



# Response to Intervention Case Study Data for School Psychology Program Evaluation

Sawyer Hunley  
University of Dayton

# Research Objective

Develop problem-solving, method for assisting individual K-12 students with severe academic and behavior concerns

Train school psychology students to use the method with K-12 students and evaluate results

Use data from implementation to determine:

- impact on K-12 students
- school psychology student skills
- impact of school psychology program

# ● Case Study Development

## 1. Model construction

- Response to Intervention Tier 3 (RTI)
- Scientist-practitioner model
- Data-based
- Single case design
- Outcome oriented

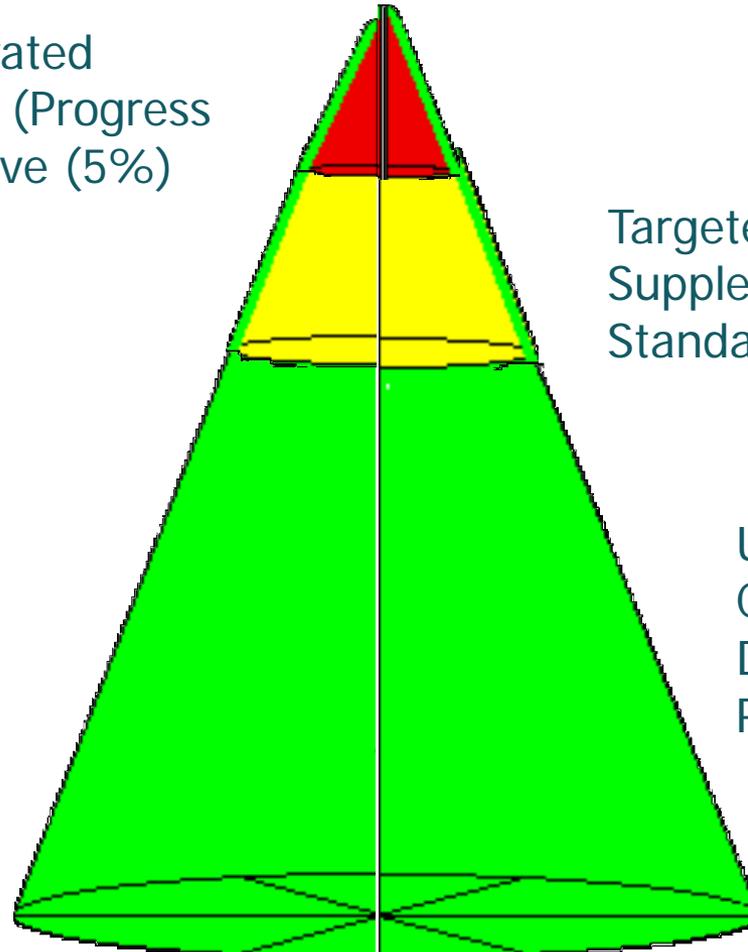
## 2. Model pilot

- Create rubric
- Train users
- Implement
- Evaluate

# The RTI Model

## Tier 3

Interventions Generated through Case Study (Progress Monitoring); Intensive (5%)



## Tier 2

Targeted (Progress Monitoring) Supplemental Instruction; Standard Protocol (15%)

## Tier 1

Universal (Screening) Curriculum/Instruction; Discipline Policy & Procedures (80%)

# Case Study Process

- Stage I: Local Norms
- Stage II: Problem Identification
- Stage III: Problem Analysis
- Stage IV: Intervention
- Stage V: Evaluation

Stages II – V were based on Bergan & Dunn (1977)

	Outstanding	Competent	Needs Development
3.1	Hypotheses were generated through team collaboration with teacher, parent, and other relevant parties	Hypotheses were generated through collaboration with teacher and/or parent	<b>Hypotheses were NOT generated through collaboration with teacher and/or parent</b>
3.2	Multiple hypotheses were developed to identify the cause or source of each problem	A hypothesis was developed to identify the cause or source of each problem	<b>No hypotheses were developed</b>
3.3	Each of the multiple hypotheses was tested and data were used to confirm the cause or source of the problem using one or more of the following methods: <ul style="list-style-type: none"> <li>Direct observation,</li> <li>Analogue assessment,</li> <li>Functional assessment,</li> <li>Self-monitoring assessment,</li> <li>Other</li> </ul>	One hypothesis was tested to confirm the cause or source of the problem using one or more of the following methods: <ul style="list-style-type: none"> <li>Direct observation,</li> <li>Analogue assessment,</li> <li>Functional assessment,</li> <li>Self-monitoring assessment,</li> <li>Other</li> </ul>	<b>Hypothesis testing did not occur</b>
3.4	The hypothesis reflected awareness of individual differences (e.g., biological, social, linguistic, cultural), and the intervention acceptability for hypothesis was verified for acceptability	The hypothesis reflected awareness of individual differences (e.g., biological, social, linguistic, cultural)	<b>The hypothesis did NOT reflect awareness of individual differences (e.g., biological, social, linguistic, cultural)</b>
3.5	<b>Support was provided to justify the use of the intervention as evidence-based practice ( research literature) that linked to the targeted problem</b>	<b>Hypothesis testing linked the academic and/or behavioral problem(s) with the intervention</b>	<b>Hypothesis testing did NOT link the academic and/or behavioral problem(s) with the intervention</b>

# Single Case Designs

Brief experimental designs for hypothesis testing to show the relationship between the dependent and independent variable

Monitor intervention impact over time

Results from individual cases were aggregated

# Key Elements

- Case Study fidelity
- Intervention integrity
- Case Study outcomes

# Outcome Evaluation

- Properties
  - Stability and variability
  - Level and gross magnitude of change
  - Trend and specific rate of change
- Methods
  - Visual analysis
  - Effect Size
  - Goal Attainment Scaling

# Pilot Test

- Case studies implemented with 23 cases in K-12 settings
- Data gathered for case study fidelity, intervention integrity, & outcomes
- Analyses of case studies included comparison of case study fidelity with outcomes, and comparison of intervention integrity with outcomes

# Results

- 20 out of 23 cases yielded positive results (2 academic and 1 behavior).
- 17 out of 23 case studies were completed with fidelity (10 academic and 7 behavioral).
- Overall case study fidelity was associated with positive outcomes, particularly in stages II, III, & IV
- 50 – 100% intervention integrity is associated with high degrees of student success