

Glassboro Public Schools



MEMO

To: Dr. Mark Silverstein, Superintendent of Schools

From: Danielle M. Sochor, Chief Academic Officer

Date: September 10, 2018

Re: Action Memo
September 2018 Board Meeting

1. Seeking approval for Rowan University to conduct a study with 2nd through 6th grade students. The purpose of the study is to provide an effective reading intervention for students with Reading Disabilities with and without ADHD. The goal is to document the relationship between reading motivation and reading achievement as well as provide the effective reading intervention for students with Reading Disabilities. The study will be conducted during the 2018-2019 academic school year. Participants will receive reading fluency instruction by their teachers during their regular reading instruction time. Students will also complete questionnaires three times during the academic year. Parents are required to provide consent, and participants are required to assent.

Attachments: Reading Intervention Study Description
Parent Letter
Parent Agreement to Participate
Student Assent Form

DS/bg



Title of Project: Reading Intervention
***Principal Investigator:** Jiyeon Lee
****Funding Source(s):** N/A

1. Purpose/Specific Aims

The purpose of this study is to provide an effective reading intervention for students with Reading Disabilities (RD) with and without ADHD. This study will examine the effects of systematic error correction during reading instruction to increase reading fluency achievement for students with RD. Furthermore, this study will also document the relationship between achievement goal oriented reading motivation and reading achievement from 2nd through 6th grade students with RD with and without ADHD and comparison students without disabilities (ND). The significance of the current study is related to documenting the relationship between reading motivation and reading achievement as well as provides the effective reading intervention for students with RD.

1.1 Objectives

This study will examine the effects of systematic error correction during reading instruction to increase reading fluency achievement for students with RD

This study will document the relationship between achievement goal-oriented reading motivation and reading achievement from 2nd through 6th grade students with RD with and without ADHD

1.2 Hypotheses

Students with reading difficulties will produce differential group effects on systematic reading instruction and decrease the need for competence and increase work avoidance goals. At a more general level and in support of earlier research, we predict that early mastery goal oriented reading instruction will be associated with and predict reading achievement in advanced grade levels, and early reading failure in elementary grade levels will predict poor mastery goal orientation at advanced grade levels.

2. Background and Significance

The goal and motivation theory may be particularly important to increase academic outcomes for students with mild disabilities, such as learning disabilities, LD (Lee & Zentall, 2012; Meece & Miller, 1999). Research that addresses individual differences has reported findings including students with varying ability levels, but has failed to report participants' academic performance levels or only presented mean reading achievement for all participants (Gottfried, 1985). More specific goal comparisons of children with identified disabilities (reading disabled) with typical students reported that each group was rated as assuming less responsibility for academic achievement, doing the minimum required, less willing to learn new things, or use internal criteria for judging success or failure than students without disabilities (Carlson et al., 2002; Meltzer, Katzir, Miller, Reddy, & Roditi, 2004). This study will provide a better understanding of performance and intervention for students with reading difficulties. Currently there is research in general education and supportive theory that provides a backdrop for research with students with disabilities. However, there are limited studies for students with Learning disabilities with and without ADHD. Further more, repeated reading instruction has been reported as the most commonly recommended procedure to improve reading fluency for students with RD (National Reading Panel, 2000;

O'Connor, White, & Swanson, 2007; Therrien & Hughes, 2008) and is often used in combination with other interventions, such as passage preview, systematic error correction, and performance feedback (Begney & Silber, 2006; Swain et al., 2013). However, the effectiveness of the repeated reading fluency instruction components has been reported differently for students with learning disabilities (LD) (Lee & Yoon, 2017). The findings of Lee & Yoon (2017) suggested that the listening passage preview in combination of RR with at least four times reading might be the most effective method for students with LD.

3. Research Design and Methods

Experimental Design and Procedure. A randomized control group design with three disability groups (ADHD, RD, and ND) by grade levels (2nd-6th) comparison will be used. Students will complete the questionnaires in their most convenient time and will receive reading fluency instruction by their teachers in their regular reading instruction time.

Instruments. Group administered questionnaires will be used to assess students' motivation and goal orientations and emotional checklist. The questionnaires will be administered 3 times for the academic year (fall 2018- spring 2019). The participants' teachers will be asked to complete Conner's teacher rating scale and Coss's teacher rating scale for the students. Also Gray Oral Reading Test-fifth Edition (GORT-5) and correct words per minutes will be used for the reading achievement measures. Attached please find the copies of the questionnaires.

- (1) School Motivation and learning Strategies Inventory (SMALSI) (see Attachment C)
- (2) BarOn Emotional Quotient Inventory: Youth Version (BarOn EQ-i:YV) (see Attachment D)
- (3) Multidimensional Anxiety Scale for Children-2nd edition (MASC2) (see Attachment D)
- (4) Children's Organization Skills Scales (COSS) (see Attachment D)
- (5) Gray Oral Reading Tests (GORT-5) (see Attachment E)

Participants' teachers will complete the following scales and provide reading fluency instruction throughout the school year in their regular reading instruction time -participants' reading progress (correct words per minutes) will be documented by their teachers 1-3 times per week.

- (1) Conners' 3rd edition teacher's scale (see Attachment F)
- (2) Children's Organization Skills Scales (COSS) teacher's scale (see Attachment F)

3.1. Duration of Study

This study will be conducted during the 2018-2019 academic school year. During the time, the participants will receive reading fluency instruction by their teachers during their regular reading instruction time. Students will also complete the following questionnaires 3 times (fall, early spring, later spring) during the academic year and the duration of the scales are below:

- (1) School Motivation and learning Strategies Inventory (SMALSI) 20-30 minutes
- (2) BarOn Emotional Quotient Inventory: Youth Version (BarOn EQ-i:YV): 10-15 minutes
- (3) Multidimensional Anxiety Scale for Children-2nd edition (MASC2): 15 minutes
- (4) Children's Organization Skills Scales (COSS): 20 minutes
- (5) Gray Oral Reading Tests (GORT-5): 15-45 minutes

3.2 Study Sites

Glassboro Public Schools: Bullock School (2nd- 3rd grades) and Bowe School (4th-6th grades)
Attached please find the signed permission letter from Glassboro Public Schools

3.3 Sample Size Justification

We estimate that 400 Grade 2nd, 3rd, 4th, and 5th elementary children with and without disabilities from mixed socioeconomic, ethnic and racial backgrounds and will receive permission letters through school. From that initial sample, we hope to ultimately ascertain approximately 300 subjects with reading problems/disabilities, ADHD attention activity problems, and average learners.

3.4 Subject Selection and Enrollment Considerations

1. Upon IRB approval, teacher/school personnel will be asked to nominate students who may qualify to participate in the study who have RDs, reading difficulties, ADHD, inattentive and high activity characteristics, and average learners.
2. Teachers/school personnel will send home the parent's consent form to those students' parents.
3. Parents will be asked to return the signed consent form to school.
4. Only those students whose parents grant permission participate in this study.

3.5.1 Inclusion Criteria

2nd-6th grade students with reading problems/disabilities, ADHD attention activity problems, and students without disabilities

3.5.2 Exclusion Criteria

- Children under 6 years old and over 14 years old.
- Children with uncorrected visual impairment, hearing or other physical impairment that would interfere with typical school functioning.
- Other mental disabilities (intellectual disabilities, physical disabilities, etc.).

3.5.3 Subject Recruitment

Formal induction into the study occurs when participants and parents indicate a willingness to participate. When the students are nominated by teachers/school personnel, their identities will remain anonymous to these investigators until parents' consent and children's assent forms are obtained. At that time, the participants' name will be coded and kept completely confidential. No name will be used in the study.

3.5.4 Consent Procedures

1. The teacher/school personnel will hand out the parent's consent form to those who are previously labeled ADHD or with characteristics of inattention and/or high activity, and children with previously labeled Reading Disabilities (RD) or with reading difficulties and students without disabilities. The identities of the students nominated by the teacher will **not** be provided to the research team until parental consent form is obtained.
2. Parents or guardians will be asked to complete and return the consent form (Attachment A).
3. Students under 18 years of age will be asked to complete the assent form (Attachment B).

3.5.5 Subject Costs and Compensation

The participated students will receive a \$10.00 Barnes and Noble gift card upon completion of the study.

3.6 Chart Review Selection

N/A

4. Study Variables

4.1 Independent Variables or Interventions

Repeated reading instruction will be provided by the participants' teachers during their regular reading instruction time. Repeated reading instruction has been reported as the most commonly recommended procedure to improve reading fluency for students with RD (National Reading Panel, 2000; O'Connor, White, & Swanson, 2007; Therrien & Hughes, 2008) and is often used in combination with other components, such as passage preview, systematic error correction, and performance feedback (Begney & Silber, 2006; Swain et al., 2013). Repeated reading instruction requires students to read the same passages more than once or until an established criterion is met (Chard, Ketterlin-Geller, Baker, Doabler, & Apichatabutra, 2009; Weinstein & Cooke, 1992). It has consistently been reported as an effective intervention to improve reading fluency (e.g., accuracy and rate) for beginning readers and for students with reading disabilities/difficulties (Chafouleas, Martens, Dobson, Weinstein, & Gardner, 2004; Nelson, Alber, & Gordy, 2004).

4.1.1 Drug or Device Interventions

N/A

4.2 Dependent Variables or Outcome Measures

Reading achievement/progress that will be measured by GORT-5 and correct words per minutes.

4.3 Risk of Harm

There are no potential risks inherent from participating in this research beyond those experienced in everyday life. The participants who volunteer to participate in the study may withdraw at any time.

4.4 Potential for Benefit

There are no direct benefits to the subjects. However, because reading is an important academic subject, the results of this study may contribute to classroom interventions that could be beneficial to students with reading difficulties with and without ADHD.

5. Data Handling and Statistical Analysis

All documents that include assent and consent forms from all principals and students, demographic data, test results, and questionnaires will be stored in locked filing cabinets in PI's office for at least 5 years. After 5 years, the original data will be destroyed. During that time, only the principal investigator, Dr. Lee will access to this information. However, the coded data that are not associated with personal identifiers will be kept indefinitely for possible future research.

Data Analysis. A preliminary purpose of data analysis will be to examine group differences on the demographic variables of age, attention ratings, hyperactivity ratings, IQ, reading achievement scores, etc. using ANOVAs for follow-forward 2nd through 6th graders. [If there are group differences in IQ, it may necessitate the use of IQ as a covariate in the analyses.] Also preliminary co-relational analyses and regression analyses will also determine whether the goal orientations are associated with (predicted by) measures of reading achievement in 2nd through 6th grades. Furthermore, the Multivariate Analysis of Variance (MANOVA) test will be initially conducted for the between group factors of disability group (RD, RD+ADHD, ND) and within group factors of grade level (2nd-6th) and reading intervention. Significant MANOVA findings will be followed by univariate analyses, and followed up with post hoc Tukey's studentized range (HSD) tests (i.e., to assess for differences among the disability groups).

Title: Reading Intervention
Principal Investigator: Dr. Jiyeon Lee



Dear Parents/Guardians:

We invite your child to participate in a research study on reading intervention, which will be led by Dr. Jiyeon Lee in College of Education at Rowan University, Glassboro, NJ. The purpose of this research is to assess the effectiveness of repeated reading fluency intervention and reading motivation. The study will take very little of your child's time throughout the academic year (fall 2018-spring 2019). In addition, there is no cost to participate in the study. The study contains minimal risk to your child because it does not involve any strenuous or dangerous activities: neither physical, mental, nor emotional. There is a reasonable possibility of the breach of confidentiality in a research study, but all records used in this study will be confidential and your child's name will not appear on any record. There is no direct benefit to the participants; however, the results of this study may contribute to classroom reading instruction. The participating students will receive a \$10 Barnes and Noble gift card.

Your child will participate in the study at school at his/her best time and your child's teacher will be asked to complete brief attention and organization-rating scales for your child and to provide repeated reading instruction. We request to access to your child's educational records (e.g., age, gender, and achievement scores) and your child will be asked to complete rating scales on reading motivation, emotion, and organization skill. We will also give a brief reading assessment.

Your decision to allow your child to participate in this research is voluntary and you have the option to leave the study at any time. There are no alternatives. If you no longer wish for your child to be in the study or if you have any questions or concerns, please contact Dr. Lee at leej@rowan.edu. If you have any questions or concerns regarding your rights as a research subject, please contact the Rowan University Glassboro/CMSRU IRB, Office of Research Compliance at (856) 256-4078.

Thank you.

Sincerely,

Jiyeon Lee, Ph.D.
Principal Investigator, Associate Professor in Special Education
College of education, Rowan University

Title: Reading Intervention
Principal Investigator: Dr. Jiyeon Lee

AGREEMENT TO PARTICIPATE

Parent/Legal Guardian Consent

The purpose and procedures for this Study have been provided to you in writing. If you have any questions about this study, please contact Dr. Lee, Principal Investigator, at leej@rowan.edu. By signing below, you indicate that your questions have been addressed either via the consent letter or through a discussion with the investigators.

As a Parent/Legal Guardian, I freely give my consent for my child _____ to participate in the research project and authorize that his/her information as described above, be collected/disclosed in this research project. I understand that by signing this form I am agreeing for the Minor named above to take part in research. I understand that I have a right to make a copy or receive a copy of this form upon request.

Signature of Parent/Legal Guardian

Date

Printed Name of Parent/Legal Guardian



Student Assent Form for Children/Minor (2nd-6th grades)

Title of the study: Reading Intervention

Investigator: Jiyeon Lee, Ph.D., Associate Professor in Special Education, Rowan University,
leej@rowan.edu

We are doing a research study. A research study is a special way to find out about something. We want to find out how reading motivation is related to reading and how we can provide an effective reading fluency instruction.

You can be in the study if you want to. If you want to be in this study, we will meet at your school and you will be asked to

- (1) Complete rating scales about your interests and reading
- (2) Read lists of words or a brief paragraph
- (3) Answer questions about the paragraph

We believe the information from this study will help reading instruction.

When we are done with the study, we will write a report about what we found. We won't use your name in this report.

Please remember this is a voluntary activity and you may ask to drop out of the study at any time. If you say yes now but you want to stop later, you can just tell us you do not want to be in this study.

If you want to be in this study, please sign your name.

I, _____, want to be in this research study.



Investigator's Signature

Date