Mythbusters: Debunking Common Misunderstandings in School Psychology Practice
myth

/mith/

a widely held but false belief

Session goals:
1. Present common myths you may encounter in practice or be personally curious about.
2. Discuss the best available evidence relative to these myths.
3. Provide talking points to challenge the myths and recommend alternatives.
## Overview of Myths

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Our Orientation

Evidence-based practice is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences.

From https://ebbp.org/ebbp/definition
How to determine the best available research?
Myth:

We can improve students’ outcomes by accommodating or targeting diverse learning styles.
What are learning styles?

• Generally refers to idea that there is a style or modality in which a learner best processes and retains information

• There are >70 noted in the literature

• Commonly: visual, auditory, reading, kinesthetic (kinesthetic-tactile, tactile)

• What it's not: differentiated instruction, universal design, individualization
Common Assumptions

• There are a variety of ‘learning styles’ represented in the population that indicate the mode of instruction or studying that is most effective.
• Some people learn better visually, aurally, reading, or kinesthetically.
• If we adapt instruction of individuals’ preferred learning style, they will do better.
• Related: Some people are left- or right-brained and this explains differences in learning and learning styles.
What does the best available research say?

• People—both adults and youth—vary in preferences for and attitudes about learning styles.
• There is no correlation between learning style strategy used and learning outcomes. Even when students can select strategies based on their preferred ‘learning style,” it makes no difference.
• Learning isn’t related to hemispheric dominance (i.e., so-called right v. left-brained).
What does the best available research say?

• Studies *claiming* to demonstrate influence of learning styles lack design/rigor to support such conclusions.
  – The most rigorous studies tend to contradict the concept of and hypotheses related to learning styles.
  – “However, given the lack of methodologically sound studies of learning styles, it would be an error to conclude that all possible versions of learning styles have been tested and found wanting; many have simply not been tested at all.” (Pashler et al., 2009, p. 105)
What would constitute evidence for styles?

“[E]vidence for a learning-styles intervention needs to consist of finding that a given student’s learning is enhanced by instruction that is tailored in some way to that student’s learning style.” (Pashler et al., 2009, p. 108)
What can we conclude?

“There is no adequate evidence base to justify incorporating learning styles assessments into general educational practice.” (Pashler et al., 2009, p. 105)

• People may have different abilities or skill levels, but not learning styles, and tailoring to ‘learning styles’ doesn’t make a difference in learning outcomes.

• Discourage teachers or students from labelling learning style —such pigeonholing may constrain engagement and learning outcomes.
“Learning Styles do not work, yet the current research literature is full of papers which advocate their use. This undermines education as a research field and likely has a negative impact on students. … It is in everyone’s interests for educational research and resources – time, money, effort, to be directed toward those educational interventions which demonstrably improve student learning, and away from those which do not.” (Newton, 2016, p. 5)

What to do instead?

– Make available to all learners generally effective instructional strategies and academic prevention/intervention

– Invest in what we can be reasonably sure will be effective.
Key References


- **Quick readings/resources:**
Myth:

Grade retention is an appropriate alternative for students who show limited social or academic readiness for the next grade.
Common Assumptions

• If a student hasn’t achieved the knowledge and skills needed for the next grade level, they’ll do better if repeating the current grade.
• If a student isn’t socially or behaviorally ready for the next grade, they’ll do better with the extra time to mature if retained/held back.
• More time in current grade is better for students who haven’t achieved the readiness expected or met standards for the next grade.
• Early retention (primary grades) is more beneficial than later retention.
What does the best available research say?

• Studies of the effectiveness of grade retention are mixed and controversial because of the variable quality of studies of retention.
  – It’s challenging to construct a rigorous study of retention’s effects because an experiment (i.e., random assignment to retention or no retention) isn’t feasible or ethical.
What does the best available evidence say?

- Multiple meta-analyses have concluded that grade retention is ineffective and even less likely to support positive academic or social emotional outcomes than social promotion. That is, researchers generally agree that students are better off—that is, they will have higher achievement—if promoted than retained.

- Negative effects are especially negative for lower ability/skill students.

“Grade retention is not an effective policy for raising the performance of students targeted by the policy, the lowest-ability students.” (Cooley Fruehwirth et al., 2016, p. 1018)
What does the best available research say?

A recent meta-analysis of 22 studies accounted for design and years post-retention of outcome measurement, which appear to be related to study outcomes. Less rigorous studies show more negative effects, but even the highest quality studies tend to show no effect at best for students’ academic performance.

- The negative effects are stronger the more years post retention that outcomes were measured.
- There may be a short-term boost but it is quickly lost and is then characterized by a downward trajectory.
- Early retention is not beneficial and may actually be more detrimental than later retention (Cooley Fruehwirth et al., 2016).
What can we conclude?

• **Does retention help students? No/probably not.**
  – Students are likely to be better off academically if they are *not* retained, especially those who are lowest performing at the time of retention.

• **National Association of School Psychologists (2003): “seek alternatives to retention that more effectively address the specific instructional needs of academic underachievers”**

• **What To Do Instead?** Effective research-based academic and behavioral supports (e.g., MTSS, targeted intervention).
References


Myth:
Waiting a year to enroll a student eligible for Kindergarten will increase his/her likelihood of success.
The Littlest

Can Your Kid Hack It in Kindergarten?

Or should you

By MELINDA WENNER

AFTER all that heap talk about
Kumon, the I.Q. centers, the
playgrounds in private schools,
it's finally time to ask

Suzanne Collins' 'The Hunger
Games' and even a few

true believers the question:

Can your child hold his own

in kindergarten?

...
What do we know about Kindergarten redshirting?

• The practice of redshirting is highly debated specifically for students who’s birthdays are close to the seasonal cutoff (most frequently cited as September 1st, Education Commission of the States, 2011).
  – The argument reasons that a student born on August 31st has expectations that are a whole year higher than a child born on September 1st, presenting as unfair and sometimes often espoused as discriminatory.
  – However, start dates have varied considerably over the past 30 years, so this argument has always migrated to the “current” start date cutoff.
What do we know about redshirting?

- The argument for redshirting a student before Kindergarten entry places all of the responsibility on the child to be ready for Kindergarten. However from the lens of evidence-based practice, Kindergarten (and related policy and leadership) should take responsibility for being ready for students (Puccioni, 2015).

- If we allow Kindergarten to represent a static point of entry, we alienate the idea of differentiated instruction and developmentally appropriate practice (Dijkstra, Walraven & Mooij, 2017).
What do we know about redshirting?

- Redshirting is typically available to families who have high socio-economic status, while families who require care for their children but do not have the means to send them to private or family friend and neighbor childcare settings do not have this same luxury (Diamond et al., 2000).

- As a result, the pool of students who are redshirted (and are represented in research studies) have a variety of protective factors that are highly correlated with high SES at K entry (Larson, Russ, Nelson, Olson & Haflon, 2015).
  - High parent education levels
  - More likely to have received 1 or 2 years of preschool experience
  - Improved cognitive ability
What do the data tell us about redshirting?

- When we compare students who were redshirted to students who have typical entry into Kindergarten through psychometrically robust analyses that control for SES and other related variables evidence suggests that the differences in student level outcomes are insignificant.
  - Mendez, Kim, Ferron & Woods (2015) used propensity score matching on 12 variables to control for variance due to extraneous variables and then compared performance in delayed entry vs typical entry on cognitive tasks and student outcomes. Their study included 6841 students.
Insignificant differences between groups

• Teacher ratings of behavior, attention and attitude in grades 3-5.
• Grade 6-10 referrals
• Likelihood of being retained in grades 1-12.
• Reading, Math, and Language academic outcomes across grades 5, and 7.

Significant differences between groups

• Delayed enrollment students were significantly more likely to receive special education services in grades 6-12.
• Reading and Language outcomes for grades 3 were lower for typical enrollment students, but these attenuated by grade 5.
What do the data tell us about redshirting?

- Other large scale studies have demonstrated similar effects.
  - Cascio & Schanzenbach (2007) used a preexisting RCT where children were assigned Kindergarten classrooms to test the effects of small classroom size to match students based on age at entry and found that there were no meaningful effects of delayed start.
  - Fortner & Jenkins (2017) found a small effect at Kindergarten, but these effects dissipated by 3rd grade on academic outcomes.
Summary

• These findings highlight the importance of considering a variety of demographic and ecological variables when considering the value of redshirting.
• Highly controlled, psychometrically sophisticated, and large sample studies generally show very limited impact of redshirting.
• As a result, redshirting is unlikely to benefit most students in Kindergarten.
Myth: Kindergarten is either academically focused or play-based.
What Is Lost When Kindergarten Gets More Academic?

Secret Teacher: teaching without play was soul-crushing

After spending time in early years, the focus on structured learning in years 1 and 2 came at a cost.

The New Preschool Is Crushing Kids

Today’s young children are working more, but they’re learning less.

Children are emotional, loud, indecisive, excitable, distracted.

STEP INTO an American preschool classroom today and you are likely to be bombarded with what we educators call a print-rich environment, every surface festooned with alphabet charts, bar graphs, word walls, instructional posters, classroom rules, calendars, schedules, and motivational platitudes—few of which a 4-year-old can “decode,” the contemporary word for what used to be known as reading.
Play vs Academics

- Is it a necessary dichotomy?
- Current thoughts that contribute to this myth:
  - Kindergarten literacy and math instruction is just 1st grade pushed down to K.
  - When instruction occurs, there is no time for play, fun, or social interaction.
  - Academic instruction requires intensive and intrusive assessment.
High Quality Kindergartens

- Evidence indicates high quality Kindergartens share common elements that lead to improved student outcomes including:
  - Rich opportunities for language development through conversational turns and literacy activities, rather than explicit reading activities.
  - Authentic-play-based opportunities to engage in social interaction.
  - Authentic opportunities to engage in academic domains DURING play.
  - High quality relationships between teachers and students.

(Burchinal et al., 2008; Neuman, Copple & Bredekamp, 2000)
Evidence for quality Kindergarten

• Early math and STEM instruction engages students in building blocks of mathematics and fosters inquiry through creative play-based opportunities with embedded direct instruction (Clements & Sarama, 2016).

• Kindergarten assessments can (and should be) developmentally appropriate, brief, and inform instructional decision-making in contrast to perceptions of large standardized national tests, such as the MCAs.
Summary

• High quality Kindergartens engage in a range of play to support academic and social skill growth and development.
• Play and academic rigor are not mutually exclusive.
• Students come to the Kindergarten classroom with a wealth of skills emerging in math, literacy, social and other domains. Kindergartens must be ready to meet student’s skills and provided differentiated experiences to nurture growth.
• Assessment in Kindergarten reflects the need to evaluate student performance to adjust differentiated instruction rather than to provide state level assessment results.
MYTHS ABOUT STUDENT BEHAVIOR
Myth: Praise and rewards are bad/harmful

• Praise is “an affirmative statement delivered by the teacher following the completion of a specified behavior” (Musti-Rao & Haydon, 2011).

• Praise is not synonymous with positive reinforcement.

• When used correctly, behavior specific praise can promote a more positive relationship between the student and staff when delivered in a way the student finds acceptable.

• Rewards do not reduce intrinsic motivation or interest.
Myth: Ignoring is a good base strategy

- **Planned** ignoring is a form of extinction designed to weaken, decrease, or eliminate a behavior (Sheuermann & Hall, 2008).
- When used **appropriately and under the right conditions**, planned ignoring can be an effective strategy.
  - It is commonly misused.
- Use planned ignoring **wisely**: when behavior is reinforced by adult attention and in combination with other strategies.
Timeout - Watch out! Misuse and Overuse

• Timeout **is not a place, it is a process** whereby all opportunities for reinforcement are withdrawn.
  – The time in area must be more reinforcing than the time out area.
• When used **appropriately and under the right conditions**, time out can be an effective strategy.
  – It is commonly misused.
• When used incorrectly, time out can promote escape/avoidant behavior and result in exclusionary practices.
MYTHS ABOUT MATH
Myth Busters in Math

Timed Tests
CAUSE
Math Anxiety

MYTH

- No Fact Fluency
- No Progress Monitoring or Screening
- No Explicit or Timed Practice

CAUSE
Math Anxiety
Research suggests timed tests cause math anxiety

J DEO SOALER, PROFESSOR OF MATHEMATICS EDUCATION, STANFORD UNIVERSITY

Teachers in the United States are often forced to follow directives that make little sense to them and are far removed from research evidence. One of the initiatives mandated by many school districts is that I place high in the category of un memset policy is the use of timed tests to assess math facts and fluency. Teachers and administrators use these tests with very best of intentions, but they use them without knowledge of the important evidence that is emerging from neuroscience. Evidence strongly suggests that timed tests cause the early onset of math anxiety for students across the achievement range. Given the extent of math anxiety, math failure, and insufficiency in the United States (Boaler 2009), such evidence is important for us all to consider. In this article, I summarize the evidence from neuroscience and describe an alternative pedagogical routine that teaches number sense and math fluency at the same time as it encourages mathematical understanding and excitement.

Math anxiety

Occurring in students from an early age, math anxiety and its effects are exacerbated over time, leading to low achievement, math avoidance, and negative experiences of math throughout life (Ramirez et al 2013; Young, Wu, and Menon 2012). Educators have witnessed the impact of math anxiety for decades, but only in recent years have timed math tests been shown to be one cause of the early onset of math anxiety. Indeed, researchers now know that students experience stress on timed tests that they do not experience even when working on the same math questions in untimed conditions (Stigle 2000).

In a recent study of 150 first and second graders, researchers measured students’ levels of math anxiety, finding that children as young as first grade experienced it and that levels of math anxiety did not correlate with grade level, reading level, or parental income (Ramirez et al 2013). Other researchers analyzed brain-imaging data from forty-six seven- to nine-year-old children while they worked on addition and subtraction problems and found that those students who “felt anxious” about math had increased activity in brain regions associated with fear. When these areas activated, decreased activity took place in the brain regions that are involved in problem solving (Young, Wu, and Menon 2012).

Deak and her colleagues conducted brain scans to study the ways in which anxiety affects individuals, showing that children who compute with math facts—such as those required in timed tests—by recalling information that is held in the working memory (Deak 2011). The more working memory an individual
My Students Initiative…

Rebecca Edmunds
Stacey Brandjord
Jenna Klaft
Danielle Becker
Math Anxiety – What is it?

Tension or worry which interferes with completion of mathematical tasks or the manipulation of numbers (Richardson & Suinn, 1972)

Not test anxiety
- The moderate correlation between test anxiety and math anxiety ($r = .52$; Hembree, 1990) suggests distinct but related factors

Prevalence: Unknown in Younger Children
- 2-6% of secondary students (Chinn, 2009)
- 17% of the general population (Ashcraft & Moore, 2009)

In primary school the relationship with math outcomes is UNCLEAR
- Anxiety in Math Related Situations (as opposed to anxiety about failure in math) is related with arithmetic skills

(Cargnelutti et al., 2017; Gunderson et al., 2018; Sorvo et al., 2017)
Math Anxiety – What Influences it?

<table>
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<tr>
<th>NATURE OF THE TASK:</th>
<th>PERFORMANCE FEEDBACK:</th>
<th>INSTRUCTIONAL MATCH:</th>
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<tr>
<td>• Influence of the testing experience, rather than the</td>
<td>• Type of feedback students are given may influence their performance and anxiety</td>
<td>• Difficulty in math content has been connected to increased math anxiety (e.g.</td>
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<tr>
<td>math content</td>
<td>(e.g. Rattan, Good, &amp; Dweck, 2012)</td>
<td>Ashcraft et al., 2007)</td>
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What Did We Find?

• Searches were conducted in Academic Search Premier, PsycInfo, and ERIC through 2017.
  – Search terms (math* and anxi*) and (arithmetic or computation or “basic facts”; or “number combinations”; or calculation) - Yielded 415 articles
  – Search terms (time* and "math* test*”) or (time* and "math* task*”) and anxi* - Yielded 62 articles

• 477 total articles → 7 K-5 Studies
  – experimental and quasi-experimental

• 2 Studies Manipulated TIMED TESTS/TASKS

• Very LITTLE research of any kind with K-5 students
New Search: No Age Limit

2 Studies Ages 8-12 years

4 Studies Ages 18-59 years

- All assessed anxiety
- All compared timed vs. un timed conditions
- 1 Covert Timing; 5 Untimed
- 4 evaluated computation outcomes
  - 1 verbal/graphic problems
  - 1 statistics

(Agus, Peró-Cebollero, Penna, & Guàrdia-Olmos; 2015; Grays, Rhymer, & Swartzmiller; 2017; Hunt & Sandhu, 2017; Kellogg, Hopko, & Ashcraft, 1999; Owuegbuzie, 1995; Tsui & Mazzocco, 2006)
General Pattern of Findings

- **Timed Condition = BETTER Outcomes**
  - [2 studies]

- **Participants with High Math Anxiety = WORSE Under Timed Conditions**
  - [2 studies]

- **Participants with High Math Anxiety & Perfectionism = BETTER Under Timed Conditions**
  - [1 study]

- **Participants in Timed Condition Performed WORSE**
  - [1 study]
36 gifted 6th graders received both timed & untimed test in different orders. Math anxiety and perfectionism measures followed.

Higher levels of math anxiety and perfectionism were FACILITATIVE of performance.

Math performance was LESS accurate ONLY when the TIMED TEST WAS 1st….suggesting benefits of recent & relevant practice.
Elementary Level: Grays, Rhymer, & Swartzmiller (2017)

81 4th & 5th graders received both conditions

Explicit Timing
Correctly complete as many as possible
Overt timing (stopwatch)
Informed of time limit
Provided 2-min & 1-min warnings

Control
Correctly complete as many as possible
Covert timing of 3-min
Elementary Level: Grays, Rhymer, & Swartzmiller (2017, p. 195)

- **ALL STUDENTS** displayed better performance in the ET condition.

- Students with HA performed worse than LA or MA students.
Implications

No Evidence that Timed Tests/Tasks CAUSE Anxiety in Children

Could be ....

| Students with High Anxiety Perform Worse or Better Under Timed Conditions??? | Timed Conditions Enhance Performance???

Timed Conditions MAY Enhance Outcomes When....

- Timings are Brief
- Materials Represent Instructional Match
- Feedback is Given & Associated with Goals
**What Should We DO?**

(Cargnelutti et al., 2017; Grays et al., 2017; Gunderson et al., 2018; Sorvo et al., 2017)

<table>
<thead>
<tr>
<th>Determine if Students Experience Math Anxiety</th>
<th>Determine Students’ Math Strengths &amp; Weaknesses</th>
<th>Monitor Student Progress</th>
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<tr>
<td>• Repeated Exposure to Aversive Stimuli (<em>Math Computation</em>) Using Explicit Timing</td>
<td>• Improve Acquisition &amp; Fluency with Foundational Skills</td>
<td>• Using Brief, Reliable, &amp; Valid Tools</td>
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<tr>
<td>• Writing</td>
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<td>• Monitor Sub-Skills</td>
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<td>• Cognitive Re-structuring</td>
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<td>• Monitor Grade Level Skills</td>
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<td>• Working Toward Specific Goals</td>
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Myth: Fact Fluency is Unnecessary
Why Fact Fluency?

**Fluent**
- If students automatically retrieve $3 + 4$ they are more likely to access:
  - $30 + 40$
  - $53 + 24$
  - $321 + 452$
  - $1.30 + 1.40$
  - $3/9 + 4/9$

**Not Fluent**
- If students are not fluent they:
  - Direct more attention & working memory to retrieving the solution than typical performing peers
  - Experience greater **anxiety** for & **avoidance** of math tasks than students with fluent skills

(Dehaene, 2011; DeSmedt et al., 2011; Gersten et al., 2009; Hasselbring et al., 1988; Jordan et al., 2009; O’Connell & SanGiovanni, 2011; Powell & Fuchs 2013; Price et al., 2013; Stickney et al., 2012).
Computational Proficiency

Solid
Sense of Number & Number Relations

Fluency
With Standard Algorithms

Facts
Automatic Recall

(National Mathematics Advisory Panel, 2008)
Accuracy or Fluency?

BOTH number combination accuracy & fluency INDEPENDENTLY contribute to success with word problem solving & pre-algebra skills

• Carr & Alexeev (2011); Fuchs et al. (2016)

Fluency (via CBM) scores: (a) MORE STRONGLY correlate with SAT-9 than accuracy scores, (b) are MORE reliable, and (c) better indicate instructional categories

• Burns, VanderHeyden, & Jiban (2006)
Fact Fluency Defined

• **What**: Fast and accurate performance on simple arithmetic facts across all 4 whole number operations

• **When**: Should be mastered by the end of 3rd grade

• **Why**: Associated with higher mathematics achievement & more efficient processing of complex math tasks

(Hansen, Jordan, & Rodrigues, 2017; Jordan, Kaplan, Locuniak, & Ramineni, 2009; NGACBP/CCSSO, 2010; Numkung et al., 2018; Price, Mazzocco, & Ansari, 2013; Resnick et al., 2018)
School-wide Problems with Fact Fluency

(Bickley, Sharp, & Keynon, 2012)
Pathway to Automaticity

3 + 5
Counting All

Counting Up from First Addend

Counting on from Larger Addend

7 + 8 = 5 + 2 + 8 = 5 + 10
7 + 8 = 7 + 7 + 1

Least Efficient

Counting

Reasoning

Most Efficient

Mental Retrieval

Decomposition

(Butterworth, 2005; Griffin, 2003)
How Do We Build Fluency?

Deliberate Productive Opportunities for Practice

- Brief opportunities with materials that are matched to students’ instructional level and sequenced into small sets that are altered according to student progress and later integrated for cumulative review.

Frequent Opportunities for Practice

- IES Practice Guide: 10 min of daily fluency practice for students receiving tier 2 and 3 supports
- The average 3rd grader requires about 7-8 repetitions & the average 4th grader about 5 to solve more difficult multiplication facts.

(e.g., Baroody et al., 2009; Burns et al., 2006; Burns et al., 2015; Daly et al., 2007; Fuchs et al., 2008; Gersten et al., 2009)
How Do We Build Fluency In At-Risk Students?

- Fuchs, Powell, Seethaler et al. (2010): “It is UNLIKELY that an exclusive focus on foundational number concepts will lead to students discovering efficient counting or decomposition strategies or translate into automatic retrieval (p. 153)”

NC Drill & Practice
- Effective But Slow Mastery

NC Drill & Practice w/ Conceptual Lessons on Decomposition
- No Added Value of Conceptual Lessons Over D+P

NC Counting Strategies, Brief Drill + Practice, Embedded in Word Problems
Processing Strengths and Weaknesses
Culture-Language Interpretive Matrix
Background

• Assessment methods vary widely throughout the field
  – In a recent survey of 1317 school psychologists:
    • 32% reported using at least one projective test within the last year
    • 49% used academic assessments for universal screening/benchmarking
    • 46% used academic assessments for progress monitoring
    • <30% report using CBM
  – In an almost-as-recent survey
    • 55.2% and 49.3% of respondents reported using subtest-level and composite-level profile analysis

Modern myths in assessment

- Old wine in new bottles?
  - Ipsative measurement
  - For diagnostic purposes
  - For linking assessment and intervention

- 20 years of consistently negative findings have led many to argue "just say no" (McDermott, Fantuzzo, & Glutting, 1990; Watkins, 2000)
Processing Strengths and Weaknesses

• Traditional caveats hold
  – Stability of patterns is low
    • One study: 29%-44% of composite scores changed ≥ 10 pts over 2-3 years (Watkins & Smith, 2013)
    • Large gaps subject to regression to the mean

• CHC structure of assessments in question

• Diagnostic utility
  – No specific profiles confirming or disconfirming the presence of a learning disorder have been identified (Mather & Schneider, 2015)

• Treatment utility?
  – Scatter identifies academic dysfunction at chance levels (McGill, 2018)
  – Specific cognitive weaknesses have low positive predictive values in identifying focal academic weaknesses (Kranzler, Floyd, Benson, Zabrowski & Thibodaux, 2016).
  – Effect sizes of interventions guided by academic data are much larger than those guided by cognitive data (Burns et al 2016).
  – As always, $g$ accounts for the most variance in academic performance (Zaboski, Kranzler & Gage, 2018).
    • Some evidence that a few broad abilities account for around 10% of variance in
      – Basic Reading: Ga (6-8 YO), Gc (everyone), Gsm (14-19 YO)
      – Reading Comp: Glr (6-8 YO), Ga (6-8 YO), Gc (everyone)
      – Basic Math: Gf (6-13 YO), Gc (14-19 YO)
      – Math Reasoning: no major cognitive explanations for 6-13 year olds. Gc and Gf explained about 10% of variance for 14-19 year-olds
    • Relationship $\neq$ intervention utility. See above.
PSW Conclusions

• CHC theory is still evolving
• Researchers will keep researching.
  – So far, we do not have evidence to substantiate this practice
• You only have so much time, so use it doing the assessment that will make a difference to the student.
• No tests are completely valid for use with individuals whose cultural experiences differ from the mainstream.
  – In assessment we need to address the degree of difference and its relative influence on performance.

No proven method exists for identifying an English learner student who has a learning disability and then placing the student in the most appropriate instructional program. (Burr, p.1)
Research on the CLIM

  - Only 13% of CLD students’ results fit the predicted pattern of the C-LIM (Kranzler, Flores, & Coady, 2010).

- Ortiz points out that this study included students with average age of 11, in 6th grade, up to 18. This was not accounted for in discussion, but is probably relevant to results.
  - Ortiz intends to focus primarily on students K-6 (MSPA Midwinter keynote, 2011)

- Further research showed similar results with K-5 students (Styck & Watkins, 2013). The CLIM identified EL students at chance levels.

- Cultural loading and linguistic demand appear to influence scores, but not in the pattern suggested by Ortiz et al (Cormier, McGrew & Ysseldyke, 2014)
CLIM conclusions

Still important to consider

• Linguistic demand
• Limitations of intelligence tests when assessing students who are not well-represented in the normative sample
  – Remember the assumption of comparability

Busted

• CLIM as a matrix
• CLIM as categorical
• CLIM as an evidence-based interpretive tool
Key Questions to Ask

• To what extent is the student receiving instruction of sufficient quality to make the accepted levels of academic progress?
• How does the students’ progress in hearing, speaking, reading and writing English as a second language compare with the “normal” rate of progress for the student’s age and initial level of English proficiency?
• To what extent are behaviors that might otherwise indicate a learning disability considered normal for the child’s cultural background or process of U.S. acculturation?
• How might other factors, including socioeconomic status, previous educational experience, fluency in 1st language attitude toward school, attitude toward learning English, etc. affect the student’s academic progress?

Conclusions

• School psychology practice is broad by necessity
• We will probably always have to tease apart evidence based practices, fads, and myths.
• Our best path forward is to follow the best available evidence
  – To use our time wisely
  – To serve kids, schools, and families
  – To meet our ethical guidelines