Factors Affecting English Vocabulary Skill of Undergraduates

At Prince of Songkla University, Pattani Campus

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Abstract

This study aimed to examine factors affecting the English vocabulary recognition of undergraduate students in Thailand. The sampled subjects comprised 785 undergraduates from 6 faculties enrolled in the second semester of the 2005 academic year at Prince of Songkla University, Pattani Campus. The data were collected using a questionnaire based on 10 common English words, each of which the respondents were asked to match to one of five similar words including four distracters and one correct synonym. Respondents were also invited without coercion to give their student registration number, enabling demographic and enrolment details to be matched to their answers. Over 97% of those surveyed gave their number, and took 5 minutes on average to complete the test, giving a mean score of 5.4 correct answers (standard deviation 2.5). Multiple regression analysis of the results showed that the students' scores were related to their level of seniority, faculty of enrolment, and major field of study, but bore no relation to their gender, religion, or type of high school attended. The students who performed by far the best were a group of 113 majoring in Language (English, French, Malayu, Arabic or Thai) in the Faculty of Humanities. Students who had obtained an A or B grade in a compulsory one-semester English unit also did better on the test. Although the test requires further extensive evaluation with respect to its internal and external validity, compared to alternatives it has the advantage of simplicity and ease of administration.

Keywords: English vocabulary skill, Undergraduate students, Short and simple questionnaire, Thailand

1. Introduction

As global communications among people has increased, English has become the first choice for cross-border communication worldwide. English is the language most widely taught as a foreign language in more than 100 countries in the world. In Thailand, since English is not the official language, it is taught as a foreign language both in schools and universities. The rough outlines of the course study include the four basic skills for communication in English (listening, speaking, reading and writing), western culture, and the use of English in other subjects and in the community. However, English learners in Thailand still have competence which is far below that of native speakers. Kirisri (2003) found the major factor influencing English language achievement to be the student's characteristics, other factors being home background, peer, teacher and school. For Thai freshmen students who had studied English as a

foreign language for about ten years, Prapphal and Oller (1982) found demographic factors (including years of studying English, school achievement grades, and parents' income) were related to certain attitudes towards English, which in turn may affect 'English as a foreign language' proficiency. The high school GPA is a cognitive factor that indicates the relationship with English proficiency. Furthermore, the student's English background had the strongest effect on the student's achievement in learning English. In addition, English language skill was related to age, study programs, mass media usage, teacher's attitudes and teachers' understanding about teaching method. Chaowakeeratiphong (2004) studied the factors related to achievement in English of students in Rajabhat Universities in the Northern Region and found that in studying English the factors of attitude, motivation, opportunities, peer relations, study habits and quality of instruction were all positively associated with achievement in English.

For studying English, reading skill is important. Knowing the information from books, internet or other media, reading skill was needed before other skills. However, Thai students had problems in reading English, especially with vocabulary (Anusornnorakarn, 2001). To understand a text requires not only the ability to read words but also vocabulary knowledge.

The present study focuses on the English vocabulary skill outcome variable and examines factors affecting the English vocabulary skill of Thai undergraduate students at Prince of Songkla University, Pattani Campus.

2. Materials and Methods

2.1 Participants

The participants for this study comprised 785 (168 male and 617 female) undergraduates studying in the second semester of the 2005 academic year at Prince of Songkla University, Pattani Campus. They were selected by purposive sampling from the faculties of Education, Humanities and Social Sciences, Science and Technology, Communication Science, Fine and Applied Arts, and the College of Islamic Studies.

2.2 Data Collection

A cross-sectional study was used in this study. The instruments used were the English Vocabulary Skill Test (Appendix) and the university database.

The English Vocabulary Skill Test was used to measure the English vocabulary skill of undergraduate students. The test consists of ten common English words used in a widely-used introductory Statistics text at Macquarie University in Australia. For each word, there are five possible response items: a correct synonym, a similar sounding word, a similarly written word, an opposite word and another unrelated word, listed in alphabetical order next to the test item. These items are listed in random order, and the student is requested to select the word that most closely matches the given word in meaning.

The gender, religion, faculty and major field of study, seniority level, high school type (public or private) and home province were identified via links to the university's database using the students' ID number. They also specified the time they started and ended the test.

2.3 Statistical Methods

Preliminary statistical analysis involved examining the frequency distributions of the independent variables and assessing their univariate associations with the outcome using one-way analysis of variance. Multiple regression analysis (see, for example, Kleinbaum et al, 1998) was used to investigate the relations between the independent variables and the English vocabulary skill outcome.

3. Results

Table 1 shows the distributions of the predictor variables with the average score obtained by subgroup and the p-values from one way analysis of variance tests.

Of the 785 sample subjects, 78.6% were female and 50.3% were Muslim, 35.7% finished university preparation at an Islamic religious high school, and 59.5% came from the 5 Southern Border Provinces (Satun, Songkla, Pattani, Yala and Narathiwat). Most respondents (90.7%) studied in a 2 or 4 year degree program. The percentages in 1st, 2nd, 3rd and 4th year were 25.9, 34.6, 21.4, and 18.1, respectively.

By faculty, 33% were from Science and Technology, 23.1% from Education, 20.5% from Humanities and Social Sciences, and 12.5% from the College of Islamic Studies. Main Majors were science (43.8%), languages (24.1%) and Islamic Studies (13.2%).

The outcome, the test scores that used to measure the English vocabulary skill of the students, ranged from 0 (14 students) to 10 (39 students). The mean score was 5.4 with standard deviation 2.5. The average scores on the individual items ranged from 0.21 for the word "useful", which most students incorrectly matched to "useless", to 0.85 for the word "dirty", which most students correctly matched to "unclean". The average scores on the other eight items ranged from 0.43 (for "push") to 0.67 (for "important").

The time taken by the students to complete the test varied from 1 to 30 minutes with mean 5.9 and standard deviation 3.3 minutes. However, most students spent 1 to 10 minutes to complete the test, 31.3% finished within 5 minutes, and a further 17.8% within 10 minutes. Only 3.8% who took more than 10 minutes to finish. The score achieved in the test was found to be negatively correlated with this outcome (Pearson correlation -0,072, p-value 0.043).

Multiple linear regression analysis was used to test the association between the test outcome scores and all independent variables. A reduced model, produced by omitting independent variables with p-values exceeding 0.05 using backward elimination, gave an r-squared value of 0.222 and contained three predictors – student seniority level, faculty, and major field. Since faculty and major field are strongly associated we recoded major field to include the faculty, giving nine categories instead of seven, with a resulting r-squared of 0.218. The results are shown in Table 2.

The results show that the student's seniority level and recoded major field are both related to their English vocabulary skill. Students majoring in Languages in the Faculty of Humanities (113 students) did substantially better than other students in the test, and first-year and third-year students also performed better than the others.

4. Conclusion and Discussion

Multiple regression analysis was used to investigate the association between the independent variables and the English vocabulary skill outcome. It was found that two factors (student seniority level, major field) were associated with the students' English vocabulary skill.

This study revealed that many undergraduate students at Prince of Songkla University, Pattani Campus had limited vocabulary knowledge, particularly those majoring in Communication Science, Islamic Studies, and Social Sciences. Several studies in Thailand suggested that poor English vocabulary among students was due to their lack of reading practice. Suknantapong et al (2002) found that the Humanities and Social Sciences students performed poorly in reading ability and their poorest skill was inference and determining context clues. Moreover, Kaewklom's study (2002) indicated that problems found in English reading were related to vocabulary, grammar and disturbing environment, and vocabulary skill depended on the students' level, faculty, and major field. Likewise, the study of Anusornnorakarn (2002) indicated that the students' level and major field were factors in reading ability. In addition, Suknantapong et al (2002) reported that Humanities students performed significantly better than Social Sciences students in reading skills.

Our questionnaire was developed largely as the result of an initial attempt to modify for a Thai audience questionnaire instruments for testing vocabulary and grammar skills that had been developed in the United States and published on the Internet. However, we quickly realized that these questionnaires were mainly designed for face to face interviews and were too complicated and time-consuming to be feasible in our study. We wanted a simple and quick instrument that could be used in the classroom without unduly disrupting the teaching process, but were unable to find one despite extensive literature search. We developed our questionnaire by choosing ten words sampled from the introductory chapter of a Statistics text book used by many thousands of first-year students at a large Australian university. The ten words were all words with meanings that would be understood by any reasonably fluent university student in an English-speaking western country, but not necessarily by a Thai student. We also carefully chose one synonym (confirmed by Microsoft Word's Thesaurus Language Tool) and four distracters for each word, including an antonym, a similar-sounding word, a similarly written word, and an unrelated word.

The fact that only 39 of the 785 students (including 20 majoring in Languages in the Faculty of Humanities and 10 majoring in the Faculty of Science and Technology) knew the meaning of all ten words indicates that the test was not too easy. On the other hand, the fact that only one word ("useful", for which most respondents selected the antonym "useless") stumped more than 60% of the students indicates that it was not too difficult. And the fact that it was completed within 5 minutes by two-thirds of the students makes it a feasible non-invasive instrument for classroom use. Moreover, the fact that only 2% of the respondents were unwilling to provide their student number enables their responses to be correlated straightforwardly with their demographic and enrolment details via the university records database.

Undoubtedly, our test needs extensive further testing and development before it can be recommended unreservedly to a wider audience. Its validity might be expected to depend largely on the choice of words and their distracters. Clearly, if it is to be used routinely for assessment a much larger population of suitable words (and synonyms and distracters) will need to be developed, from which ten (or possibly more) items will need to be selected for each instrument. It will probably be necessary to customize the instrument for particular groups of students, and to develop various levels of difficulty so that a student who satisfactorily completes the test can proceed to a higher level.

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Table 1. Distributions of categorical independent variables

Predictor	Category	Count	Mean Score	P-value
Gender	Male	168	5.45	0.893
	Female	617	5.42	
Religion	Islam	395	5.38	0.517
	Other	390	5.50	
Province	5 Southern Border Provinces	467	5.36	0.297
	Other Provinces	318	5.55	
High School	Islamic Religious School	280	5.41	0.810
	Other School	505	5.46	
Faculty	Education	181	5.48	<0.001
	Humanities & Social Sciences	161	6.38	
	Science & Technology	259	5.56	
	Islamic Studies College	98	4.12	
	Communication Science	41	4.10	
	Fine & Applied Arts	45	5.29	
Student seniority level	1st Year	203	5.90	<0.001
	2nd Year	272	4.60	
	3rd Year	168	6.16	
	4th or higher Year	142	5.54	
Major field of study	Science	344	5.70	<0.001
	Communication Science	55	3.82	
	Social Sciences	28	4.64	
	Education	19	5.53	
	Islamic Studies	104	4.12	
	Arts	46	5.30	
	Languages	189	6.30	
Degree Duration	2 or 4 years	712	5.52	0.006
	5 years	73	4.67	
Grade in English 1	A or B	94	5.97	0.028
	Other grade or not yet taken	691	5.37	

Table 2. Multiple Linear Regression Model

Independent variables	Coef	SE	p-value
Intercept	6.678	0.323	<0.001
Student seniority level			<0.001
1st Year	0*		
2nd Year	-1.145	0.241	<0.001
3rd Year	0.139	0.270	0.606
Up to 4th Year	-0.605	0.260	0.020
Major field (including faculty)			<0.001
Communication Science (55)	-2.628	0.418	<0.001
Islamic Studies (104)	-1.928	0.329	<0.001
Social Sciences (Humanities) (28)	-1.701	0.504	0.001
Languages (Education) (76)	-1.299	0.352	<0.001
Arts (46)	-0.886	0.414	0.033
Education (19)	-0.819	0.577	0.156
Science (Science & Tech) (259)	-0.594	0.279	0.033
Science (Education) (85)	0*		
Languages (Humanities) (113)	0.917	0.346	0.009
(Number of students)		* Referent group	

Appendix: Questionnaire Used in Study

English Test for Students at Prince of Songkla University, Pattani Campus

This test has been developed as part of a Research Methodology Masters Degree student's thesis. Its purpose is to test the English vocabulary of students at Prince of Songkla University, Pattani Campus. The results will be kept confidential but are aimed to improve students' English skill. It would be highly appreciated if you do this test carefully.

Thank you very much for your kind cooperation.

Student ID……………………………..

Start at …………………hrs. Finish at …………………..hrs.

Please circle around a word that has the same meaning as the given word.

Example:

exit	exist	exhibit	(way out)	enter	exciting

1	**dirty**	clean	dusty	strong	thirsty	unclean
2	**useful**	empty	help	practical	used	useless
3	**disease**	bad	decease	dizzy	health	sickness
4	**push**	bush	catch	press	pull	punish
5	**research**	ignore	random	reach	resource	study
6	**damage**	dam	harm	kill	open	repair
7	**propose**	create	dispose	marry	purpose	suggest
8	**forecast**	back	data	forward	predict	throw
9	**hazard**	benefit	danger	hard	relevant	risky
10	**important**	big	close	import	significant	trivial