characteristics predict teacher ratings?
## Teachers’ ratings of Social Competence

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.75</td>
<td>.14</td>
<td>426</td>
<td>25.97</td>
</tr>
<tr>
<td>Gender, girl</td>
<td>.22</td>
<td>.07</td>
<td>556</td>
<td>3.27**</td>
</tr>
<tr>
<td>Grade level</td>
<td>-.31</td>
<td>.12</td>
<td>77</td>
<td>-2.79</td>
</tr>
<tr>
<td>Agreeable</td>
<td>.01</td>
<td>.01</td>
<td>596</td>
<td>2.83*</td>
</tr>
<tr>
<td>Argumentative</td>
<td>-.01</td>
<td>.00</td>
<td>599</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Rough play</td>
<td>-.00</td>
<td>.00</td>
<td>589</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Time alone</td>
<td>-.02</td>
<td>.01</td>
<td>570</td>
<td>-8.10**</td>
</tr>
<tr>
<td>Parameter</td>
<td>Estimate</td>
<td>Std. Error</td>
<td>df</td>
<td>t</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>------------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Intercept</td>
<td>3.20</td>
<td>.20</td>
<td>482</td>
<td>16.19**</td>
</tr>
<tr>
<td>Gender, girl</td>
<td>-0.20</td>
<td>0.08</td>
<td>540</td>
<td>-2.66**</td>
</tr>
<tr>
<td>Grade</td>
<td>-0.20</td>
<td>0.13</td>
<td>79</td>
<td>-1.48</td>
</tr>
<tr>
<td>Overt retaliation</td>
<td>0.04</td>
<td>0.02</td>
<td>588</td>
<td>2.68**</td>
</tr>
<tr>
<td>Overt proactive</td>
<td>0.09</td>
<td>0.04</td>
<td>576</td>
<td>1.99*</td>
</tr>
<tr>
<td>Proactive gossip</td>
<td>0.15</td>
<td>0.05</td>
<td>598</td>
<td>3.06**</td>
</tr>
<tr>
<td>Argumentativeness</td>
<td>0.04</td>
<td>0.02</td>
<td>599</td>
<td>2.53*</td>
</tr>
<tr>
<td>Social competence</td>
<td>-0.37</td>
<td>0.05</td>
<td>598</td>
<td>-8.03**</td>
</tr>
</tbody>
</table>
# Teachers’ Ratings of Proactive Aggression

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.65</td>
<td>.14</td>
<td>472</td>
<td>12.03**</td>
</tr>
<tr>
<td>Sex</td>
<td>-.06</td>
<td>.05</td>
<td>538</td>
<td>-1.23</td>
</tr>
<tr>
<td>Grade level</td>
<td>-.04</td>
<td>.09</td>
<td>75</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Overt retaliation</td>
<td>.04</td>
<td>.01</td>
<td>583</td>
<td>3.56**</td>
</tr>
<tr>
<td>Overtly proactive</td>
<td>.01</td>
<td>.03</td>
<td>571</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Proactive gossip</td>
<td>.08</td>
<td>.03</td>
<td>596</td>
<td>2.59*</td>
</tr>
<tr>
<td>Argumentativeness</td>
<td>.02</td>
<td>.01</td>
<td>598</td>
<td>2.19*</td>
</tr>
<tr>
<td>Social competence</td>
<td>-.12</td>
<td>.03</td>
<td>597</td>
<td>-3.82**</td>
</tr>
</tbody>
</table>
Utility of Subtype Approach

• Identifies socially competent aggressors

• ‘Nice’ behavior helps high status leaders
  – Elude detection
  – Escape serious punishment
Research Needed on Aggressive Leaders

• *How* might they influence others to be aggressive
  – Victim talk a constant feature of teen conversations
  – Is it useful for motivating vengeful acts of support?

• What are the risks of associating with leaders?
  – Aggression increases later risk of becoming a target.
  – Listening to gossip → large increase in risk
    • Proximity to aggressors can be risky itself
    • Does listening increase probability of risky behavior?
Zero Tolerance: Guaranteed to Fail

- Severe punishment restricts adult options
  - Requires proof of guilt, often difficult
  - Too punitive for most episodes
    - Bullying is typical adolescent behavior
    - Not usually severe
  - Most episodes are ignored by adults
    - Breeds imitation by peers
    - Educators reduced to ‘waiting for the big one’
- Reduces student reporting & respect
Students’ Fears About Adults

• Adults will ignore my complaints
• Adults will make a ‘federal case’ out of it
• Students typically correct
• Adults & students lose with zero tolerance
Successful Approaches

• Proactive, with goals of:
• changing the peer culture
• Forging a Student-Adult partnership
• “Nipping it in the bud”
  – Responding to small infractions
  – Educating & supporting targets & aggressors
  – Providing proportionate consequences
Evaluation of an Anti-bullying Program

• *Steps to Respect*
• One of several good programs
• Grades 3 – 5 or 4 – 6
• Multi-level
  – School: Policies & staff training
  – Classroom: 12 weeks
    • 10 lessons to foster socially responsible norms & social skills
    • 2 weeks of literature lesson to review and foster empathy
  – Individual: Coaching of those involved in bullying
School Policy & Expectations

• Define respectful & bullying behavior
• Define appropriate bystander behavior

‘If you’re not part of the solution, you’re part of the problem.’

• Defining reporting vs. tattling
  – ‘Are you telling me to keep someone safe,
  – Or to get someone in trouble?’
Classroom Lessons

• Encourage empathy and inclusiveness
  – Less bystander support for aggression
  – Less likely to endorse retaliation as a good idea

• Assertive response
  – ‘Calm, strong, and polite’
  – Reduced victimization (Frey, Jones, Hirschstein, & Edstrom, 2011)

• Relationship skills
  – Recognize elements of healthy relationships
  – Learn constructive ways to solve conflicts
Brief Coaching of Involved Students

- Affirm the victim’s feelings
- Assess safety needs and identify problem history
- Generate solutions and create plan
- Rehearse needed skills (e.g., assertive voice)
- Follow-up with all parties

- Minimal effort (1 / week) linked to reductions
  - Victimization
  - Retaliatory aggression
Evaluation of the 1\textsuperscript{st} Year Effects

Reducing playground bullying and supporting beliefs: An experimental trial of the \textit{Steps to Respect} program

Bullying rate / hour/ child

Hourly rate change

Fall pretest  Spring posttest

- **Intervention**
- **Control**
Changes in Group that Bullied @ Pretest

Hourly rate change

Fall Pretest | Spring Posttest
---|---
Pretest bullying, intervention
Pretest bullying, control
Intervention Group Differences

- Bullying (pretest involvement)
- Destructive bystander (pretest involvement)
- Argumentative behavior
- Agreeable behavior
- Norms endorsing aggressive retaliation
- Assertiveness (5th & 6th grade)

No significant differences
- Victimization
- Reactive aggression
- Perceived Friend Support
Gossip on the Playground: Changes Associated with Universal Intervention, Retaliation Beliefs, and Supportive Friends

Low, Frey, & Brockman, (2010)

*School Psychology Review* special issue on relational aggression, 39, 1536 - 551
Beliefs endorsing retaliation Predict Later Changes in Victimization

Hourly rate change

Not a pretest target | Pretest target
---|---
Intervention | Control
Association between friend support & changes in gossip victimization
Friend Support Predicts Changes in Aggression Among Baseline Targets

Hourly rate change

Control Group
Intervention
Evaluation After 18-months

Observed reductions in school bullying, nonbullying aggression and destructive bystander behavior: A longitudinal evaluation

Observed Playground Behaviors: Within-group & between-group comparisons

- Bullying
- Victimization
- Destructive bystander behavior
- Reactive aggression
- Argumentative behavior in intervention group

But not

Agreeable behavior
Destructive Bystander Behavior rate/hr

- Pretest bystander
- Not bystander

Pretest 6 mo. posttest 18 mo. posttest
Non-bullying Aggression rate/hr

- Pretest aggression
- No aggression

Pretest
<table>
<thead>
<tr>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2.5</td>
</tr>
</tbody>
</table>

6 mo. posttest
<table>
<thead>
<tr>
<th>0.5</th>
</tr>
</thead>
</table>

18 mo. posttest
<table>
<thead>
<tr>
<th>0.5</th>
</tr>
</thead>
</table>
‘Bullying is still there, but it’s better’

--6th grade intervention group student

‘Students are just nicer. They’re not constantly picking at each other.’

--6th grade teacher
What Parents Can Do

• Find out about school bullying—ask about peers
• Encourage socially responsible bystander behavior
• Be realistic about the risks of retaliation
• Discourage involvement in gossip
• Discuss characteristics of supportive friendships
• Encourage positive relationship goals
• Discourage status and material goals
Effects of a school-based social-emotional competence program: Linking goals, attributions, and behavior

Design

- 15 schools
- randomly assigned, intervention or control
- Intervention: *Second Step* Program
  - Locally developed
  - One of most widely distributed in US & world
- Tested after two years of intervention
- Grades 3 & 5
Program Evaluation using Structured Conflicts Situations

• Prisoner’s dilemma task performed in pairs
  – Wanted to observe partners negotiate as they decided to either compete or cooperate
  – Measured task goals, satisfaction, reasoning

• Dyadic Negotiation: four ‘thank you’ gifts
  – Both youngsters needed to agree on division
  – Measured satisfaction
Negotiations: Intervention v. Control

• Agreement without adult help, 61% more, $p < .05$

• Coercive behavior
  – 42% less Aggressive, $p < .05$
  – No difference in Demanding/whiney behavior

• Collaborative behavior
  – 59% more Preference Inquiries (girls), $p < .05$
  – 33% more Agreement Requests (boys), $p < .10$
Goals

• Measured prior to playing a game with pair from another class
• All pairs working to earn money for class party
• Pairs can choose to cooperate or compete
• 8 trials
## Earning Contingencies/trial

<table>
<thead>
<tr>
<th>Pair A’s Choice</th>
<th>Pair B’s Choice</th>
<th>Pair B’s Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooperative</strong></td>
<td>40 cents (40) Equal—high</td>
<td>50 cents (20) self—high</td>
</tr>
<tr>
<td><strong>Competitive</strong></td>
<td>20 cents (50) Self—low</td>
<td>10 cents (10) Equal—low</td>
</tr>
</tbody>
</table>
Program Changed Student Goals

<table>
<thead>
<tr>
<th></th>
<th>Intervene</th>
<th></th>
<th>Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n = 392$</td>
<td>$n = 411$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-interested</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td>55</td>
<td>14%</td>
<td>96</td>
<td>23%</td>
</tr>
<tr>
<td>Absolute Gain</td>
<td>127</td>
<td>32%</td>
<td>130</td>
<td>32%</td>
</tr>
<tr>
<td>Cooperative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equality</td>
<td>170</td>
<td>43%</td>
<td>146</td>
<td>35%</td>
</tr>
<tr>
<td>Generosity</td>
<td>40</td>
<td>10%</td>
<td>39</td>
<td>10%</td>
</tr>
</tbody>
</table>
Children with Cooperative Goals

• More socially competent, teacher-rated
• Less antisocial, teacher rated
• Less aggressive intentions following hypothetical provocation
• More satisfied by game, negotiation outcome
Teacher rated Social Competence

- Attributions of Intent
  - Cooperative
  - Self-interested

- Hostile
- Benign

Goals

Cooperative | Self-interested
Teacher-rated Antisocial Behavior

Cooperative | Self-interested

- Hostile
- Benign
Cooperative Choices by Dyadic Goals

- **Prosocial**: 91 pairs
- **Self-interested**: 104 pairs
- **Discordant**: 112 pairs
Negotiation Behavior

Dyad Goal Concordance

- Aggressive
- Demanding
- Collaborative

Shared Prosocial
Shared Self-serving
Unshared
Confirms Importance of Goals

- Relates to personal social competence
- Potential source of classroom conflicts
- What are implications for intervention?
  - Student goals shift at different rates
  - Is there a temporary increase in conflict?
  - Backlash from high status aggressors
Person-centered Analyses

- May reduce analytical power
- Inconsistency in defining groups
- May identify subtypes that may be otherwise difficult to identify
- Potentially helpful for communicating with practitioners
Response-to-Intervention

• *Steps to Respect* bullying prevention program

• Reactive aggression only declined in the first year with
  – Minimal level of teacher coaching, or
  – 2nd year of intervention

• Bullying & bystander behavior reduced, yr 1

Aggression Functions

• Reactive aggression
  – Retaliation in response to provocation or
  – Outburst in response to frustration
  – Associated with poor self-regulation
  – Hostile biases in the interpretation of other’s intent

• Proactive aggression
  – Well-controlled & goal-directed
  – Aimed at obtaining material or social rewards
Social-emotional Skill Differences

• Do better social and self-regulatory skills enable some aggressors to adapt more quickly to changes in reward structures?

• Exploratory analyses
Caveats

• Teacher scales did not explicitly include gossip
• Proactive aggression might include well-controlled, delayed retaliation
• Variations in methods for creating subtypes
  – Empirical, using cluster, latent variable analyses
  – A priori groups based on % or sd cut-offs
• Are these truly categorical differences or more subtle gradients?
Posttest Overt Proactive Aggression

![Bar chart showing Posttest Overt Proactive Aggression for PA, PRA, RA, and NA. The chart compares Intervention and Control groups.](chart.png)