### Why Do School Psychologists Cling to Ineffective Practices? Let's Do What Works

Preprii	Preprint · March 2018		
CITATION 0	CITATIONS READS 3,018		
1 author:			
(6)	Amanda M. Vanderheyden Education Research & Consulting, Inc. 86 PUBLICATIONS 2,457 CITATIONS  SEE PROFILE		
Some of the authors of this publication are also working on these related projects:			
Project	Development of Spring Math View project		
Project	Project the Science of Math View project		





## School Psychology Forum:

#### RESEARCH IN PRACTICE

VOLUME 12 · ISSUE 1 · PAGES 1-9 · Spring 2018

# Why Do School Psychologists Cling to Ineffective Practices? Let's Do What Works

Amanda M. VanDerHeyden

Education Research & Consulting, Inc., Fairhope, Alabama

**ABSTRACT**: This article considers the cost of poor decision making in school psychology, especially with regard to determining eligibility for special education under the category of specific learning disability. One common costly decision made by school psychologists is failing to use evidence-based assessment and intervention procedures that are likely to be of benefit to the student. VanDerHeyden comments on the direction of the field and discusses possible reasons that school psychologists continue to use practices that have not demonstrated a benefit for students. She then suggests specific ways in which school psychologists might overcome barriers to using effective assessment and intervention practices in schools.

School psychologists must make accurate and meaningful decisions about students. Accurate decision making depends upon the selection and correct use of measures that yield reliable scores and valid conclusions, but traditional psychometric adequacy is insufficient to ensure a good decision. Messick (1995) famously expanded the definition of validity to include consequential validity, which broadens test validity to include the intended and unintended consequences of a test's use. In the last 30 years, we have seen the emergence and predominance of techniques and tactics that have improved educational decision-making (e.g., curriculum-based assessment, formative assessment, and universal screening systems). We have seen the emergence of education policy that prizes evidence over anecdote and acknowledges that to appropriately steward the considerable resources devoted to the education of all children, we must examine the effects of those efforts and invest in the tools that are of greatest benefit to children.

Reschly and Ysseldyke (2002) described a new future of school psychology in which the school psychologist functioned as an instructional ally to teachers and systems, preventing and remediating learning problems and reducing the need for more costly and restrictive mechanisms of service. Recent research in assessment technology has demonstrated the truth and power in their prediction. Assessment data can be used to select standard treatments that produce large effects because they are aligned with student need. Research has shown that IQ and other various cognitive measures do not predict which students will or will not have a successful response to instruction (Burns et al., 2016; Stuebing et al., 2002; Stuebing, Barth, Molfese, Weiss, & Fletcher, 2009). However, a student's performance on a prerequisite concept or skill and baseline level of performance have predicted intervention effects (Schatschneider, Fletcher, Francis, Carlson, & Foorman, 2004; Szadokierski, Burns,

Correspondence concerning this article should be directed to Amanda M. VanDerHeyden, Education Research & Consulting, Fairhope, AL 36532; amandavande@gmail.com.

Copyright 2018 by the National Association of School Psychologists, ISSN 1938-2243







McComas, 2017), which is called a skill-by-treatment interaction (Burns, Codding, Boice, & Lukito, 2010). Effects of instructional tactics that are available in the absence of extensive and expensive psychoeducational assessment outperform those that can only be obtained via individual psychoeducational assessment (Kavale & Forness, 1999), which is a substantial step forward in assessment research in school psychology.

Although there has been recent progress in assessment research, it is unknown how well that field of study has reformed practice or influenced learning disability identification. Carnine (2000) characterized education as an immature scientific discipline in which leaders are more persuaded by ideology than evidence. Carnine argued that leaders in education invoke rich problem descriptions as a basis for action ("deriving an 'ought' from an 'is," p. 4) but also stated that "the best way for a profession to ensure its continued autonomy is to adopt methods that ensure the safety and efficacy of its practices" (p. 50). School psychology continues maturing as a field as evidence-based tools become widely available to school psychologists. However, despite this considerable traction in the right direction in the fields of education and school psychology, selection and use of ineffective tactics persist. It is worth asking what the costs of bad decisions are and why school psychologists cling to ineffective and unproven tactics.

#### WHAT ARE THE COSTS OF BAD EDUCATIONAL DECISIONS?

By far the most prevalent activity of the school psychologist is determining risk and eligibility for specific learning disability (SLD; Kovaleski, VanDerHeyden, & Shapiro, 2013). As written about extensively elsewhere (Kovaleski et al., 2013; VanDerHeyden, 2011; VanDerHeyden, Kovaleski, Shapiro, & Painter, 2014), the field of school psychology was institutionalized when all children were granted access to school (*Brown v. Board*; PL 94-142). The role of the school psychologist early on was to determine eligibility for so-called special education needed to ensure a child's access to a free and appropriate public education, as was the child's right. SLD first appeared in the laws and regulations governing special education in 1977. The impetus for the category was advocacy rather than science and was mostly promoted as a way to potentially help "typical" students who were failing learn to read (Sleeter, 1986). Sleeter (1986) explained the learning disabilities category "was established for children who, given the prevailing categories used to describe failing children, did not seem to fit any other category" (p. 50). She concluded by stating, "Schools need to focus much greater attention on how to teach children rather than on how to categorize those who do not learn well when offered 'business-as-usual'" (p. 52).

The discrepancy-based operationalization of SLD was an immediate source of controversy among researchers due to concerns about validity of the construct, diagnostic reliability, and treatment utility. During the following nearly three decades, SLD diagnoses skyrocketed even as scientific study after scientific study emerged underscoring fundamental flaws in the construct and poor outcomes for students who received the SLD label (Stuebing, Fletcher, Branum-Martin, & Francis, 2012). Two generations of students completed their K–12 schooling during a time when, if students struggled to learn to read, they were likely to be identified as having a disability using questionable identification practices, and, in the end, the child was unlikely to receive effective intervention in general or special education. It seems a significant miscarriage of justice to those students and poor stewardship of resources to have allocated so much money to providing the eligibility when the eligibility did not help these children avoid illiteracy.

In a prescient article in 2000, Shapiro predicted that the role of the school psychologist would evolve from solving individual problems one student at a time to a systemic prevention-oriented role of building academic and social resilience for all school children. Shapiro suggested that for the school psychologist to make big (as opposed to little) differences for children, the school psychologist would need contemporary skill sets in collecting and interpreting systemic data, defining targets for improvements, guiding change effort implementation toward improvement, and working with students individually when front-end prevention efforts (different and much more intensive than previously understood) had been

VanDerHeyden Commentary | 2

05-02-2018 19:01:10

SPF-2018-0003.indd 2

NASP | School Psychology Forum: Research in Practice



unsuccessful. For the purpose of this article, I will define a bad decision in the case of the school psychologist as using assessments and interventions that are unlikely to produce measurable benefit to the student, no matter the logic that governs the decision to use the assessment. Hence, focusing on building academic and social resilience would result in better outcomes for students but also better decision making by school psychologists, even for decisions such as identifying SLD.

#### **DECISION MAKING AND SLD**

If we return to the concept of consequential validity, the onus is on the practitioner who wishes to use an assessment, or a battery of assessments, to demonstrate that the process produces a value-added effect to learning and is worth the investment. Previous research has questioned the value-added effect of identifying a student with SLD (Aaron, 1997; Kavale & Forness, 1999). Williams and Miciak (this issue) take up the value-added question with a patterns of strengths and weaknesses (PSW) approach to SLD identification, which is a more contemporary approach than previous discrepancy models but also requires extensive and expensive individually administered batteries of psychoeducational assessments. Williams and Miciak argue that it may be impossible to make a value-added claim for the PSW model because of the paucity of data on the effects. The decision to use PSW may be governed by logic and rich problem descriptions (Carnine, 2000), but it is logic that has nothing to do with producing the greatest effect on learning at the lowest cost for the students who are exposed to it. The decision to use PSW may be a simple practice habit (a high-probability behavior on the part of the practitioner), intellectual curiosity on the part of the assessor, an allegiance to a theory of assessment above and beyond the effects it can currently be shown to return, and/or a hope that, with continued effort, the PSW approach will produce a better return than it currently does.

Distinguishing a group of students who truly do have SLD in a stable and predictable way has been a significant hurdle to our field and actually ignores the larger question we should be asking, which is whether doing so actually brings benefit to the children for whom the diagnosis is made. In my view, these questions must be asked and answered in concert. To make the diagnosis when the diagnosis does not convey benefit is a miscarriage of justice as much as failing to make a diagnosis when doing so does convey benefit. Thus, the onus is on all school psychologists to bring improvements to the most vulnerable students, regardless of how they are categorized in our systems. One important reason to limit actions that do not produce a measurable return for their investment is that they carry an opportunity cost of time that could have been spent to benefit child learning.

#### WHY DO SCHOOL PSYCHOLOGISTS CLING TO PRACTICES THAT DO NOT RESULT IN GOOD DECISIONS?

First, this habit is not unique to school psychology. In fact, cognitive science shows us that we are all illogical decision makers by nature (Kahneman, 2011). In medicine, there has emerged a specialty called "evidence-based medicine" (as if there could or should be any other kind). Evidence-based medicine emerged in the 1990s and has subsequently outpaced psychology in measuring the utility and consequential validity of medical assessments and interventions. The routine overuse of screening and diagnostic tests that carried negative side effects or resulted in unnecessary treatments that carried negative side effects created a strong political and ethical call to action among medical experts and analysts to both quantify the benefit of their tools and recommend parameters for their use. For example, the overuse of radiographic tests when the probability of "true diagnosis" was exceedingly low was demonstrated to cause more harm than good due to the risk of radiation exposure. In other cases, the false positive error rate associated with a screening instrument when applied universally (i.e., in cases where patients are asymptomatic) was shown to result in too many unneeded surgeries that caused terrible side effects, such as incontinence and impotence, for a small number of those surgeries (but magnified because of the high number of people unnecessarily receiving the surgery).







Jerome Hoffman is a medical scholar who has spoken and written extensively about this problem of overassessment and overtreatment. Hoffman and Wilkes (2015) suggested that physicians are taught to ask, "What shall we do?" rather than "Should we do something?," which presumes that all action can be helpful and nonaction is not an option. This is a pressure to which all helping agents can relate, the pressure to do something, even if it is not effective. As one very common example, many school psychologists agree to conduct an eligibility evaluation when there is a high probability that less-than-ideal instruction in the general education classroom has caused the poor learning. The pressure from the team to conduct the evaluation causes the school psychologist or the administrator to agree to the evaluation, which satisfies the team in the short term, but the school psychologist knows the process and the outcome are unlikely to produce the change that the team really desires for the child (i.e., improved learning, less risk of academic failure). SLD is a diagnosis of exclusion (VanDerHeyden, 2011), meaning that alternative explanations for poor academic performance must be examined and ruled out to make the SLD diagnosis. Thus, agreeing to an eligibility evaluation when poor instruction is suspected increases the probability of a false-positive diagnostic error (MacMillan, Gresham, & Bocian, 1998).

Hoffman and Wilkes (2015) articulate mythical thinking in healthcare that contributes to the momentum favoring actions that are unlikely to produce benefit for the patient, including:

- "Earlier is better."
- "More is always better."
- "Technology will solve all our problems."
- "Miracles are right around the corner."
- "Once we identify genetic risk factors there will be a perfect tailored treatment for us."
- O1 "And ultimately, if we're clever enough ... and spend enough—death will soon be optional."



VanDerHeyden Commentary | 4

#### **Training**

The mythical thinking outlined by Hoffman and Wilkes is not specific to medical decision makers, but rather occurs among all helping professionals, including school psychologists. Practicing school psychologists are optimistic that their efforts may work, and optimism is useful, but continuing to hope that a treatment with little evidence will eventually work is a practice habit that is costly and diminishes the overall efficacy of school psychology as a profession. This habit seeps into our training programs, and students emerge having been trained to conduct practices that are of little or no demonstrable value to children. These newly trained school psychologists often lack the basic competencies needed to engage in the practices that will reliably make a difference for students. These newly minted school psychologists arrive in the most complex organizations in which they must change the behavior of multiple adults, in multiple roles, to impact the outcomes of one student. Hence, the first reason that school psychologists cling to ineffective practice habits is that they were trained to do so.

School psychology trainers must renew their commitment to equip students with the skills articulated by NASP (2010) and available here: http://www.nasponline.org/standards-and-certification/nasp-practice-model. Practitioners must reflect on the skills needed for contemporary best practices in school psychology and determine where they may need to seek professional development to build new skills. Researchers must ask more practice-relevant questions, and practitioners must be savvy and demanding research consumers (Kratochwill et al., 2012).

#### **Competing Demands/Reinforcers Make It Hard to Show Up**

NASP | School Psychology Forum: Research in Practice

Schools are complex organizations. The leadership structures within which the school psychologist must function and the quality of leadership differ across schools. School psychologists must have excellent skills in managing their own behaviors because there will always be more to do than can be done, and those things that will produce big effects over time should be prioritized. It is easy to spend more time in "healthier" schools and avoid schools where getting anything accomplished takes much more effort. Thus, the first step is for the school psychologist to show up. This action may seem obvious,









but it is too easy to avoid difficult schools and difficult people. The school psychologist must understand that going where it is not pleasant is challenging but is also likely where the school psychologist is most needed. The teachers who invite the school psychologist into their classrooms are often the ones who need the least help. You can think of these teachers as "thoroughbreds." Perry Zirkel has called these teachers "eagles" (personal communication, May 20, 2015). Thoroughbreds and eagles are those teachers who are going to implement what the school psychologist recommends no matter what. Their successful implementation is not a measure of the school psychologist's success. In the classrooms where invitations are not forthcoming, where teachers are perhaps even unwelcoming, is where the school psychologist will see the biggest effects when the teachers' needs are understood.

One lesson I have learned as a school psychologist is to act like a behaviorist but to communicate in a way that brings the implementer to the right answer and action. To have an effect, school psychologists must get the teacher to make the specific changes needed to attain the improvement that they know is possible. School psychologists cannot make this happen by simply telling the teacher they have figured out the problem and identified the actions that should be taken. Getting the teacher to act requires building credibility and being trustworthy. One basic definition of trust that I follow is Edgar Schein's (2013), which says trust "believing that the other person will acknowledge me, not take advantage of me, not embarrass or humiliate me, tell me the truth, and ... not cheat me, work on my behalf, and support the goals we have agreed to." School psychologists can only be effective through changing others' behaviors (teachers, principals), and this requires a set of skills that includes being nonjudgmental, listening to the teacher, earning the teachers' trust, understanding that change is incremental, assisting the teacher to make incremental changes with success, and making sure the teacher experiences the reward of successful implementation. It does not hurt to be kind and authentic in these interactions. No one likes an expert. I think this is what Ed Shapiro (2006) meant when he said "collaboration matters."







The school psychologist can easily spend time in settings where the work feels more productive and is more rewarding, but it is also the easier option to spend time in a back office working individually with a student than to work with the adults who function within the student's system. It is a seductive choice for school psychologists to work individually with students because children are generally more pleasant than adults, and the school psychologist can feel accomplished, but such actions will never yield a big effect. The school psychologist has to face the tough reality that the big effects in difficult schools come from working on the frontline where there is often resistance and little appreciation, the effects are hard-won in increments, and the ratio of effort to gain is greater than it would be in a more pleasant setting. School psychologists must also recognize the ever-present threat to their own behaviors—it is easier in tough settings to engage in behaviors that will not return the big effects and to avoid those that will. In fact, all the contingencies may favor engaging in ineffective behaviors except one, but it is an important one. Most school psychologists work in our field because they want children to be successful. Doing what will produce big effects for children is hard, but it brings the greatest reward.

#### Insufficiently Operationalized Constructs Are Invoked When One Does Not Know the Active Essential **Ingredients of Instructional Improvement**

School psychologists must know what the specific needs of a school are and have attainable goals for improvement. All implementers must be clear about the specific steps that will be taken. When implementers do not really understand the necessary actions in an operationalized way, there is a tendency to retreat into safer, less clear, and less measurable constructs like "relationship." *Education* Week recently published an article and led with this teaser in social media: "Is a good teacher one that makes students happy or one who raises test scores?" This question amazingly positions these two options as mutually exclusive, and one reader, who happens to be a notable reading scholar, responded with "That's the same teacher" (Timothy Shanahan, 12/13/17). Of course, these constructs are inseparable. All instructional tactics are situated within the relationship of student and learner, and all organizational change efforts are situated within the group of learners. Learners must believe the teacher can help them gain better understanding and must trust that the teacher will not shame,



NASP | School Psychology Forum: Research in Practice





diminish, or punish their efforts. The teacher must draw out the student's thinking so that misunderstandings can be adjusted and new understandings created. The teacher must keep the child interested and motivated with encouragement and a certain rate of success, which is accomplished by adjusting the difficulty of the work and the level of support provided.

Aubrey Daniels (2013) describes a process called "reverse behavioral engineering" that changes the typical flow of management, such that the change agent begins with the frontline implementer and asks what is needed to support correct implementation of the change effort for that person. Then every layer of external infrastructure is evaluated to assess how it either supports the teacher to engage in those efforts or does not. Daniels asks:

"If teacher accountability is to create successful students, what is the accountability of the other staff? It is actually quite simple. Every staff member's charge is to help teachers be successful. The only reason any education staff exists at the school, county, state, or federal level is to help the teacher educate children more effectively. Right away you can see that accountability in these jobs should be primarily for valuable behaviors that have a direct link or connection to increased student learning." (p. 82)

#### Behavioral Momentum and Adaptive Leadership Are Needed to Shift Systems

When the school psychologist enters a school in which the prevailing attitude is "we've always done it this way" and the way it has been done is not best practice, then the school psychologist must introduce a practice change. Introducing change requires a specific skill set. This skill set is not often taught to school psychologists, but it should be. Translating Heifetz (1994), the National Implementation Research Network (NIRN) notes, "When systems undergo change, the natural tendency of those in the system is to look to those in authority to minimize the tension of change and regain stability. However, when change is the goal, formal authority can get in the way of leadership because it is designed to maintain systems, not to help people overcome their natural tendencies to maintain the status quo. When organizations and systems are being changed on purpose, adaptive leadership is needed to manage the change process" (NIRN, http://implementation.fpg.unc.edu). Adaptive leadership is required when the change effort must be carried out by someone other than the prescriber, when the values or motivation to engage in those behaviors must come from the frontline implementers (and thus must change as part of the effort), and when the exact operationalized steps of the change process are not yet known (Heifetz, 1994). Technical leadership skills such as knowing how to assemble an intervention, how to train and coach a teacher to implement an intervention, and how to evaluate the success of an intervention are necessary skills, but they will not be sufficient when an instructional change effort is new to a school.

Adaptive leadership in response to intervention (RTI) involves encouraging new roles, exposing vulnerabilities for implementation, coordinating troubleshooting, and managing the group effort so that implementation is not overwhelming to the organization. Behavioral momentum can be used within the change process to encourage historically low-probability behaviors to occur at higher rates. Behavioral momentum was defined in an applied way by Mace and colleagues (1988) to describe the tendency of a low-probability behavior to occur with greater probability when following the occurrence of two highprobability behaviors. The greater the reinforcement for the two high-probability behaviors, the greater the probability of the low-probability behavior's occurrence. This natural behavioral phenomenon can be used to both understand current organizational behavior patterns (e.g., What are high- and lowprobability behaviors and what are the reinforcers?) and to shift organizational behavior toward greater occurrence of current low-probability behaviors using what one has learned could be reinforcing for implementation of key actions.

#### Distal Consequences Make It Hard to Establish New Behaviors and Sustain Them Over Time

The consequences of helping actions are often not immediately apparent and the real "outcome" may take years to emerge. Distal consequences create problems for implementers, including promoting doubt







NASP | School Psychology Forum: Research in Practice



among stakeholders as to whether the effort is working or will work. When stakeholders experience doubt, it is a natural response to want to simply change direction or try something new. One common scenario involves changing treatments routinely, implementing none of them well, and then concluding that the child did not respond to a treatment. Distal outcomes also introduce an opportunity for intervening events that make the causal (or functional) relations harder to detect. One way to contend with the problem of distal consequences is to track and report progress on short-term proximal indicators that sensitively reflect that the learner is on track to attaining the longer-term goals over time. It turns out that performance on direct academic measures, obtained via repeated assessment, can sensitively indicate if a student is going to attain bigger benchmarks, such as passing the next screening in reading and scoring in the proficient range on a year-end test (Jenkins, Hudson, & Johnson, 2007). There are important milestones along the way to more distal, important outcomes such as staying in school, staying out of the risk group, enrolling in advanced coursework, meeting readiness criteria on the ACT, enrolling in and completing college, and so on. These should be the next-generation questions we ask and answer to assist schools in moving larger numbers of students into these "success" categories on the big outcomes.

#### **CONCLUSION AND THE ISSUE**

Today's school psychologist should be facile in selecting and deploying universal screening, interpreting data, communicating with teachers and leaders to connect the screening data to core instructional practices, identifying systemic targets for improvement, delivering customized advice for improvement based on evidence-based tactics, and guiding implementation using current evidence from implementation science. The school psychologist should ensure that data sources in the school communicate with one another for the benefit of all, especially vulnerable students. All assessment should translate into action that brings benefit to the student or it should not be conducted (Hayes, Nelson, & Jarrett, 1987; Messick, 1995).

The reality of schools is that teachers vary in their capacity to deliver high-quality instruction in a stable way. As a result, children receive different amounts and different qualities of instruction. These differences can be significant and have measurable effects on learning (Hanushek, 2011). The school psychologist must be able to evaluate the dynamic needs of groups of children in addition to individual children, to evaluate the learning context, to guide and successfully support adjustments in the instructional context, and then to measure the response to instruction in that context as an indicator of the need for more intensive services such as special education. To accomplish these goals, the school psychologist must take four actions. First, the school psychologist must show up. Second, the school psychologist must know the active ingredients of the intervention needed to produce improvement. Third, the school psychologist must know how to successfully deploy the needed intervention. Fourth, the school psychologist must know how to sustain the intervention until measurable gains are detected.

One implication from Maki (this issue) is that fewer than half of school psychologists responding to a survey indicated that they received formal training in RTI procedures. Maki recognizes, and Newman and Barrett (this issue) provide a case study demonstrating, that RTI/multitiered system of supports (MTSS) is still a new process, and understanding how best to support its implementation is context specific and likely requires a significant amount of time. With implementation, Newman and Barrett report decreased identification of SLD and some gains in academic achievement. Another implication of the Newman and Barrett study is that quantifying the effects of RTI use is not an easy undertaking. Assessments change with time, attrition occurs, and there are varying degrees of implementation integrity across time and contexts. There are a number of challenges inherent to knowing how RTI is working programmatically. Gersten, Jayanthi, and Dimino's (2017) recommendation to use RTI program evaluation data to improve effects is a good one. Many fields of inquiry begin by asking "Does it work?," but more mature professions end up asking more informative questions, such as "Under what conditions did it work?" or "What supports are necessary to ensure a given effect for a given set of students?" using experimentally rigorous designs.



NASP | School Psychology Forum: Research in Practice





So what is our responsibility? In school psychology, Shapiro (2000) argued we should be solving big, not little, problems and operating strategically and systematically at the system level to prevent failure and promote resilience. Certainly, this call to action has come to fruition in many places with school-wide models of behavioral support and academic RTI/MTSS. More is needed. We must also look for big effects in our research practices, not little ones. We should be looking for effects for which relatively simple-todeploy tactics can reliably produce the desired effect. We should be attending to the complexity of the host environment into which we are enacting academic and behavioral interventions. The work required to translate, install, and support the intervention is where the effect is most commonly lost in practice. O7 Reynolds said, in 1975, "In today's context the measurement technologies ought to become integral parts of instruction designed to make a difference in the lives of children and not just a prediction about their lives." The fact that our assessment technology is capable of making strong predictions is a good thing because that is a necessary precondition to delivering effective intervention that can make a difference for the student, but our ability to do the second part in stable and predictable ways is the next frontier for school psychology. It is up to each individual school psychologist to use decision-making practices that will result in a positive difference in the lives of the children we serve. If you want to make big, not little, differences, select evidence-based tools of known effect, show up, and do the work to get those tools used to their greatest potential.



- Aaron, P. G. (1997). The impending demise of the discrepancy formula. *Review of Educational Research*, 67, 461–502. doi:10.2307/1170518
- Burns, M. K., Codding, R. S., Boice, C. H., & Lukito, G. (2010). Meta-analysis of acquisition and fluency math interventions with instructional and frustration level skills: Evidence for a skill-by-treatment interaction. *School Psychology Review*, *39*, 69–83. doi:5826.2010.00323.x
- Burns, M. K., Peterson-Brown, S., Haegele, K., Rodriguez, M., Schmitt, B., Cooper, M., ..., VanDerHeyden, A. M. (2016). Meta-analysis of academic interventions derived from neuropsychological data. *School Psychology Quarterly*, *31*, 28–42. doi:10.1037/spq0000117
- Carnine, D. (2000). Why education experts resist effective practices (and what it would take to make education more like medicine). Washington, DC: Thomas B. Fordham Foundation.
- Daniels, A. (2013). Feedback in education: On whom and for what. In R. Detrich, R. Keyworth, & J. States, (Eds.), *Advances in evidence-based education, Volume 3, Performance feedback: Using data to improve education performance* (pp. 77–96). Oakland, CA: The Wing Institute.
- Gersten, R., Jayanthi, M., & Dimino, J. (2017). Too much, too soon? Unanswered questions from national response to intervention evaluation. *Exceptional Children*, 83, 244–254. doi:10.1177/0014402917692847
- Hanushek, E. A. (2011). The economic value of higher teacher quality. *Economics of Education Review*, 30(3), 466–479. doi:10.1016/j.econedurev.2010.12.006
- Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. *American Psychologist*, *42*, 963–974. doi:10.1037//0003-066x.42.11.963
- Heifetz, R. A. (1994). Leadership without easy answers. Cambridge, MA: Harvard University Press.
- Hoffman, J. R., & Wilkes, M. S. (2015). Don't just do something, stand there. *Revista Brasileira de Medicina de Família e Comunidade*, 10(35), 1051. doi:10.5712/rbmfc10(35)1051
- Jenkins, J. R., Hudson, R. F., & Johnson, E. S. (2007). Screening for at-risk readers in a response to intervention framework. *School Psychology Review*, *36*, 582–600.
- Kahneman, D. (2011). *Thinking, fast and slow*. New York, NY: Farrar, Straus, and Giroux.
- Kavale, K. A., & Forness, S. R. (1999). Effectiveness of special education. In: C. R. Reynolds, & T. B. Gutkin, (Eds.), *The handbook of school psychology* (3rd ed., pp. 984–1024). New York, NY: Wiley.
- Kovaleski, J. F., VanDerHeyden, A. M., & Shapiro, E. S. (2013). *The RTI approach to evaluating learning disabilities*. New York, NY: Guilford.
- Kratochwill, T. R., Hoagwood, K. E., Kazak, A. E., Weisz, J. R., Hood, K., Vargas, L. A., & Banez, G. A. (2012). Practice-based evidence for children and adolescents: Advancing the research agenda in schools. *School Psychology Review*, *41*, 215–235.



VanDerHeyden Commentary | 8



- Mace, F. C., Hock, M. L., Lalli, J. S., West, B. J., Belfiore, P., Pinter, E., & Brown, D. K. (1988). Behavioral momentum in the treatment of noncompliance. *Journal of Applied Behavior Analysis*, *21*, 123–141. doi:10.1901/jaba.1988.21-123
- MacMillan, D. L., Gresham, F. M., & Bocian, K. M. (1998). Discrepancy between definitions of learning disabilities and school practices: An empirical investigation. *Journal of Learning Disabilities*, *31*, 314–326. doi:10.1177/002221949803100401
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, *50*, 741–749. doi:10.1037//0003-066x.50.9.741
- National Association of School Psychologists. (2010). *Model for comprehensive and integrated school psychological services*. Bethesda, MD: National Association of School Psychologists.
- Reschly, D., & Ysseldyke, J. E. (2002). Paradigm shift: The past is not the future. In A. Thomas, & J. Grimes, (Eds.), *Best practices in school psychology IV* (pp. 3–20). Bethesda, MD: National Association of School Psychologists.
- Schatschneider, C., Fletcher, J. M., Francis, D. J., Carlson, C. D., & Foorman, B. R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology*, 96, 265–282. doi:10.1037/0022-0663.96.2.265
- Schein, E. H. (2013). *Humble inquiry: The gentle art of asking instead of telling*. San Francisco, CA: Berrett-Koehler Publishers.
- Shapiro, E. S. (2000). School psychology from an instructional perspective: Solving big, not little problems. *School Psychology Review*, *29*, 560–572.
- Shapiro, E. S. (2006). Are we solving the big problems? School Psychology Review, 35, 260–265.
- Sleeter, C. E. (1986). Learning disabilities: The social construction of a special education category. *Exceptional Children*, *53*, 46–54.
- Stuebing, K. K., Barth, A. E., Molfese, P. J., Weiss, B., & Fletcher, J. M. (2009). IQ is not strongly related to response to reading instruction: A meta-analytic interpretation. *Exceptional Children*, 76, 31–51. doi:10.1177/001440290907600102
- Stuebing, K. K., Fletcher, J. M., Branum-Martin, L., & Francis, D. J. (2012). Evaluation of the technical adequacy of three methods for identifying specific learning disabilities based on cognitive discrepancies. *School Psychology Review*, *41*, 3–22.
- Stuebing, K. K., Fletcher, J. M., LeDoux, J. M., Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2002). Validity of IQ-discrepancy classifications of reading disabilities: A meta-analysis. *American Educational Research Journal*, *39*, 469–518. doi:10.3102/00028312039002469
- Szadokierski, I., Burns, M. K., & McComas, J. J., (2017). Predicting intervention effectiveness from reading accuracy and rate measures through the instructional hierarchy: Evidence for a skill-by-treatment interaction. *School Psychology Review*, 42, 190–200. doi:10.17105/SPR-2017-0013.V46-2
- VanDerHeyden, A. M. (2011). Evolving standards of diagnostic accuracy in predicting and avoiding academic failure. In T. E. Scruggs, & M. A. Mastropieri, (Eds.), *Assessment and intervention: Advances in learning and behavioral disabilities* (vol. *24*, pp. 59–78). Bingley, United Kingdom: Emerald.
- VanDerHeyden, A. M., Kovaleski, J. F., Shapiro, E. S., & Painter, D. T. (2014). Scientifically supported identification of SLD using RTI: A response to Colker. *Journal of Law and Education*, *43*(2), 229–247.

#### **AUTHOR BIOGRAPHICAL STATEMENT**

Amanda M. VanDerHeyden, PhD, is president of Education Research & Consulting, Inc. in Fairhope, Alabama.



NASP | School Psychology Forum: Research in Practice



Cat. No: Chapter No:

#### TO: CORRESPONDING AUTHOR

#### **AUTHOR QUERIES – TO BE ANSWERED BY THE AUTHOR**

The following queries have arisen during the typesetting of your manuscript. Please answer these queries by marking the required corrections at the appropriate point in the text.

Q1	If these statements are direct quotes from Hoffman and Wilkes, please provide a page number.	
Q2	Please provide the page number for this quote.	
Q3	Please provide the page number for this quote.	
Q4	Should this be "relationships"?	
Q5	Please add this article to the References.	
Q6	Please clarify source; was this a personal communication? Tweet? Other source? If it was a public tweet that can be accessed, please add this to your reference list using the format of the following example: Gates, B. [BillGates]. (2013, February 26). #Polio is 99% eradicated. Join me & @ FCBarcelona as we work to finish the job and #EndPolio. VIDEO: http://b-gat.es/X75Lvy [Tweet]. Retrieved from https://twitter.com/BillGates/status/306195345845665792	
Q7	Please add this source to the References and supply the page number for this quote.	
Q8	I am unable to verify this source, is it one of these? Please correct as needed. Kavale, K. A., & Forness, S. R. (1999). Efficacy of special education and related services (G. N. Siperstein, Ed.). Washington, DC: American Association on Mental Retardation. Kavale, K. A. 2008. Effectiveness of Special Education. Encyclopedia of Special Education. 749:805–814.	



