Emergent Writing in Pre-Kindergarten Children at Risk for Reading Failure: Impact of an Early Literacy Intervention

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INTRODUCTION

- Emergent writing is a fundamental component of early literacy skills, which are crucial for academic success.
- Writing skills are typically viewed as a continuum that starts with scribbling in its emergent stage, then continues into formation of symbols (e.g., letters, numbers, punctuation marks) at the conventional stage.
- Scribbling, coloring, and drawing are some early forms of emergent writing that often appear prior to formal education or conventional instruction in writing.
- Several recent studies have indicated that name writing is correlated with alphabet knowledge, spelling, and conventional stage. However, explicit phonological awareness instruction can impact emergent writing skills.
- The current study set out to explore the relationship found between emergent writing and emergent literacy. The study was designed to investigate whether explicit phonological awareness instruction can impact emergent writing skills.

METHOD

Participants
- 2832 children were screened for literacy risk status using the GRTR from over 119 different Pre-K programs.
- 321 children, ages ranging from 4 yrs. to 4 yrs. and 11 mos., qualified to receive an early literacy intervention.
- Mean age of pre-kindergarten children was 52.83 months (SD = 3.07).
- 136 females and 185 male children.
- 6 Nemours BrightStart! (NBS!) Observers assessing PALS, IRR (Krippendorf’s alpha = .86).

Measures
- Phonological Awareness Literacy Screening for Preschool name writing task (PALS PREK; Invernezzi, Sullivan, Meter, & Swank, 2004).
- Get Ready to Read (GRTR; Whitehurst, 2001).
- 20-item early literacy screening tool that assesses print knowledge and phonological awareness.
- Test of Preschool Early Literacy (TOPEL; Longian, Torgesen, & Wagner, 2007).
- Phonological Awareness: 27 item composite score.
- Print Knowledge: 36 item composite score.
- PALS PREK test was administered during lesson 1 (pre-test) and lesson 18 (post-test) of intervention to those that qualified as high risk for reading failure.
- PALS assessments were judged by one of six observers and scored using the following seven point scale:
  0 - Scribble or picture represents picture and written name
  1 - Writing and drawing are intertwined
  2 - Picture is separated from the written name but the name is unrecognizable scribble
  3 - Name writing consists of random letters and symbols, and is separate from picture
  4 - Name consists of some correct letters and placeholders, and is separate from picture
  5 - Child writes many correct letters from his/her name, and name is separate from picture
  6 - Name writing is generally correct and is separate from picture, with some letter backwards
  7 - Name is written correctly and is separate from picture

Procedure
- Children were screened using the GRTR.
- PALS PREK test was administered during lesson 1 (pre-test) and lesson 18 (post-test) of intervention to those that qualified as high risk for reading failure.
- PALS assessments were judged by one of six observers and scored using the following seven point scale:
- Lessons provided explicit, systematic, multisensory instruction in print and letter knowledge, phonological awareness, oral language, and emergent writing instruction.
- Tier 2: push in design with small groups consisting of no more than 4 children.

RESULTS

- Preliminary analyses showed no significant effects of gender in relation to emergent writing outcomes (p>.05).
- A main treatment effect was found to be moderately significant when looking at pre and post emergent writings scores after intervention (F(1, 267) = 3.74, p = .05).
- Multiple regression analysis was used to predict where children would end up on their emergent writing based on the initial PALS assessment after controlling for age. The results of the regression indicated the pre-test explained 45.3% of the variance in PALS (R2 = .45, F(1,266) = 224.16, p<.001). It was found that pre-test scores significantly predicted post-test score (β = .64, p<.001).

DISCUSSION

Conclusions
- PALS demonstrates the predictive ability to show where a child will score post assessment based on where they started on their PALS.
- Results suggest that children do improve on emergent writing as a function of RTI Tier Two early literacy curriculum.
- High risk children showed the greatest improvement in emergent writing ability.

Limitations
- PALS writing assessment had a ceiling effect due to lack of variance in scores. A new writing assessment should be used for future research containing a broader assessment scale.
- Children were excluded from the study based on age because the old version of GRTR is known for having a ceiling effect for older children.
- A new GRTR has been created since this research and allows for children 3 to 5 yrs. old to be assessed without a ceiling effect.

Future Directions
- Look at assessing emergent writing ability using a new name writing tool with greater variance.
- Use the revised version of the GRTR in order to eliminate ceiling effects based off of age.
- Assess children during the winter to create a control group to examine treatment effects due to intervention more accurately.

REFERENCES


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