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FREE VOLUNTARY READING AND WRITING COMPETENCE IN TAIWANESE HIGH SCHOOL STUDENTS[1]

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Summary.—A positive but very modest relationship was found between measures of free voluntary reading and a measure of writing ability for 318 high school students in Taiwan.

There is substantial evidence that reading, especially free voluntary reading, is the source of development of literacy. Those who read more write better, read better, spell better, have larger vocabularies, and have superior grammatical competence (cf. 4). It is through reading, it is claimed, that we acquire the conventions of writing. There has, however, been very little research with languages other than English. The goal of this study was to confirm "the power of reading" for speakers of Chinese, to see whether those who read more showed better development of literacy. Specifically, we examined the relationship between free reading and performance on a test of writing, hypothesizing that those who reported more reading would do better on a writing examination.

Subjects were 318 secondary school students living in Taiwan (ages 15 and 16 years). Subjects provided scores from the composition section of the Senior High School Entrance Examination, one of the most important given in Taiwan. It covers English, Mathematics, Social Science, Natural Science, and Chinese. The composition section accounts for 25% of the grade in Chinese language. Topics assigned students were typically expository but contemporary, e.g., problems with the physical environment, "If I were still a first-year high school student." While reliability estimates have not been reported for the composition, essays are holistically scored by two raters, and a third rater is involved when the two raters show clear disagreement.

Two measures of free reading were used. In the Author Recognition Test (6), subjects are asked to indicate whether they recognize the names of authors on a list. For speakers of English, scores on the Author Recognition Test correlate with measures of language competence, with measures of vocabulary (8, 9), reading comprehension (2, 6), and spelling (3). Scores on the Author Recognition Test also correlate with measures of the amount of reading done, with observed reading behavior (West, *et al.*), and with the amount of leisure reading subjects report doing (1, 6) .

A Chinese version of the Author Recognition Test was constructed

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based on materials in several popular bookstores in Taipei. Forty-five items and 15 foils were used, and results were corrected for guessing using procedures employed by Stanovich, West, and Harrison (1995). The proportion of foils checked was subtracted from the proportion of real authors checked. The correlation between the raw and adjusted scores was high ($r = .96$). The reliability of the Author Recognition Test was .83 (Cronbach alpha).

In addition, subjects were asked how much free reading they engaged in, filling out a questionnaire probing amount of pleasure reading, library use, and newspaper reading (an English translation is presented in Appendix A, p. 690).

Subjects were also asked how many books they owned and to how many magazines they currently subscribed. It was expected that this measure would correlate both with free reading as well as writing performance. The former relationship would be direct; those who live in print-rich environments would be expected to read more. The richness of the print environment would affect literacy only indirectly, however; those who read more would have higher literacy.

Results

Table 1 presents descriptive data. A composite score for the questions on free reading was used, as all items loaded on a single factor in a principal components analysis, with loadings ranging from .30 to .73 (Lee, 1995). Table 1 also presents intercorrelations among the variables, with books in the home and magazines in the home combined as a single variable, print environment.

TABLE 1
Descriptive Data

Measure	*M*	*SD*	*rs*		
			1	2	3
1. Author Recognition Test	.29	.10		.39	.30
2. Free Voluntary Reading	19.21	3.40			.49
3. Print Environment					
Books Owned	2.87	1.10			
1 = 0–20					
2 = 21–50					
3 = 51–100					
4 = more than 100					
Magazine Subscriptions	1.87	.84			
1 = none					
2 = 1					
3 = 2–5					
4 = more than 5					
4. Writing Examination	25.56	7.61	.22	.19	.13*

*$p < .05$; for other *rs* $p < .01$ (one-tail).

Fig. 1 is a simple path diagram to clarify the predicted relationships among the variables. It was predicted that those who live in a more print-rich environment would read more and that those who read more would write better. Correlations between measures of free reading (reported free reading, Author Recognition Test) were, as predicted, related to performance on the composition section of the Senior High School Entrance Examination, but correlations were low. A measure of the print environment was clearly correlated with the amount students read, but the correlation of print environment with scores on the Author Recognition Test was modest.

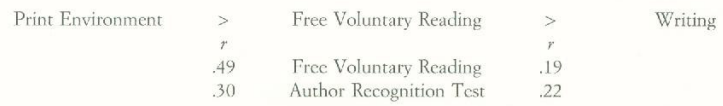

FIG. 1. Relationships among Print Environment (books in the home, magazine subscriptions), Free Voluntary Reading, and Writing Scores

Results of a simultaneous multiple regression (Table 2) indicated that both scores on the Author Recognition Test and reports of free reading were significant predictors of scores on the writing examination. While the results were statistically significant, the over-all effect size was low.

TABLE 2
MULTIPLE REGRESSION: SUMMARY

Predictor	beta	t	p
Author Recognition Test	.17	2.78	$< .05$
Free Voluntary Reading	.12	2.00	$< .05$
	$R^2 = .06$, $F = 8.86$, $p = .0002$		

The major finding is that free reading, as measured by a self-report questionnaire and the Author Recognition Test, was significantly related to performance on a writing examination. The effect, however, was weak. While consistent with the hypothesis that we acquire much of our writing competence from reading, these results clearly suggest that ratings of writing quality are based on factors other than mastery of the conventions of writing. Such factors could include creativity, display of factual knowledge, etc. Reading, of course, may contribute to this kind of competence as well.

As expected, a measure of the richness of the print environment was positively related to the amount of free reading done. This prediction was clearly supported for our measure of reported free voluntary reading, but only weakly supported for the Author Recognition Test.

Our results also showed that the Author Recognition Test has value in languages other than English. As in previous studies using English speakers, performance on the Author Recognition Test correlated significantly with reported free reading, but the correlation of .39 fell well short of what is expected for concurrent validity. Thus, the Author Recognition Test and reported free voluntary reading appear to be measuring different aspects of free voluntary reading.

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APPENDIX A

Reported Free Reading

Item	*M*	*SD*
1. I read for pleasure		
(1) less than once a week; (2) once a week; (3) about three days a week; (4) everyday	2.7	1.0
2. I visit the library or check out books (for outside reading)		
(1) almost never; (2) a couple of times a year; (3) at least once a month; (4) once or more a week	2.5	1.0
3. I visit bookstores		
(1) almost never; (2) once or twice a year; (3) once or twice a month; (4) once or more a week	3.1	.8
4. Do you have library card(s) outside of school?		
(1) no; (2) yes	1.5	.5
5. I read magazines		
(1) less than one hour a week; (2) 1 to 3 hours a week; (3) 4 to 7 hours a week; (4) more than 7 hours a week	1.9	.9
6. I read newspapers		
(1) I do not care to read a daily newspaper even if I have the time; (2) I do not have time to read a daily newspaper; (3) occasionally; (4) everyday	3.7	.8
7. Not including textbooks, how many books do you read a year?		
(1) none; (2) 1 or 2; (3) 3–10; (4) 11–30; (5) more than 30	3.8	1.0