Except from PBIS Tier 3 Manual (3rd Edition)

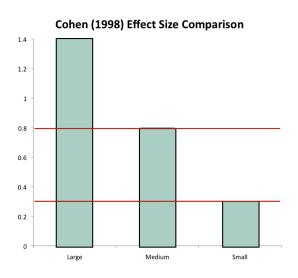
A meta-analysis study is one place where educators can search for evidence-based practices. The dictionary defines meta-analysis as the "examination of data from a number of independent studies of the same subject, in order to determine overall trends". In education, where every person and company seems to be promoting a "Best Practice", it can be hard to know which educational practice is truly "research-based" and scientifically shown to be effective.

Meta-analysis research helps educators evaluate how effective a practice is by analyzing how well it did across a large number of well controlled studies by different researchers, institutions, students and after many years of replication.

Meta-analysis research relies in part on calculating an Effect-Size, which is a statistic that represents the overall effectiveness of an individual intervention. A meta-analysis study compares the effect-size of many independent studies of the same intervention to determine an intervention's effectiveness. Cohen's Effect Size Comparison is often used to determine effectiveness and states the following:



- Moderate Effect Size = 0.3 0.8
- High Effect Size = 0.8 1.0 (or more)



The graphs on the following pages come from three separate mega-analysis research studies and showcase interventions with a high effect size across three different contexts and student population.

This excerpt is part of the Differential Reinforcement chapter of the *PBIS Tier 3 Manual*, available from Amazon, Apple Books, or <u>koi-education.com/books</u>.



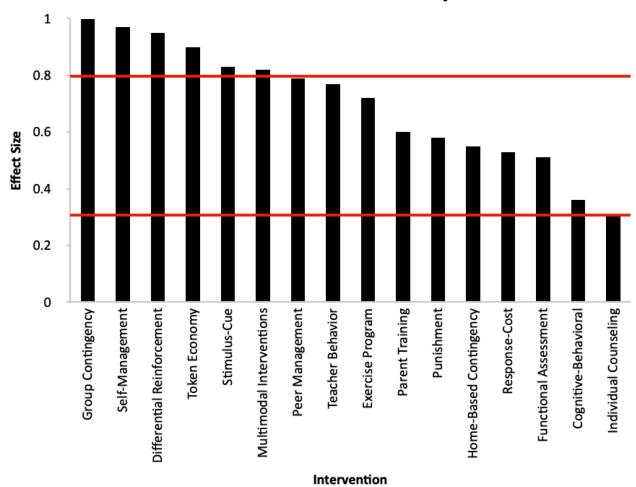


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Interventions that decrease disruptive behaviors in public school students

Stage, S. A., & Quiroz, D. R. (1997). A meta-analysis of interventions to decrease disruptive classroom behavior in public education settings. School Psychology Review, 26, 333-368.

Interventions to Decrease Disruptive Behavior



Some of the interventions in this graph such as punishment, cost-response, and counseling require further explanation and context, which is included in the original article - and discussed in the PBIS Tier 3 Manual.



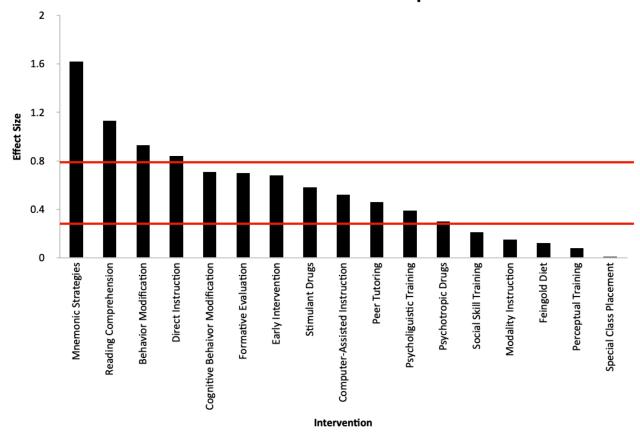


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Interventions effective for students identified as needing Special Education services

Forness, S. R., Kavale, K. A., Blum, I. M., & Lloyd, J. W. (1997). Mega-analysis of meta-analyses. Teaching Exceptional Children, 29, 4-9.

Evidence-Based Interventions in Special Education







Except from PBIS Tier 3 Manual (3rd Edition)

Interventions effective for student identified as having an Emotional and Behavioral Disorder

Ryan, J. B., Pierce, C. D., & Mooney, P. (2008). Evidence-based teaching strategies for students with EBD. Beyond Behavior, 17, 22-36.

Evidence-Based Interventions for Students with EBD Effect Size 0.8 0.4 Cross-Age Tutoring Peer Turoring Classwide Peer Tutoring Cooperative Learning Peer Reinforcement Self-Monitoring Verbalize Math Problems Cubicles Stuctured Academic Tasks **Feacher Planning Strategies** Adjusting Presentation Rate Incorporating Student Interest Individual Curricular Modification Peer-Assisted Learning Strategies Peer Assessment Peer Modeling Self-Evaluation Self-Instruction Strategy Instruction Modeling, Rehersal, Feedback Life Space Interviewing Adjusting Task Difficulty Previewing Sequential Prompting Teach Test-Taking Skills Mnemonic Instruction **Taped Words and Drill Instruction** Trial and Error vs Time Delay Personalized System of Instruction Structured Instructional System Intertrial Interval Duration Teacher vs Child Control of Choice of Task and Reinforcement Story Mapping Choice-Making Opportunities Token Reinforcement System Contingency Reinforcers Academic Contracting Written Feedback Bonus Contingency in Token Program





