

Predictors of Latino English Learners' Reading Comprehension Proficiency

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Abstract

There is a gap in reading comprehension proficiency between English learners and their English-speaking peers. This study examined the strength of three significant predictors of reading comprehension—oral English proficiency, oral reading fluency, and academic vocabulary knowledge. Spending more instructional time on developing students' skills in the strongest predictor, academic vocabulary knowledge, may reduce the achievement gap.

Problem

English learners (ELs) make up a significant and growing percentage of students in public schools across the United States. In the classroom context, ELs are not achieving parity with their English-speaking peers in reading comprehension proficiency (Koo, Becker, & Kim, 2014), and a paucity of effective instructional practices for ELs may be contributing to the literacy achievement gap (August & Shanahan, 2006).

Influential studies have shown large positive correlations between oral reading fluency, as measured by words correct per minute (WCPM), and reading comprehension on standardized tests for general populations of students (Good, Simmons, & Kame-ennui, 2001; Pinnell et al., 1995), but there is a lack of research supporting this same positive correlation between oral reading fluency and reading comprehension for ELs.

Purpose

The purpose of the study was to investigate the strength of the relationship between reading comprehension proficiency of Latino ELs and their oral reading fluency, as well as their oral English language proficiency and academic vocabulary knowledge. Determining which measure of English language and reading proficiency predict Latino ELs' reading comprehension can provide direction for introducing instructional practices aimed at narrowing the literacy gap.

Relevant Literature

This study is grounded in theories that inform reading instructional practices related to (a) oral reading fluency, (b) oral English language proficiency, (c) academic vocabulary knowledge, and (d) reading comprehension.

Oral Reading Fluency Theory. Reading fluency involves a complex cognitive process of reading accurately and quickly with prosody (T. Rasinski, 2004). Students who are able to read words in text quickly and easily reserve more of their cognitive resources for the complex task of constructing meaning (Pressley, 2000, T. V. Rasinski, 2000).

Oral Language Proficiency Theory. Oral language proficiency comprises both expressive and receptive skills, which includes knowledge of the sounds of English, vocabulary, rhythm and cadence, word order, sentence structure, verb tenses, grammar, and functions of the language for academic and social purposes (Dutro & Helman, 2009). Literacy for most native-English speakers is usually acquired through strong oral language skills (Dressler & Kamil, 2006).

Academic Vocabulary Knowledge Theory. Academic vocabulary knowledge refers to one's familiarity with language used in books, formal writing, and specific genre (Scheffelbine, 2003). An under-developed vocabulary lexicon contributes to the literacy achievement gap between ELs and native-English speakers (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006).

Reading Comprehension Theory. Reading comprehension is a complex process of meaning construction involving decoding of words, processing the words in relation to one another, and operating on the ideas presented in the text to make meaning (Pressley, 2002). Proficient reading also depends on the reader's background knowledge and skillful use of comprehension strategies (Pressley, 2000). Reading comprehension proficiency is impacted by an ELs proficiency in oral reading fluency, oral English language proficiency, and academic vocabulary knowledge (Francis et al., 2006).

Research Questions

Do oral English language proficiency, oral reading fluency (WCPM), and academic vocabulary knowledge predict reading comprehension proficiency of Latino ELs on standardized tests, and if so, what is the relative influence of each of them on reading comprehension proficiency?

Procedures

Archival data were used from 1,376 third-grade Latino students, or 46.3% of the district's total third-grade enrollment, identified as limited English proficient from 23 elementary schools in a school district in Southern California. The variables and their measurement instrument are displayed in Table 1. Three different variables measuring distinct aspects of reading comprehension were combined into one comprehensive measure of reading comprehension proficiency, which yielded a reliability coefficient of $\alpha = .75$.

Data Analysis

The dependent variable of reading comprehension was regressed onto the independent variables of oral English proficiency, oral reading fluency (WCPM scores), and academic vocabulary knowledge.

Findings

Regression results indicated that the tested model significantly predicts reading comprehension, $F^2 = .66$, $F(3, 1,372) = 892.03$, $p < .001$, which accounts for 66% of the variance in reading comprehension proficiency. A summary of the results of the regression are displayed in Table 2. Academic vocabulary knowledge is the strongest predictor in the model ($\beta = .44$), almost twice as strong as oral English language proficiency ($\beta = .25$). WCPM is the second strongest predictor in the model ($\beta = .30$). The effect size of academic vocabulary knowledge ($ES = .74$) is almost twice that of either oral English language proficiency ($ES = .38$) or WCPM ($ES = .42$).

Table 1. Variables and Their Measurement Instruments

Variable	Measurement Instrument
Oral English language proficiency	CELDT listening comprehension scores
Oral reading fluency	End-of-year average oral reading fluency scores (WCPM)
Academic vocabulary knowledge	CST word analysis & vocabulary development scores
Grade-level reading comprehension	CST reading comprehension scores
Norm-referenced reading achievement	CAT6 reading comprehension scores
English reading proficiency	CELDT reading scores

Note. CELDT = California English Language Development Test; CST = California Standards Test; CAT6 = California Achievement Test 6th Edition.

Limitations

The tested model explained only 66% of the variance in reading comprehension scores, which means other variables not included in the model account for the remaining 34%. Additionally, the correlational research design and sample drawn from only one grade level in only one school district in Southern California limits generalizability.

Conclusions

Educators seeking to promote the reading comprehension proficiency of Latino ELs should consider using WCPM assessments and activities cautiously and appropriately, and strive to allocate more time for instruction and assessment on academic vocabulary knowledge and skills and the prosodic dimension of oral reading fluency.

Social Change Implications

In the societal context, poor literacy achievement among ELs has contributed significantly to their high school dropout rates, poor job prospects, and high poverty rates (Johnson, Strange, & Madden, 2010). Implementing literacy instructional practices that focus more on developing academic vocabulary and less on oral reading fluency and oral language proficiency may help to narrow the literacy achievement gap for ELs and may promote increased high school graduation rates, improved job prospects, and even increased enrollment in higher education for ELs.

Table 2. Coefficients for Model Variables Predicting Reading Comprehension

Variable	B	β	t	p	Bi-variate r	Partial Effect size
Oral English language proficiency	.18	.25	14.45	<.001	.55	.36
Oral reading fluency (WCPM)	.01	.30	15.03	<.001	.67	.38
Academic vocabulary knowledge	.24	.44	21.13	<.001	.73	.50