School-Wide Positive Behavior Supports for Playground Behavior

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Findings from the Literature

- Antisocial acts committed by children and youth are a concern to our society (Sprague & Walker, 2000)

- Trends toward common incivilities in our school, such as bullying, aggression, rule infractions, and defiance of authority leave us with concern for the safety of our children (Lane, Gresham, & O’Shaughnessy, 2002; Mayer, 1995; Walker, Colvin, & Ramsey, 1995; Sprague & Walker, 2000; Walker & Sylvester, 1998)

- Children and youth with antisocial behavior problems typically lack the social skills needed to have appropriate social interactions with their peers (Pepler, Craig, & Roberts, 1998; Walker, Colvin, & Ramsey, 1995)
Findings from the Literature (continued)

- Teachers and administrators often report disruptive and aggressive behavior as their foremost challenge and concern (Kauffman, Mostert, Trent, & Hallahan, 1998; Rhode, Jeson, & 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)

- One study surveyed students’ opinion as to where bullying occurs—76% reported majority occurs on the playground (Olweus, 1993)
So what has been investigated?
Intervention
Organized games
Adult supervision of entire playground—praise paired with timeout

Outcome
Significant decrease of aggression, property abuse, rule violations
Doughtery, Folwer, & Paine (1985)

- **Intervention**
  - Social skills instruction
  - Peer mediation and self-monitoring
  - Recess supervisors—token economy earned for group activities paired with response cost

- **Outcome**
  - Significant reduction in negative interactions with peers
**Intervention**
Social skills instruction
Group contingency

**Outcome**
Modest decrease in problem behavior of students,
Limited affect on 5-7% of kids who account for most of problem behavior
Conclusions Gained from the Literature
Effective interventions include:

- Social skills instruction
- Adult supervision
- Organized games
- Group contingencies
- Peer mediation
Areas needing additional research:

- Individualized assessment of students who account for majority of problems
- Intervention plans that attend to their specific needs
Purpose of the Study

To determine if elementary students’ rates of aggressive recess behavior would decrease using a treatment package with five main components:

1. Teaching playground rules during PE
2. Providing reminders of the rules
3. Modifying the playground to facilitate appropriate play
4. Encouraging playground monitors to take a more active supervisory role
5. Conducting a self-management program for students with aggressive behavior
Participants

- **Children**
  - 3 boys
    - 2 First graders
    - 1 Third grader
  - Ages 6-9
- **Two P.E. Teachers**
- **Eight Playground Supervisors**
- Referred by P.E. Teachers and Principal
Student Support Center Interview Form

Student: ____________________________ Date: ____________________________

Person being interviewed: ____________________________ Relationship to student: ____________________________

Interviewer: ____________________________

NOTE TO THE INTERVIEWER:
If the student exhibits more than one problem behavior, attach an additional set (or sets) of functional assessment questions, so the respondent may answer the questions one time for each problem behavior. Note: You may lump problem behaviors together if they occur together in some way (See referral form).

PROBLEM BEHAVIORS (or groups of behaviors that occur together):
1. __________________________________________________________________________
2. __________________________________________________________________________
3. __________________________________________________________________________

BACKGROUND INFORMATION
Do you think any of the following factors influence the student’s problem behavior?
q Medication ______________________ q Conflicts at home ______________________
q Physical health ___________________ q Academic skills ______________________
q Disabilities ______________________ q Negative peer influence ______________________
q Illegal drug use ___________________ q Other ______________________

In what situations are the student’s behaviors most appropriate?

<table>
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<tr>
<th>Location</th>
<th>Time</th>
<th>Person</th>
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<td>In class</td>
<td>Arrival to school</td>
<td>Teacher(s)</td>
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<td>Entire Group</td>
<td>Morning</td>
<td>Support staff</td>
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<td>Hallways</td>
<td>Lunch</td>
<td>Peer(s)</td>
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<td>Small group</td>
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<td>Cafeteria</td>
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<tr>
<td>Individual</td>
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Settings

- **School Gym**
  - 50’ x 40’
  - Basketball hoops and stage

- **Playground (Lunch Recess)**
  - Two grassy fields
  - Playground equipment
  - Basketball hoops and four square boxes
Dependent Variables

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
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.
### 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

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<th>Hands and feet</th>
<th>Kind words</th>
<th>Points</th>
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<td>2nd check</td>
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NAME: __________________________
DATE: ___________________________
Data Collection

Observers

Two primary observers

- One on the North (grades 1-2)
- One on the South (grades 3-6)
<table>
<thead>
<tr>
<th>Interval</th>
<th>Child</th>
<th>Aggress</th>
<th>Play</th>
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Participant: ____________________
Total # of intervals observed: ______
# of Intervals of Approp. Play: __________
% Intervals Approp Play: _____
Total minutes observed: _______________
Total # aggressive acts: ________________
Responses per min aggress: _______
Data Collection (continued)

Anecdotal Information

Data were not recorded for the following conditions:

Behavior
Weather
Observers

One reliability observer
Interobserver agreement for both North and South ends of the playground
Reliability

- 25% of all sessions
- Mean 96%
- Range 83%-100%
Experimental Design

Multiple baseline across grades
Irwin’s Graph

Responses per minute (Aggression)

Days

% Interval (Appropriate Play)

Baseline
Imitation
Irwin
Results of 1st graders

Irwin

- Baseline
  - Verbal aggression .42 per minute
  - Physical aggression .85 per minute
  - Percentage of intervals of appropriate play = 11

- Treatment
  - Verbal aggression .026 per minute
  - Physical aggression .034 per minute
  - Percentage of intervals of appropriate play = 89.95
Joseph’s Graph

Responses per minute (Aggression)

Days

Baseline
Implementation
Joseph
Intervention

Percent Interval (Appropriate Play)
Results of 1st graders

- **Joseph**
  - **Baseline**
    - Verbal aggression .73 per minute
    - Physical aggression .72 per minute
    - Percentage of intervals of appropriate play = 23

- **Treatment**
  - Verbal aggression .004 per minute
  - Physical aggression .067 per minute
  - Percentage of intervals of appropriate play = 74.2
Mitchell’s Graph
Results of 3rd grader

- Mitchell
  - Baseline
    - Verbal aggression .25 per minute
    - Physical aggression .76 per minute
    - Percentage of intervals of appropriate play = 5

- Treatment
  - Verbal aggression 0 per minute
  - Physical aggression 0 per minute
  - Percentage of intervals of appropriate play = 85.9
Supervisor Data

Please select one statement that describes the first and second-graders' behavior during lunch recess THIS WEEK.

(a) The students behaved well during recess this week -- there were very few behavior problems.

(b) The students behaved ok during recess this week—there were a few behavior problems.

(c) The students behaved poorly during recess this week—there were many behavior problems.
Findings from the Study

- Treatment package influenced decrease in aggressive behavior
- Anecdotal evidence indicates school found treatment acceptable
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
- Exploring interventions for students with internalizing behavior problems
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