

One-to-One Tutoring for Reading in Grade One:

IS IT BENEFICIAL FOR ALL STUDENTS?

BY AUBREY INCORVAIA

SUMMARY

Attention Deficit / Hyperactivity Disorder (ADHD) is one of the most prevalent disorders among school-age children, occurring in 3 percent to 12 percent of adolescents in the United States (Jakobson & Kirkas, 2007; Shulman, 2008). Recognizing and understanding the disorder is complicated by the fact that between 10 percent and 20 percent of people with ADHD also have a learning disability (Shulman, 2008). Adverse consequences for those with ADHD may include: underachievement, lower quality of life, increased reckless and dangerous driving habits, and increased risk of medical and dental emergencies (Shulman, 2008). These effects impose costs on the people with ADHD, their families and society.

While two-thirds of the public is familiar with the term ADHD, many do not comprehend the condition's intricacies or know about promising treatment methods (McLeod, Fettes, Jensen, et al., 2007). Children diagnosed with ADHD generally exhibit symptoms of both inattention (e.g., difficulty sustaining attention to tasks) and hyperactivity-impulsivity (e.g., difficulty remaining seated) to a far greater extent than their peers, although some children with ADHD only exhibit one type of symptom or the other. Although hyperactivity may be the most

recognizable symptom, recent research suggests that children's academic achievement difficulties are most directly linked to inattentive behaviors (Jakobson & Kirkas, 2007). Furthermore, the research suggests that children who demonstrate attention problems are at risk for poor academic performance, whether or not they have a clinical diagnosis of ADHD (Rabiner & Malone, 2007).

This brief draws policy implications and makes recommendations for further research from "The Impact of Tutoring on Early Reading Achievement for Children With and Without Attention Problems" by David L. Rabiner, Patrick S. Malone and the Conduct Problems Prevention Research Group (2004).

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THE IMPACTS OF ONE-TO-ONE TUTORING

A randomized study performed between 1991 and 1993 examined the benefits of one-to-one tutoring for grade one students. Details of the study:

| Participants: | Locations: | Treatment: | Tutors: |
|--|---|--|--|
| 581 grade one students with high levels of externalizing problems ¹ | Schools in: Durham, NC Nashville, TN Seattle, WA Rural PA | Three half-hour sessions per week for the entire school year | Paraprofessionals who received 40 hours of training in the Wallach and Wallach program. ² |

To investigate the association between attention problems and early reading difficulties, researchers performed an experiment analyzing the educational benefits of one-to-one tutoring for students in grade one. For the experiment, researchers rated each student's level of early reading difficulty at the start of grade one (determined by standardized testing) and level of observed attention problems during grade one (determined by teacher rating scales). Students were considered to have early reading difficulties if their reading achievement scores were in the bottom 15 percent (as compared to national norms). Students were considered to have attention problems if their attention problem ratings were in the top 15 percent (as compared to national norms). The pairing of the ratings resulted in the following four groups:

- Group One:** Students without early reading difficulties or attention problems
- Group Two:** Students with early reading difficulties but without attention problems
- Group Three:** Students without early reading difficulties but with attention problems
- Group Four:** Students with early reading difficulties and attention problems

| | Early Reading Difficulties | Attention Problems | Intervention Outcome Benefits |
|--------------------|----------------------------|--------------------|-------------------------------|
| Group One | ⊘ | ⊘ | Negligible |
| Group Two | ✓ | ⊘ | Substantial |
| Group Three | ⊘ | ✓ | Moderate |
| Group Four | ✓ | ✓ | Negligible |

Schools at each site were randomly assigned to intervention or control groups. At the conclusion of the experiment, all of the students completed the same end-of-year reading achievement evaluation.

Students in **group one** (without early reading problems or early attention problems) *did not benefit from tutoring*: their reading achievement scores at the end showed no correlation to whether or not they had received tutoring. This is not surprising, however, as these students do not

typically receive additional educational services, and the experiment did not indicate that providing extra assistance in the acquisition of early reading skills was beneficial.

Students in **group two** (with early reading difficulties but without attention problems) *substantially benefited from one-to-one tutoring*. Although these students entered grade one with reading achievement scores in the bottom 15 percent, the tutored students achieved scores well within the average range of national norms by the end of the school year. Their untutored counterparts made little or no gain.

Children in **group three** (without early reading difficulties but with attention problems) *derived moderate benefits from one-to-one tutoring*. **Group three** students who were tutored achieved reading scores that were almost as high as their peers in **group one** (without early reading difficulties or attention problems). However, **group three** students who were not tutored scored significantly lower on end-of-year reading achievement evaluations than did their peers in **group one**. Thus, in the absence of tutoring, **group three** students did not progress sufficiently in reading to keep up with their **group one** peers.

For students in **group four** (with early reading difficulties and attention problems), *one-to-one tutoring did not benefit participants*. The combination of early reading difficulties and attention problems appeared to completely negate

¹ Externalizing problems refers to conduct problems and 'acting out' types of behaviors.

² The Wallach and Wallach program was designed for low-readiness children from disadvantaged backgrounds and emphasized a phonics-based, mastery-oriented approach to the development of initial reading skills.

the potential benefits of the tutoring intervention for students in **group four**.

POLICY IMPLICATIONS

States and school districts have limited resources. In order to maximize resources and provide the greatest student benefit, states and districts would do well to consider the following strategies, listed in order of importance:

1. Tutoring for students with early reading difficulties but without attention problems (**group two**). While some schools commonly use this intervention method and, by doing so, efficiently allocate educational resources, many do not.
2. Tutoring for children without early reading difficulties but with attention problems (**group three**). These students are at risk for falling behind in the development of early reading skills. Consequently, they could be targeted for additional support in the acquisition of important reading skills.
3. Investigating and implementing successful interventions for students with early reading difficulties and attention problems (**group four**). Given the unsuccessful outcome of this intervention for students who exhibit both of these characteristics, schools would do well to investigate alternative intervention methods that could enhance this group's academic performance.

One-to-one tutoring has substantial benefits for grade one children with early reading difficulties who do not have attention problems (**group two**). While other interventions may also prove successful, this method is empirically proven to benefit students.

ADHD is associated with educational failure and negative adult outcomes. However, "The Impact of Tutoring" study reinforces other research that indicates children who exhibit attention problems (diagnosed and undiagnosed) are at greater risk for diminished academic success than are children who display hyperactivity but lack attention problems. Policies supporting educational funding that targets academic interventions for students with attention problems who do not have early reading difficulties (**group three**) are likely to have a greater impact on academic outcomes than policies targeting hyperactivity alone.

Grade one students without early reading difficulties but with attention problems (**group three**) benefit from one-to-one tutoring. This intervention prevents **group three** children from becoming **group four** students, children with both early reading difficulties and attention problems. For students in **group four**, the Wallach and Wallach one-to-one tutoring program proved unsuccessful at helping them achieve academic success. Therefore, helping **group three** children maintain and improve their reading skills in spite of their inattentive behavior is important. To determine long-term evidence-based outcomes, education stakeholders could assess the impact of one-to-one tutoring on older students who exhibit either or both academic difficulties and attention problems.

Further research is required to identify and develop effective educational strategies for **group four** students (with early reading difficulties and attention problems, both diagnosed and undiagnosed). Policymakers and school district practitioners might consider funding research to investigate effective intervention methods for this population. Data from "The Impact of Tutoring" study implies that the Wallach and Wallach tutoring style does not benefit children who show evidence of early reading problems and who are also inattentive (**group four**). More could be learned from additional studies to investigate the strength of this finding. If new research were to indicate that students with early reading difficulties and attention problems would benefit from more intensive, long-term tutoring, this intervention would likely be cost-prohibitive. Public schools are typically ill-equipped to provide extensive educational services, especially for students who lack a formal diagnosis.

RECOMMENDATIONS FOR FURTHER STUDY AND CONCLUSION

Further research investigating the benefits of one-to-one tutoring would be useful. Two important questions for future experiments:

1. Does progress made through one-to-one tutoring continue its momentum into higher grade levels?
2. Will intervention methods used for grade one students in "The Impact of Tutoring" study work successfully with older students?

To summarize, one-to-one tutoring is especially helpful for children with early reading difficulties who are not inattentive. It may also provide modest benefits for students who are inattentive but do not have early reading difficulties, in that it may keep them from falling behind their peers. However, for children who have early reading difficulties and who are also inattentive, the one-to-one tutoring examined in this study provided no apparent benefits. Children with early reading difficulties and early attention problems may be at particularly high risk for long-term academic failure, and individual tutoring was not helpful to them. Policymakers, school district leaders and teachers should pursue efforts to develop effective educational strategies for these children.

Many schools recognize the benefits of one-to-one tutoring but may be unaware of its differential impact on students with diverse needs. To optimize treatment results, schools should more efficiently target the recipients of this intervention method.

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