



Classroom Organizational Practices and Home Literacy Environment Affecting First Graders' Early Reading

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Abstract

This study examined how teachers' organizational practices and children's home literacy environment related to first graders' early reading skills. To obtain the results for this study, 104 first graders across 44 classrooms were assessed using standardized reading evaluations in both the fall and spring. Home literacy environment was examined using a questionnaire completed by the parents of the first graders regarding parenting practices and beliefs. Results demonstrated that both the teachers' classroom organizational practices and the home literacy environment were associated with improvements in children's reading recognition scores in the spring from previous baseline measurements in the fall.

Introduction

In recent studies, researchers observed that the most efficient teachers in their studies were those who had smooth and brief transitions (while switching between different academic subjects) and fewer interruptions so that more class time could be devoted to academic activities [1]. These teachers frequently provided clear instructions and organized classroom procedures for their students, which appeared to help students stay organized during classroom time. The time that teachers spend familiarizing their students with classroom procedures, organizing the class for certain assignments, and clarifying the objectives of these activities for their students, is referred to in this study as "orient-organize" [1]. These practices appear to help students focus on learning by helping them understand the tasks to be accomplished. Moreover, in an organized class, teachers have more time to focus on educational activities and to address individual student needs, which relates to student outcomes although there is little research evidence regarding this issue [2]. In this study, we examine the effect of teachers' classroom organizational practices on students' early reading abilities.

There is converging evidence that classroom instruction and parenting both influence children's literacy

development [3]. Parental support of children's literacy development involves not only learning opportunities such as shared book reading but also the three critical parenting dimensions: (1) home literacy and language environment, (2) warmth and responsiveness, and (3) control and discipline. Studies show that these dimensions directly or indirectly affect the child's cognitive growth. Home literacy and parenting practices strongly predicted children's academic achievement even beyond the first grade [3]. Research suggests a positive correlation between mothers' warmth and sensitivity, which refers to how a mother emotionally responds to her children, and cognitive and language skills for children in preschool, kindergarten, and the first grade. In fact, researchers argue that these three dimensions apply to both parents, not just to mothers. The following effective parent-child interactions influence a child's cognitive development: parents' participation in problem-solving tasks with their child, regulation of information shared between adults and children, and encouragement of a child's exploratory tendencies [3]. In addition, while parents' control/disciplinary behaviors did not directly predict literacy outcomes, these actions were significantly related to a child's social interaction (*e.g.*, cooperation, independence, and responsibility), which was then linked to academic performance [4]. For instance, authoritative parenting is often associated with the endorsement and upkeep of higher levels of academic competency and school adjustment in children, whereas non-authoritative parenting styles are associated with the accumulation over time of adverse effects such as poorer classroom engagement and inconsistent homework completion [4]. These findings show how influential parenting can be on children's literacy skills, particularly in the younger years. In this study, we examine the effect of home literacy environment: What are the effects of orient-organize in a child's classroom and home literacy environment on his or her early reading performance? We anticipate that organized classrooms and strong home literacy environments will predict stronger reading outcomes in first graders' early reading levels.

Table 1: Summary of individual child assessment findings.

Descriptive information for PIAT-R gain scores.

	Number Measured	Mean	Standard Deviation
Growth in reading recognition raw score	108	16.3611	10.08141
fy1 PIAT RRR raw score	108	23.27	13.140
sy1 PIAT RRR raw score	108	39.63	15.225

Methods

Participants

In this study, 104 first grade children and 44 certified teachers were recruited from schools within the same urban-fringe community of a large city in the Midwest; 44% of the children in the study were boys, 38% of the children in the study were African American and the remaining 62% were Caucasian. Furthermore, the child's socioeconomic status, which is the combination of economic and social factors that describe his or her family's level of income, education, and occupation, was based largely on his or her mother's years of education because it was assumed that the more education the mother had, the more she could promote literacy at home. The mother's year of education for this study was approximately 16 years on average (SD = 3.10). All the teachers in this study were certified by the state to teach elementary school students in grades kindergarten through fifth.

Individual Child Assessment

The children in this study were assessed in both fall and spring using the Peabody Individual Achievement Test-Revised (PIAT-R). The PIAT-R measures the recognition of printed letters and the ability to read words aloud. Children's growth in reading recognition from fall to spring was measured by their spring PIAT-R raw score (fy1 PIAT RRR raw score) minus fall PIAT-R raw score (sy1 PIAT RRR raw score). For descriptive information, see Table 1.

Parent Questionnaire: Home Literacy

A parenting practices and beliefs questionnaire measured the home literacy environments of first grade children. The parenting questionnaire contained 45 questions related to parental beliefs and practices with regard to child rearing. The survey included questions regarding the frequency of library card usage, the number of adult and child magazine subscriptions, the number

of newspaper subscriptions, how often the family read together, the number of children's books, the hours of television the child watched per week, and how frequently the parents themselves read [5].

Instructional Classroom Variables

Classroom variables were measured through classroom observations over the course of the school year, which occurred during three all-day sessions in the fall, winter, and spring [2]. For this study, only the fall observation variables were used. Trained observers recorded a description of the school day as well as a measure of the amount of time spent on specific instructional activities. The classroom variables were time the teachers spent in orient-organize (orient-organize FY2) in the spring; non-instructional time (transition, non-instructional FY2); disruption, non-instructional time (disruption, non-instructional FY2); and the time the teacher spent in management/discipline (management/discipline FY2). For descriptive information, see Table 2 (all variables are in minutes).

Analytic Strategy

Correlations and multiple regression using SPSS v11.5 (Statistical Package for the Social Sciences) were utilized to examine the relations among child, home, and classroom variables.

Results

Gains in PIAT-RR (reading recognition gain) were positively correlated with time spent in orient-organize ($r = .195, p < .05$). Thus, when teachers spent more time in orient-organize in the fall, students demonstrated greater gains in reading recognition scores. In addition, reading recognition gain was significantly positively correlated with the home literacy environment score ($r = .201, p < .05$). Therefore, children with parents who provided enriching home-literacy environments demonstrated greater reading recognition gains than did children whose parents did not provide home environments as rich in

Table 1: Summary of instructional classroom variables findings.

Descriptive information for classroom variables.

	Number Measured	Mean	Standard Deviation
Orient-organized FY2	108	19.2593	6.89761
Transition, non-instructional FY2	108	54.4722	15.56443
Disruption, non-instruction FY2	108	.7404	1.53081
Management/discipline FY2	108	.7870	1.86483

Note: all instructional variables represent minutes per day.

literacy materials. Furthermore, a mother's education (in years) was significantly positively correlated with the home literacy environment score ($r = .551, p < .01$). This suggests that mothers with more years of education may be more likely to provide literacy-enriched home environments with activities that enhance their children's reading development.

Time spent in orient-organize was negatively correlated with transition, non-instruction ($r = -.372, p < .01$), and management/discipline ($r = -.310, p < .01$). This means that when teachers spent more time in orient-organize, less classroom time was spent on non-instructional transitions (such as switching between academic subjects) and disciplinary actions.

Multiple regression, with reading recognition gain as the outcome, revealed that when the home literacy environment score and orient-organize were used as predictors, both independently predicted reading gains (orient-organize coefficient = .29, $t = 2.071, p = .041$; home literacy environment score coefficient = .64, $t = 2.144, p = .035$). This demonstrates that both the classroom organizational practices and home literacy environment predict first graders' early reading independently, while controlling for the effect of mother's education.

Limitations

The statistics used in this study were calculated using regression instead of Hierarchical Linear Modeling (HLM). This is a limitation because regression treats each child in the study as being in a separate classroom, which is not the case in this study. In this study, there were 104 children divided over 44 classrooms. This means that some classrooms contained more than one target child in the study. Therefore, the nested nature of the data means that we cannot assume each child to be independent from the other students in his or her classroom because they share a classroom environment. However, these suggestive relations among classroom time, home literacy environments, and children's reading outcomes should be further investigated.

Discussions

This study reveals that students with teachers who spent more time in orient-organize activities in the fall exhibited significantly greater growth in reading recognition in the spring than did students whose teachers spent less time in orient-organize activities, taking into account the influence of the home literacy environment. Furthermore, teachers who spent more time in orient-organize activities, spent less time in both non-instructional transition and management/discipline activities. This orient-organize time is the time that teachers spent familiarizing their students with classroom procedures, organizing the class for certain assignments, and clarifying the objectives of these activities for their students [6]. In addition, parents who incorporated literacy successfully into their child's home life also had a positive effect on their child's early reading skills.

There are several possible explanations for these results. As the results exhibit, teachers who were more organized spent less time in non-instructional transition and management/discipline; thus, these teachers maximized the time that students spent participating in academic activities, such as working on assignments. These teachers minimized their time in transitions, and decreased the amount of time that children took to start activities, had nothing to do, or behaved inappropriately [7]. It may be that by orienting students to learning activities and organizing the classroom, first-grade teachers were able to spend more time on language arts each day, which may have then increased the early reading growth of their students.

In addition, a positive measure of students' self-regulation or work-related social skills (e.g., following directions, participating appropriately in groups, and taking on tasks) predicts growth in mathematics and reading skills between kindergarten and the second grade [8]. Could the time teachers spend organizing their students affect their reading levels in the early elementary grades, perhaps by improving the students' self-regulation skills? This may be the case, especially in the first grade when

most children have had at least one year to participate in a formal classroom environment; however, there is little research evidence to support this claim.

Researchers Morrison and Connor [9] provide further insight as to why more time spent in orient-organize is related to greater student decoding growth. They studied the effects of different teaching patterns on growth in vocabulary and decoding skills, which are the skills that children use to translate alphabet letters into familiar syllables and words. The two teaching patterns studied were teacher-managed explicit instruction and child-managed implicit instruction. Teacher-managed instruction included activities in which the teacher focused directly on the components of decoding, such as letter-sound correspondence. Child-managed learning opportunities are activities such as group work, during which students manage their own experiences and attention. They discovered that child-managed learning opportunities in addition to explicit decoding instruction, contributed to students decoding skill growth although the effect depended on students' entering vocabulary skills. Since orient-organize was found to increase the time that children spent managing their own activities, and time in child-managed instruction was associated with increased reading scores, perhaps time in orient-organize was also related to children's reading outcomes.

Research also reveals that teachers who spent more time organizing in the fall spent less time organizing the rest of the year, on average [6]. Results showed that more time spent on organizational activities in the fall was associated with greater amounts of class time devoted to child-managed activities in the spring. This empirical finding is corroborated in other earlier theoretical research, where increased levels of child-managed explicit instruction (e.g., cooperative writing opportunities) were found in highly organized classrooms where assignments, expectations, and objectives of activities were explained clearly to the students [10]. In addition, structuring fundamentals, such as thorough overviews, reviews of objectives, and outlines of content, not only facilitated children's memory for information, but also helped them recognize that parts of information connect to create a cohesive whole [10]. Therefore, teachers who spent more time in orient-organize may have had more time to spend on academic subject material, such as practicing letter-word recognition during language arts. This organization may have helped the students systematize what they had just learned, leading to increased learning.

This study demonstrates that both classroom organizational practices and children's home literacy environments can significantly affect students' reading skills in the first grade. It also indicates, "What takes place

in a school is critical, but it's not sufficient. And what happens between three in the afternoon and seven in the morning is at least as important as what happens during the school day" (quoted by the education consultation for the New Haven school district) [8]. Parents who provide a literacy-enriched home environment with activities that maximize reading development can make a difference in their child's reading skills. For example, parents' book reading styles, including labeling and describing the illustrations or encouraging and supporting children's storytelling attributes, bolstered their children's vocabulary [8]. Parental literacy-promoting behaviors can cut across all socioeconomic statuses, including low socioeconomic statuses. Behaviors promoting literacy include parents using correct grammar and complex vocabulary and sentence structure, encouraging knowledge of the alphabet, subscribing to newspapers and magazines, and providing children with books and educational toys [8]. However, it may be more difficult for parents in families with a low socioeconomic status to foster strong home literacy environments. They are frequently busy working to provide for the family; additionally, they cannot always afford to purchase as many literacy-promoting resources for their children.

Findings from the present study demonstrate that both the first graders' teachers' classroom organizational practices and children's home literacy environments can significantly affect children's early reading skills. Greater emphasis on how teachers can provide a quality educational environment, which includes an optimally organized classroom, and how parents can foster strong home literacy environments is vital for improving children's achievements in early reading.

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