A Treatment Package for Improving Playground Behavior and Eliminating Bullying Within a PBS Model

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4th International Conference on Positive Behavior Support
Boston 2007
Findings from the Literature

Teachers and administrators often report disruptive and aggressive behavior as their foremost challenge and concern. (Kauffman, Mostert, Trent, & Hallahan, 1998; Rhode, Jenson, & Reavis; 1992; Walker & Sylwester, 1998)

A context that lends itself to antisocial behavior is the playground. (Dougherty, Fowler, & Paine, 1985; Murphy, Hutchison, & Bailey, 1983; Walker et al., 1995)
Findings from the Literature

- One study surveyed students’ opinion as to where bullying occurs--76% reported majority occurs on the playground. (Olweus, 1993)

- Since the 1980s those involved in bullying increased by 50% and an increase in weekly bullying problems by 65%. (Olweus, 2003)
Effective playground interventions include:

- Social skills instruction
- Adult supervision
- Organized games
- Group contingencies
- Peer mediation

Most have been universal and tertiary level interventions.
Areas needing additional research:

- Individualized interventions for students who are at-risk for emotional/behavioral disorders
- Intervention plans that attend to these needs
Purpose of the Study

To evaluate the effects of the playground package on the aggression and appropriate play behavior of students at-risk for EBD:

Universal Level
- Teaching playground rules during PE
- Providing reminders of the rules
- Modifying the playground to facilitate appropriate play
- Encouraging playground monitors to take a more active supervisory role

Secondary Level
- Conducting a self-management program for students with aggressive behavior
Participants

• Students
  • 3 boys
    • 2 First grade
    • 1 Third grade
  • Ages 6-9
  • Normal functioning intelligence
  • None identified with EBD
  • Referred by P.E. teachers and principal for bullying behavior
Participants (Continued)

Students

• Irwin
  • Bully during transitions and rug time
  • Physically aggressive on playground
  • Rarely participated in organized games

• Joseph
  • Play Power Rangers
  • Tease and hit peers
  • Rarely participated in organized games

• Mitchell
  • Yelling & threatening to harm others (PE & recess)
  • Play fighting
Participants (Continued)

Two P.E. Teachers
- Caucasian Male in 30s
- Caucasian Female in 40s

Eight Playground Supervisors
- The P.E. teachers
- Six reading tutors
  - Caucasian ages 20s and 40s
- High school graduates and college graduates
Settings

🌟 Urban elementary school
  • Grades 1-6

🌟 School Gym
  • 50’ x 40’
  • Basketball hoops and stage

🌟 Playground (Lunch Recess)
  • Two grassy fields
  • Playground equipment
  • Basketball hoops and four square boxes
Dependent Variable

✿ Physical Aggression
   Kicking, kneeing, hitting, poking, pushing, shoving, tripping, and throwing objects

✿ Verbal Aggression
   Name calling, taunting, or criticizing another individual while in their presence

✿ Appropriate Play
   Following the five playground rules while participating in an organized activity or while using playground equipment
Independent Variable

- Schoolwide Positive Behavioral Support Plan
  - New playground rules
  - Teacher reminder of rules
  - Modification of playground
  - Playground supervisors trained, prompted, and reinforced

- Individual Positive Behavioral Support Plan
  - Self-management program
Data Collection

Anecdotal Information

Data were not recorded for the following conditions:
  
  Behavior
  
  Weather
Experimental Design

Multiple baseline across students

Phases included:

• Baseline
• School-wide Playground Program (SPP)
• Self-management training period
• Self-management implementation
School-wide Playground Program

During this condition

- Students taught new rules during P.E.
- Reminders provided about rules
- Playground modified
- Playground monitors received instruction
Five Playground Rules

FOLLOW THE RULES OF THE GAMES.
USE EQUIPMENT IN A SAFE WAY.
EVERYONE CAN PLAY.
KEEP HANDS & FEET TO YOURSELF.
USE KIND WORDS.
Playground Modifications

Playground divided into three sections:
Grassy section for soccer
Middle section for kickball
Cement area for smaller games and activities (e.g. jump rope and four square)
Supervisor Responsibilities

* Assigned to one of the sections
* Circulate and monitor their section
* Initiate organized games
Self-management Training Period

During this phase students were taught to:

• Rate their own recess behavior
• Compare their rating with recess supervisors
• Meet with supervisor twice each lunch recess
# Self-Management Card

**NAME:** ________________________________

**DATE:** ________________________________

## Recess Rules:
1. Follow rules of game
2. Use equipment in safe way
3. Everyone can play
4. Keep hands and feet to yourself
5. Use kind words

## Points:
- 🌞 = 3 points
- ☹️ = 0 points

Matching = 1 bonus point

<table>
<thead>
<tr>
<th></th>
<th>Hands and feet</th>
<th>Kind words</th>
<th>Points</th>
</tr>
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<td>🌞</td>
<td>🌞</td>
<td>4</td>
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<tr>
<td>2nd check</td>
<td>🌞</td>
<td>🌞</td>
<td>8</td>
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Self-management Implementation

During this phase students

- Matched with supervisors
- Exchanged points for reinforcers
- Received praise and encouragement from the supervisors
Irwin’s Aggression Graph

Rate of Aggression
Baseline  .50/min
SPP       .79/min
Self-Man  1.00/wk & SPP

Days
Irwin’s Appropriate Play Graph

<table>
<thead>
<tr>
<th>Rate of Appropriate Play</th>
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<tbody>
<tr>
<td>Baseline</td>
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<tr>
<td>SPP</td>
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<td>Self-Man &amp; SPP</td>
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<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>SPP</th>
<th>Self-Man &amp; SPP</th>
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<tbody>
<tr>
<td></td>
<td>7.56%</td>
<td>20.77%</td>
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<td>91.00%</td>
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Days

Percent Interval of Appropriate Play

- Baseline
- SPP
- Self-Management Implementation and SPP
Joseph’s Aggression Graph

Rate of Aggression
Baseline 0.65/min
SPP 1.00/min
Self-Management 1.00/wk & SPP
Joseph’s Appropriate Play Graph

![Graph showing the percent interval of appropriate play over days for Joseph, with phases marked as Baseline, SPP, Self-Management Training, and Self-Management Implementation and SPP. The graph includes a legend indicating the rate of appropriate play for each phase.]

- Baseline: 12.22%
- SPP: 36.67%
- Self-Management: 75.00%
- Self-Management & SPP
Mitchell’s Aggression Graph

- **Baseline**: Rate of Aggression
  - Baseline: 0.44/min
  - SPP: 0.60/min
- **Self-Management Training**: Rate of Aggression
  - Self-Man: 0.00/wk
  & SPP
Mitchell’s Appropriate Play Graph

**Rate of Appropriate Play**
- Baseline: 2.78%
- SPP: 11.25%
- Self-Man & SPP: 86.00%
Interobserver Agreement

- 25% of all sessions
- Mean 96%
- Range 83%-100%
Findings from the Study

- Treatment package influenced decrease in aggressive behavior and an increase in appropriate play
- Anecdotal evidence indicates school found treatment acceptable
Limitations

- Was SPP really needed?
- Could self-management be sufficient?
- No systematic measures of social validity
Implications for Future Research

Needs for...

- Additional research on the effect of universal interventions
- Pair universal interventions with individualized intervention plans for target students
- Collaboratively designing playground interventions that are acceptable and practical to school staff and students
Implications for Future Research
(Continued)

- Eliminate tangible reinforcers
- Use reinforcement without self-management
- Replace playground adult supervisors with peer mediators