







Causes?

- Learning Disability
- Behavior Disorder
- ADHD
- The label?
- Necessary but sufficient?
- Methods used to manage behavior?

b. Lack of Background in Research Methods in Schools

National Evaluation and Technical Assistance Center for Children and Youth who are Neglected, Delinquent, or At-Risk

"There is a critical need for evidenced-based behavior management approaches in both traditional and institutional school settings—that address student behavior issues proactively and in ways that support students' academic achievement" (Read & Lampron, 2012, p. 7).

National Institute for Literacy

"As professionals, teachers can become more effective and powerful by developing the skills to recognize scientifically based practice and, when the evidence is not available, use some basic research concepts to draw conclusions on their own" (Stanovich & Stanovich, 2003, p. 3).

Yet: Teachers have a lack of training in research methods:

$$\label{eq:constraint} \begin{split} & \mbox{One factor that has impeded teachers from being active and effective consumers of educational science has been a lack of orientation and training in how to understand the scientific process" (Stanovich & Stanovich, 2003, p. 4). \end{split}$$

c. Failure to use Research-Based Procedures/Use of Non-Research-Based Practices

Research shows that few evidence-based behavior management procedures are implemented in schools (Briesch et al., 2015).

Vision Retraining

American Academy of Ophthalmology Complementary Therapy Task Force

"To date, there appears to be no consistent scientific evidence that supports behavioral vision therapy, orthoptic vision therapy, or colored overlays and lenses as effective treatments for learning disabilities. It seems intuitive that oculomotor-abilities and visual-perception play a role in learning skills such as reading and writing. However, several studies in the literature demonstrate that eye movements and visual perception are not critical factors in the reading impairment found in dyslexia.] but that brain processing of language plays a greater role. Furthermore, the vast majority of individuals with known ocular motility and eye movement defects appear to read and comprehend normally. Many individuals born with severely misaligned eyes excel in reading and academics" (Schwab et al., 2001, p. 1).

Consistent with a review by Barrett (2009). See also Handler and Fierson (2009). Policy statement: Learning disabilities, dyslexia and vision by the American Academy of Ophthalmology.

Perceptual Motor Programs, Sensory Integration, and Tinted Lenses

The research findings regarding three relatively common, yet controversial, practices failed to support the continued use of perceptual motor programs, sensory integration therapy, and tinted lenses. Educators are encouraged to become informed consumers of research and implement evidence-based practices" (Hyat, Stephenson, & Catter, 2009, p. 313).

Brain-Based Education

"these interventions...may be based on misinterpretation or misunderstanding of the [data_]Yet, neuroscience research does, indeed, provide important information regarding how children learn and gives some important guidance towards best educational practices. However, [rather than suggesting dramatic changes in instructional] approaches, the data appear to support traditional practices...] For example, the research described above on the formation of memory through long-term potentiation strongly suggests that neural connections are strengthened through repetition or practice... Likewise, the data suggest that formation of memories through neural consolidation works best if students have a number of short learning sessions separated over time, not single long sessions. Neuroscience, in this case, reinforced these best practices by providing the data at the neural level that supported these methods" (Alferink & Farmer-Dougan, 2010, p. 50).





" Our review of the literature disclosed ample evidence that children and adults will, if asked, express preferences about how they prefer information to be presented to them. There is also plentiful evidence arguing that people differ in the degree to which they have some fairly specific aptitudes for different kinds of thinking and for processing different types of information. However, we found virtually no evidence for the interaction pattern mentioned above, which was judged to be a precondition for validating the educational applications of learning styles. Although the literature on learning styles is enormous, very few studies have even used an experimental methodology capable of testing the validity of learning styles applied to education. Moreover, of those that did use an appropriate method, several found results that flatly contradict the popular meshing hypothesis. We conclude therefore, that at present, there is no adequate evidence base to justify incorporating learning styles assessments into general educational practice. Thus, limited education resources would better be devoted to adopting other educational practices that have a strong evidence base, of which there are an increasing number" (Pashler, McDaniel, Rohrer, & Bjork, 2009, p. 105).



Behavior Management Concerns

- Misbehavior is the main concern of educators (Dunlap, Iovannone, Wilson, Kincaid, & Strain, 2010; Martella, Nelson, Marchand-Martella, & O'Reilly, 2012; Westling, 2010).
- Instructional time is sacrificed; students learn less (Musi-Rao & Haydon, 2011; Reinke, Herman, & Stormont, 2013) contributing to the low achievement and excessive referrals to special education of at-risk students (oliver & Reschy, 2007).
- 50% of new and urban teachers leave the profession within the first 5 years due to difficulties managing student behavior (Crothers & Kolbert, 2008; McKinney, Campbell-Whately, & Kea, 2005; Reinke et al.,2013).

Yet.....

•The least capable teachers begin their profession teaching the most challenging students (Oliver & Reschly, 2007).

•New teachers often have a lack of preparation and insufficient professional development in classroom management (Briere, Simonsen, Sugai, & Myers, 2015; Oliver & Reschly, 2007; Parsonson, 2012; Simonsen, Myers, & DeLuca, 2010).

•Teachers consider classroom management to be the most difficult aspect of their job; however, they do not believe their training has prepared them to address behavior management issues (Briesch, Briesch, & Chafouleas, 2015; Reinke et al., 2013).

As a result...

17

19

There are high rates of negative interactions between students who exhibit behavior problems and their teachers (Moore Parin, Robertson, Maggin, Oliver, & Wehby, 2010; Sutherland & Singh, 2004; Tillery, Varjas, Meyers, & Collins, 2010).

- · Teachers allow over 90% of all appropriate behavior to go unrecognized.
- Teachers are two to five times more likely to recognize inappropriate behavior than they are to recognize appropriate behavior.
 - Teacher attention to inappropriate behavior tends to increase the probability that the behavior will be strengthened--will occur with regularity (Latham, 1992; Martin, Hutchings, Jones, Eames, & Whitaker, 2010).

- Average ratios with teachers who work with students with behavior problems is 1 to 2 to 1 to 4 positive to negative interactions (Rathel et al. 2014)
- Even teachers who are involved in a school-wide behavior program achieve only 1.2 to 1 ratio of positives to negatives (Reinke et al., 2013). In their sample of 33 teachers, only one had a ratio of 4 to 1.
- Interestingly, teachers who report using harsher responses to student discipline problems and lower rates of positives to negatives also report higher levels of emotional exhaustion (Reinke et al., 2013).



	Nonalterable Variables
	Ethnicity
	Socioeconomic status Gender
	Home background
1	Alterable Variables
τ	Jse of time
1	Feaching skills
Adapted from Bloom (1980).	Quantity of teacher-to-student interactions





IES Recommendations

Recommendation 1. Identify the specifics of the problem behavior and the conditions that prompt and reinforce it.

Recommendation 2. Modify the classroom learning environment to decrease problem behavior.



Recommendation 3. Teach and reinforce new skills to increase appropriate behavior and preserve a positive classroom climate.

Recommendation 4. Draw on relationships with professional colleagues and students' families for continued guidance and support.

Recommendation 5.

Assess whether schoolwide behavior problems warrant adopting schoolwide strategies or programs and, if so, implement ones shown to reduce negative and foster positive interactions. 25













Evidence-Based Practices

- · Maximize structure and predictability.
- Post, teach, review, monitor, and reinforce positively stated expectations.
- Actively engage students in observable ways.
- Use a continuum of strategies to acknowledge appropriate behavior.
- Use a continuum of strategies to respond to *inappropriate* behavior.

Source: Simonsen et al. (2010).

Destination #2

Create a Reinforcing Learning Environment

Importance of Positive Teacher-Student Relationships

Meta analysis of more than 100 studies found 31% fewer discipline problems and rule violations for teachers who had positive relationships with their students over the course of a year than teachers who did not have such positive relationships (Marzano & Marzano, 2003).

Roadblock #2

use of a Negative Reinforcement Paradigm

Most of the reinforcement between students with emotional or behavioral disorders and their teachers represents negative reinforcement (Gunre & Coutinho, 1997). Why is it Important to Distinguish Between Positive and Negative Reinforcement?

35







Alterable Variables

Use of time

Teaching skills

Quantity of teacher-to-student interactions

Adapted from Bloom (1980).

How to Make Interactions More Positive

- Explicitly teach and encourage classroom-wide expectations.
- Explicitly teach classroom routines.
- Aim for a ratio of 3 to 5 positive to 1 negative adult-student interactions.

41

43

 $\begin{array}{l} \mbox{Note: Goal is 3-4 to 1 (Gunter, Coutinho, & Cade, 2002; Rathel, Drasgow, Brown, & Marshall, 2014; Stichter et al., 2009) or 5 to 1 (Martella et al., 2012; Schneider, 2012; Sugai & Horner, 2005) ratio of positive to negative interactions. \end{array}$

Note: John Gottman- Magic 5:1 positives-to-negative ratio found in successful marriages. Also found in language success, parenting, education, business, and prison rehabilitation.

Barbara Fredrickson- 3:1 ratio enhanced emotional resilience-the ability to handle aversives.

How to Make Interactions More Positive

- Explicitly teach and encourage classroom-wide expectations.
- Explicitly teach classroom routines.
- Aim for a ratio of 3 to 5 positive to 1 negative adult-student interactions.
- Engage in active supervision.
- Provide precision requests for minor, infrequent behavior errors.
- Use preventative strategies such as pre-corrections for chronic errors.
- Ensure that curriculum is matched to student skill.

Destination #3

Support All Students (multí-tíered)





Early Intervention

Need to intervene early: "Between 3% and 25% of children with autism make so much progress that they are no longer on the autism spectrum when they are older. Many of the children who later go off the spectrum have some things in common:

•Diagnosis and treatment at younger ages •A higher intelligence quotient..than the average child with autism •Better language and motor skills"

Goals: •Physical skills •Thinking skills •Communication skills •Social skills •Emotional skills

Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2017). Early intervention. Autism spectrum disorder (ASD): Condition information. Rockville, MD: Author. Retrieved from https://www.nichd.nih.gov/health/topics/autism/conditioninfo/Pages/behavioral-management.aspx 47

Hart & Risley (1996)

Studied 42 families 13 higher SES families 23 middle/lower SES families 6 low SES families

Observed every month for 1 hour for 2.5 years Observations began when children were 7-9 months of age Differences in Vocabulary at 36 Months

Children from higher SES families (1200 words)

Children from middle SES families (800 words)

Children from low SES families (580 words)

Actual Differences in Quantity of Words Heard

In a typical hour, the average child would hear:

51

High SES family 2,153 words

Middle SES family 1,251 words

Low SES family 616 words

Cumulative Language Experience
in a Typical WeekHigh SES215,000 words of language experienceMiddle SES125,000 words of language experienceLow SES62,000 words of language experience



In a typical hour, the average child would hear: High SES (32 affirmations and 5 prohibitions) Middle SES (12 affirmations and 7 prohibitions)

Low SES (5 affirmations and 11 prohibitions)

Cumulative Language Experience at Age 4

High SES	45 million words (560,000 more instances of encouraging feedback)	
Middle SES	26 million words (100,000 more instances of encouraging feedback)	
Low SES	13 million words (125,000 more instances of discouraging feedback)	54















	Intervention	Weighted		
	Focus/Outcome	Mean Z_r	Ν	
	Reading Only		585	
Meta Analysis	Reading	.30	585	
Stewart, R., Benner, G., Martella, R. C., & Marchand-Martella, N. E. (2007). Three-tier models of reading and behavior: A research review. <i>Journal of Positive Behavior Interventions</i> , 9, 239- 253.	Behavior			
	Behavior Only		860	
	Reading	.18	21	
	Behavior	.28	839	
	Integrated		3,668	
	Reading	.53	3,668	
	Behavior	.31	3,668	



uals with autism spectrum disorder (ASD), a relatively small proportion of intervention research has investigated interventions to address academic development for this population. This article includes a review of the research literature on the effectiveness of teaching academic skills to students with ASD using explicit and systematic scripted (ESS) programs. Nine studies were located and evaluated using descriptive analysis and quality indicators for single-case experimental design research. Results showed that only one study met all quality indicators for single-case research and that ESS programs are not evidence-based practices for individuals with ASD, though there is enough promise to warrant additional investigation. Limitations and areas of future research are discussed.









