# The Effects of School-wide PBS within a Randomized Control Effectiveness Trial

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#### Research Questions

- Can SWPBS be implemented to criterion by typical state trainers?
- If SWPBS is implemented are schools perceived as safer settings?
- If SWPBS is implemented do students benefit academically?

#### Method

- Randomized Control Trial
  - 30 Elementary Schools in Illinois, and 30 Elementary Schools in Hawaii
  - Random assignment of schools to
    - (Initial SWPBS training; and Delayed SWPBS training)
  - Replacement (7 schools) randomly assigned
- Data collected across three years
  - Time 1: No SWPBS training for any schools
  - Time 2: Initial Treatment Schools get training
  - Time 3: **Delay** Schools get training (problems...)

#### Measures

- Office Discipline Referrals (ODR)
- Implementation of SWPBS
  - School-wide Evaluation Tool (SET)
    - Sugai et al.
- Perceived School Safety
  - School Safety Survey (SSS)
    - Sprague, Colvin & Irvin
- Academic Success
  - Proportion of Students Meeting State Reading
     Standards (SAT 9 in Hawaii; ISAT in Illinois)

#### **Effect Size**

• .20 = Low, but may be interesting

• .50= Moderate

• .80 = High effect size

• Implementation of evidence-based practice typically use d = .50 as a criterion.

#### Randomized Controlled Trial

(Preliminary Findings)

Assessment Time Period

• Group T 1 T 2 T 3

• Treatment (N = 30) O X O

• Control/Delay (N = 30) O O X O

• (T = time (by year), O = observation, X = implementation of SWPBS training)

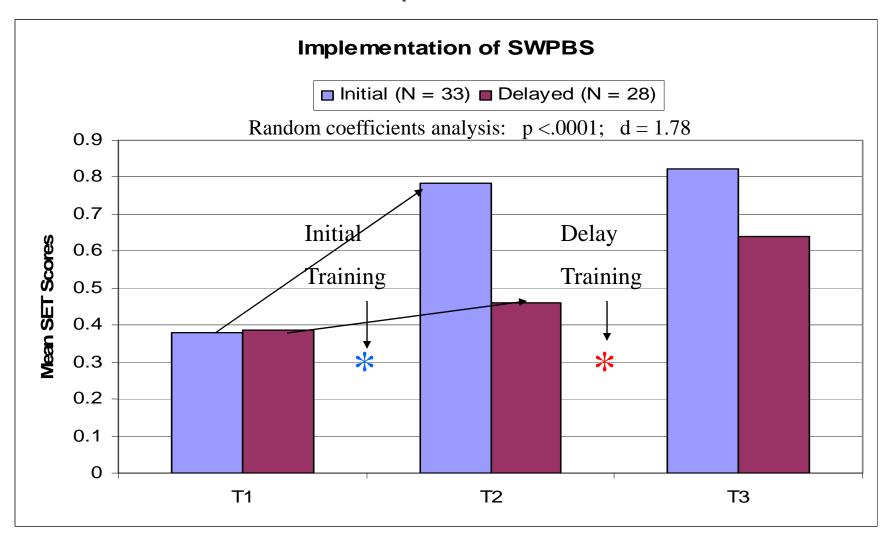
#### Finding #1: Implementation by regular personnel Mean SET score (Total) [Bold indicates post intervention]

	T1	T2	Т3
Treatment	.381	.785	.823
Group	N = 33	N = 30	N = 30
Control/Delay	.388	.459	.640
Group	N= 26	N= 27	N= 23

Random coefficients analysis (Murray, 1998; Singer & Willett, 2003):

Time X Condition p < .0001; r = .67; d = 1.78

### Results: With training by regular state trainers, schools are able to implement SWPBS to criterion.

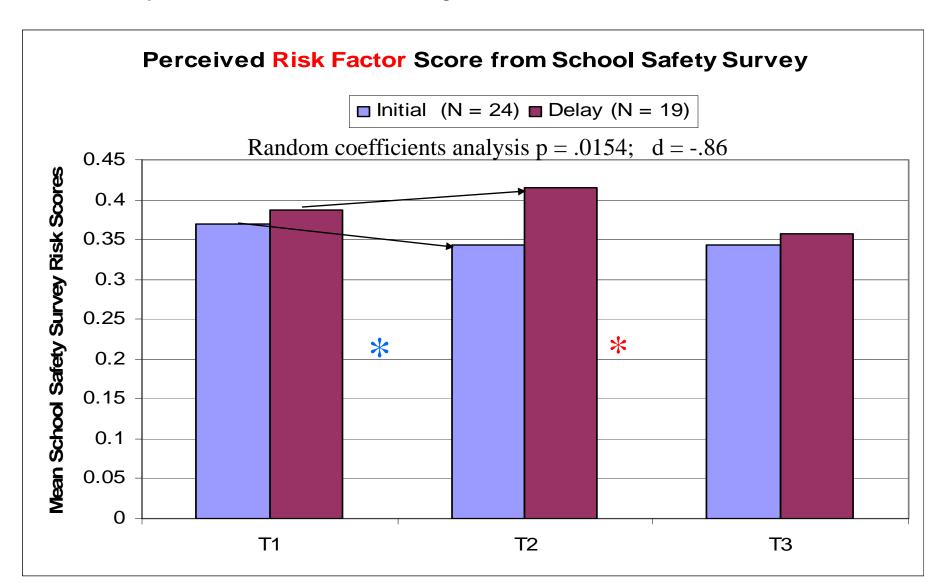


## Finding #2: SWPBS is associated with increased perception of safety: School Safety Survey: Risk Factor

	T1	T2	T3
Treatment	.370	.344	.343
Group	N= 24	N = 29	N = 25
Control/Delay	.387	.415	.358 $N = 20$
Group	N = 19	N= 24	

Time X Condition p = .0154 r = - .40 d = - .86

Results: Perceived Social Risk Factors decreased when SWPBS was implemented with fidelity.

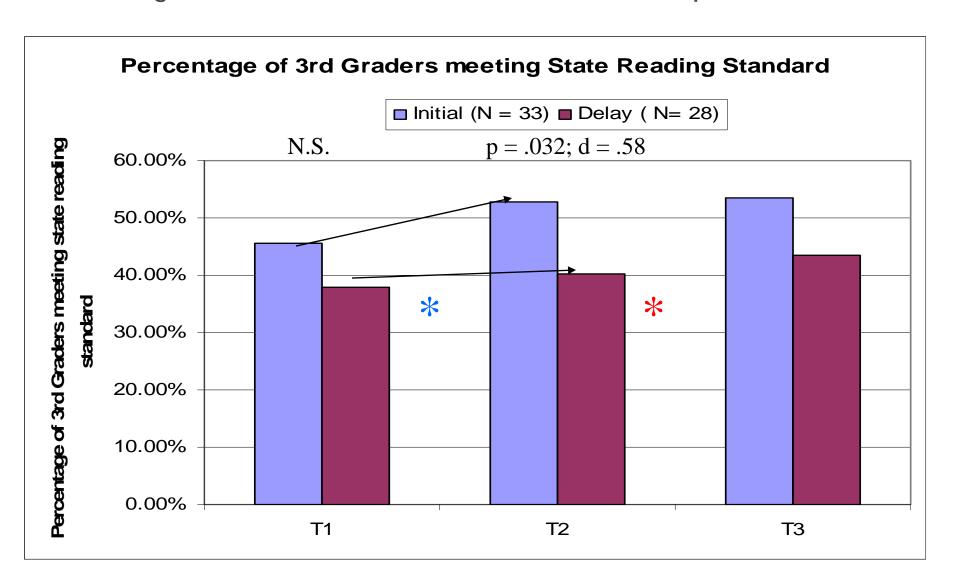


## Finding #3: SWPBS associated with increase in proportion of students meeting state reading standard

	T1	T2	T3
Treatment	.455	. <b>529</b>	.536
Group	N = 33	N= 31	N = 31
Control/Delay	.38	.402	.436
Group	N = 28	N= 27	N= 23

T2 Treatment vs. Control: p = .032 r = .28 d = .58

### **Results**: The percentage of 3<sup>rd</sup> graders meeting the state reading standard increased with SWPBS implementation



### Summary

- Schools that receive technical assistance from typical support personnel are able to implement School-wide PBS with fidelity
- When implemented with fidelity SWPBS is associated with:
  - Low levels of office discipline referrals
    - (.29 ODRs per 100 per day compared with national mean of .34)
  - Improved perception of the safety of the school
    - (reduced risk factor)
  - Increased proportion of 3<sup>rd</sup> graders who meet the state reading standard.