

Emergent Language and Literacy Skills in Bilingual Preschool Children

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Abstract. The purpose was to determine if a child's proficiency in vocabulary skills in their native language was related to and/or predictive of their proficiency in language and literacy skills in their emerging language. The sample consisted of 115 bilingual (English/Spanish) participants between ages 3 and 5 from Wichita-area Head Starts. The children were tested utilizing standardized formal measures. Tests were administered individually in a counter-balanced order in both languages by trained bilingual research assistants in 2-3 sessions. Results indicated that proficiency in native language vocabulary (Spanish) was not correlated to proficiency in the emerging language vocabulary (English); however, English and Spanish vocabulary skills were statistically correlated with literacy skills. Executive control was correlated with English vocabulary skills but not Spanish, and correlated with literacy skills. To determine if English language/literacy skills were predictive of Spanish vocabulary, a simultaneous multiple regression analysis was conducted. The overall model was significant; $F(3, 112) = 13.85, p < .000$. Executive control and the literacy skills measure both contributed unique variance to English vocabulary, but Spanish vocabulary did not. The findings provide interesting insight into the relations among native language skills and emerging language skills. This has instructional implications for teachers and policy makers.

1. Introduction

In the current study, we focused on the relationship among Spanish and English emergent literacy and language skills in young Spanish-English speaking children attending local Head Start Centers.

2. Experiment, Results, Discussion, and Significance

115 children between the ages of 3 and 5 years of age participated in the study. They completed three standardized measures:

- 1) Definitional Vocabulary: Subtest from the Test of Preschool Emergent Literacy (Lonigan, Wagner, Torgesen, & Rashotte, 2002), which measures receptive and expressive vocabulary skills. [Maximum points possible =70 (35 for expressive and 35 for receptive).] Administered in both English and Spanish.
- 2) Get Ready To Read (Whitehurst & Lonigan, 2001). This is a 25-item multiple-choice measure that assesses children's skills in phonological awareness and print knowledge (e.g., print concepts, letter-name knowledge, letter-sound knowledge, early writing). The GRTR has adequate internal consistency ($\alpha = .82$). Administered in preferred language.
- 3) Head-to-Toes Task (Cameron & Connor, 2004), which measures children's self-regulation skills and attention and is administered in the preferred language.

Descriptives

Table 1 illustrates the descriptive statistics of this sample.

There was substantial variation in performance on all measures.

Table 1: Descriptive Statistics

Variable	Mean	SD
Chronological Age (mths)	54.50	4.40
English Vocabulary	15.69	20.87
Literacy	7.25	6.15
Spanish Vocabulary	27.68	17.15
Executive Control	4.56	6.51

(Note: N=115. Points possible on vocabulary =70. Points possible on executive control=25.)

Correlations

Correlations were computed between scores on measure (See Table 2). Results indicated that proficiency in native language vocabulary was not correlated to proficiency in the emerging language vocabulary; however, English and Spanish vocabulary skills were statistically correlated with literacy skills. Executive control was correlated with English vocabulary skills but not Spanish, and correlated with literacy skills.

Table 2: Correlations

Variable	1	2	3
1) English Vocabulary	--		
2) Spanish Vocabulary	.012	--	
3) Literacy	.538***	.305*	--
4) Executive Control	.457***	.011	.256*

Note: N=115, *= $p < .05$, ***= $p < .001$

Regression

Multiple regressions were conducted to determine whether proficiency or knowledge in Spanish and/or literacy skills predicted proficiency or knowledge of English vocabulary, given that every participant was learning English as a second language. The overall model was significant; $F(3, 112) = 13.85, p < .000$. Executive control and the literacy skills measure both contributed unique variance to English vocabulary, but Spanish vocabulary did not. (See Table 3)

Table 3: Predicting English Vocabulary from Other Skills

Predictor Variable	R	ΔR^2	β	F ratio
Model	.646	.417		13.85***
Executive Control		.102	.331	3.19**
Literacy		.209	.497	4.56***
Spanish Vocabulary		.272	-.170	-1.36

Note: N=115, ***= $p < .001$, **= $p < .01$. $df = [3, 112]$

3. Conclusions

The results of this study support the notion that literacy and executive control skills are related to vocabulary skills. We were unable to support our hypothesis proficiency in Spanish vocabulary would predict English vocabulary knowledge. Interestingly, Spanish vocabulary was related to literacy skills and executive function was related to both English vocabulary and literacy but not Spanish vocabulary. This could be attributed to the fact that as native Spanish speakers, the children may have learned to exert more effortful control of attentional processes to learn English and literacy skills then needed for their native language.

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