

The Relationship between Reading Behaviors and Reading Proficiency of Thai Students: An observation in L1 and L2*

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Abstract

This study aimed to examine Thai university students' Thai and English reading behaviors, reading proficiency, and the relationship between the behaviors and the proficiency. Five hundred Mae Fah Luang University students were tested and asked about their reading proficiencies and behaviors. For reading behaviors, it was found that students normally read Thai text for pleasure but English text for knowledge while their speed of read in both languages vary greatly. In addition, Thai reading hours seems to correlate with Thai and English reading speed while English reading hours correlates with only the English reading speed. For reading proficiency, surprisingly, English reading proficiency of Thai students is averagely not significantly lower than that of Thai. For the relationship, it was found that Thai reading proficiency correlates with Thai reading for

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pleasure and Thai reading speed while English proficiency correlates with English reading for knowledge and both Thai and English reading speed.

Keywords: reading behaviors, reading speed, reading proficiency

บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อวิเคราะห์พฤติกรรมการอ่าน สมรรถภาพในการอ่าน และความสัมพันธ์ระหว่างพฤติกรรมและสมรรถภาพในการอ่าน ภาษาอังกฤษและภาษาไทยของนักศึกษาไทย นักศึกษามหาวิทยาลัยแม่ฟ้าหลวง จำนวน 500 คนที่เป็นกลุ่มตัวอย่างได้ทำการตอบแบบสอบถามและแบบทดสอบเกี่ยวกับพฤติกรรมและสมรรถภาพในการอ่าน ผลการศึกษาพบว่า ในด้านพฤติกรรมการอ่าน นักศึกษาโดยปกติจะอ่านข้อความภาษาไทยประเภทให้ความบันเทิงแต่อ่านข้อความภาษาอังกฤษประเภทให้ความรู้ ในขณะที่ความเร็วในการอ่านข้อความสองภาษาแตกต่างกันมาก นอกจากนี้ ยังพบว่าระยะเวลาที่ใช้ในการอ่านภาษาไทยมีความสัมพันธ์กับความเร็วในการอ่านภาษาไทยและภาษาอังกฤษ ในขณะที่ระยะเวลาที่ใช้ในการอ่านภาษาอังกฤษมีความสัมพันธ์กับความเร็วในการอ่านภาษาอังกฤษเท่านั้น สำหรับสมรรถภาพในการอ่านนั้น เป็นที่น่าแปลกใจว่า นักศึกษาไทยมีสมรรถภาพในการอ่านภาษาอังกฤษต่ำกว่าภาษาไทยอย่างไม่มีนัยสำคัญทางสถิติ นอกจากนี้ยังพบว่าสมรรถภาพในการอ่านภาษาไทยมีความสัมพันธ์กับการอ่านข้อความภาษาไทยเพื่อความบันเทิงและความเร็วในการอ่านภาษาไทย ส่วนสมรรถภาพในการอ่านภาษาอังกฤษมีความสัมพันธ์กับการอ่านข้อความภาษาอังกฤษเพื่อความรู้และความเร็วในการอ่านภาษาไทยและภาษาอังกฤษ

คำสำคัญ: พฤติกรรมการอ่าน; ความเร็วในการอ่าน; สมรรถภาพในการอ่าน

Reading brings about knowledge and imagination. The more one reads the more he/she accesses useful information for individual development. Unfortunately, reading skill is not innate by nature but it needs learning and training. According to the survey on reading behaviors of Thai people by National Statistical Office (2008), reading is not a regular habit for Thais. It was reported that 43 from 65 million Thai people (66.3%) engaged in external reading activities. Only 15 million of the whole population read more than four days a week. Thai people spent only 39 minutes a day in reading—which means they use only 2.7% of time per day to read. This indicates that Thai is not a reading society even though more than 80% of Thai citizens are literate. To support this fact, Thawilthai (2008) found that Thai university students use quite limited types of reading strategies in reading. In addition, Pratoptep (2007) reported an interesting fact that levels of reading proficiency of Thai students do not significantly improved no matter they applied self-regulated learning framework or not.

However, Kanittasen (2008) found that the proficiency in reading English of university students can be varied from high to very low levels depending on their majors. Students in humanities and social science tend to be more efficient in reading than those in science and technology.

Among the overall population, students are the group which is expected to have higher reading hours than others because they are in educational institution and are in the age of learning. In other words, their social role is an important force for them to spend more time with reading comparing to small children, working-aged people, or the elderly. Accordingly, questions about their reading behaviors and reading proficiency such as, how much time do Thai students spent in reading? How fast they can read? And for what purposes do students read? are raised.

It cannot be denied that today English plays a very significant role in the global society. Benefits from knowing English are not only in communicating with other speakers of English but English is also an opened window to various societies, cultures, and fields of study. For Thai people, Thai language is the first and the official language while English is taught in school as the first foreign language since Grade 1. It is one among eight main subjects Thai students have to take until high school (12 years from Grade 1 to 12). From the report of the Ministry of Education, English proficiency of Thai students at Grade 12 is quite low (the average score is less than 50 out of 100). Apart from teaching skills and pedagogy of teachers, it might be because English is mostly use only in class (less than 10 hours a week), Thai students do not have external reading habits, and Thai environment does not serve students learning English—English is not necessary for Thai daily life. Having low English proficiency nowadays is an important obstacle for those students to pursue their education in higher level such as undergraduate and graduate. It is not only English but Thai proficiency of Thai high school students is also low in average.

From the aspect of language acquisition, there seems to be, to some extent, the relationship between first and second language as found in the interference of L1 in L2 learning or in the usage of L2 learners. Thongchalerms (2011) said that the interference can be found in phonetic, lexical, syntactic, and paragraph levels. However, most research about interference of Thai language on other foreign language has been focused on writing skill (Pingmuang, 2003; Khamput, 2004; Sakonthavat, 2005; Boonklub, 2008). Accordingly, it is questioned that is there any relationship between L1 and L2 reading proficiency? Do reading behaviors correlate to reading proficiency? And does the relationship occur within (L1 reading

behaviors > L1 reading proficiency or L2 reading behaviors > L2 reading proficiency) or/and across languages (such as L1 reading behaviors > L2 reading proficiency or L2 reading behaviors > L1 reading proficiency)?

Mae Fah Luang University is an autonomous governmental university located in Chiang Rai—the top most province of Thailand. It is a mid-sized university with approximately 10,000 students and is the only governmental university uses English as medium of instruction for almost every curriculum in undergraduate level. The use of English in the university includes lecturing, teaching materials, and evaluations (such as quizzes, assignments, examinations, and reports). This means that students have to engage in English-medium instruction which automatically increases their exposure to the English language. Such university's teaching system hopefully brings up students' English language proficiency. Although the fact about the interference of L1 upon L2 learning is still exist, in the case of reading skill, it is still questioned that Thai language (L1) support or distort English language learning (L2). According to the above rationale, the objectives of this study are to examine Thai and English reading behaviors and reading proficiency in the following aspects;

- a. Thai and English reading behaviors of Thai students and their relationship
- b. Thai and English reading proficiency of Thai students and their relationship
- c. The relationship between reading behaviors and reading proficiency

Methods

Participants

Five hundred Mae Fah Luang University students were randomly selected as the participants of this study. All students were asked to fill in the questionnaire on reading behaviors, do English and Thai speed reading tests and reading comprehension tests.

Working Definitions

1. Reading behaviors

“Reading behaviors” is defined as the actual activities one performs on reading. It includes 1) number of hours spent per week in reading particular types of texts and 2) reading speed, how fast one could go through the text while reading?

2. Reading proficiency

“Reading proficiency” refers to the understanding of main idea and some details of the reading text. The measurement of reading proficiency in this study is done by the use of reading comprehension tests both in Thai and English

3. Reading speed

“Reading speed” is classified as a component of reading behaviors. In this study, reading speed is measure by “number of words per minutes” elicited from the use of Thai and English reading speed tests.

Tools

1. Reading behaviors

“Reading behaviors” is defined as the actual activities one performs on reading. It includes 1) number of hours spent per week in

reading particular types of texts and 2) reading speed, how fast one could go through the text while reading? Data concerning number of reading hours were collected by “The Reading Behaviors Questionnaire” while the data on reading speed were retrieved by the use of “Reading Speed Tests”.

1.1 The Reading Behaviors Questionnaire

The Reading Behaviors Questionnaire is designed for the quantitative measurement of time spent for reading activities. In doing this, three types of reading texts are given for the participants to inform number of hours they use for reading currently within a week. Texts are divided according to purposes of reading consisting of 1) reading for knowledge—such as textbooks, academic papers, journals, online textbooks and papers, knowledge-based magazines and websites—, and 2) reading for pleasure—such as novels, short stories, comic books, movie’s subtitles, entertainment-based magazines and websites. Such types of texts are provided for facilitating the participants to remind their recent reading experience. It is noted that blank spaces are also provided for the cases where other specific texts can be filled in.

In addition to the types of texts, two more columns for number of hours per week one spends for reading both Thai and English texts are provided as shown in Table 1.

Table 1 An example of items in Reading Behaviors Questionnaire

Reading Texts	Number of hours per week used in reading	
	Thai	English
1. Reading for knowledge 1.1 Textbooks and other teaching materials 1.2 Academic papers		
2. Reading for pleasure 2.1 Novels and short stories 2.2 Comic books		

1.2 Reading Speed Tests

Reading speed is classified as a component of reading behaviors. In this study, reading speed is measured as “number of words per minutes” by using Thai and English reading speed tests. In producing the reading speed tests, an approximate length of 600-word texts from one Thai and one English novels was excerpted. The texts were then retyped by dividing into 7-10 words per line with expanded font size.

In collecting data, the participants were informed that they will read the Thai text for three times in one minute each. At the beginning of every time, they have to restart reading from the beginning of the text. At the end of each time, they will make a slanting line (/) after the last word they read and write numbers 1, 2 and 3 for the first, the second, and the third time they read. The same process was also done for English reading speed test.

2. Reading proficiency

“Reading proficiency” refers to the understanding of main idea and some details of the reading text. The measurement of reading proficiency in this study is done by the use of reading comprehension tests both in Thai and English. The Reading Comprehension Tests were produced by selecting Thai and English reading comprehension exercises—30 questions each—from various websites. The type of texts used for reading comprehension is knowledge-based such as history, geography, nature, health and etc. In order to assure that the selected reading comprehension tests is reliable, both Thai and English tests were answered by a pilot group of 30 students. After that, content reliability tests were conducted. Accordingly, the reliability values for Thai and English Reading Comprehension Tests are 0.95 and 0.88 out of 1, respectively. This means that both reading comprehension tests are highly reliable.

The two reading comprehension tests were then completed by 500 students. Students were asked to answer the questions on the given answer sheet. Forty five minutes were given for each test.

Data collection process

Because a large number of students—500 students—were expected as participants and the collection time were during the semester when normal teaching classes were done, in order to gather a number of students, lecturers who were responsible for large classes were approached and asked for permission in letting their students participate on the project.

All the 500 students were tested their reading behaviors and reading proficiency as follows. Firstly, the students were asked to fill in the Reading Behaviors Questionnaire for 15 minutes. Then, they were tested

for the one-minute three-time of Thai and English Speed Reading Test. Finally, the participated completed the Thai and English Reading Comprehension Tests using 45 minutes for each as shown in Figure 1.

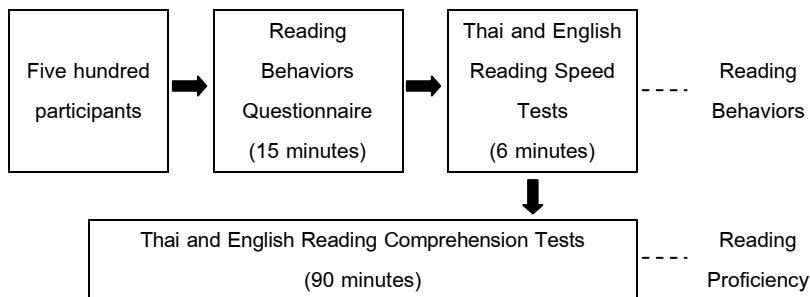


Figure 1 Data collection process

Data Analysis

After completing “Reading Behaviors Questionnaire”, “Thai and English Reading Speed Tests”, and “Thai and English Reading Comprehension Tests”, the result scores were recorded in the Excel Program and were analyzed according to the objectives as follows.

In relation to Thai and English reading behaviors of Thai students, data from 500 participants were used. Mean scores for both reading for knowledge and pleasure in the two languages were presented. In addition, for reading speed, data from the “Reading Speed Tests” were selected and calculated in terms of minimum and maximum number of words read per minute as well as the mean scores. Besides, the results from the three-time reading speed tests were also analyze by focusing on the increasing number of word participants can read for the second and the third times. Then, the correlation between Thai and English reading behaviors was examined.

For the analysis of Thai and English reading proficiency, reading proficiency scores of the 500 participants were sorted. Then, the participants with 50 highest and 50 lowest scores were selected for the further analysis in this part. Next, minimum, maximum, and mean scores from the two languages reading proficiency tests were presented. Moreover, correlation between Thai and English reading proficiency scores was analyzed.

Lastly, for the relationship between reading behaviors and reading proficiency correlations between subcomponents of reading behaviors ((1) number of reading hours in Thai and English, (2) purposes of reading, (3) reading speed) and reading proficiency (Thai and English reading proficiency scores) were investigated. It should be noted that data from 100 students (50 highest and 50 lowest) were used for the analysis in this part.

Results

Reading behaviors of Thai students

Reading behaviors refer 1) to the number of hours spent in reading for different types of texts and 2) reading speed of the students. From the data of 500 Thai students, Table 2 shows mean number of hours Thai students spent on Thai and English text reading in one day.

Table 2 Mean number of hours per day Thai students spent on Thai and English reading for different purposes

	Mean number of hours per day (hours)		
	Knowledge	Pleasure	Total
Thai reading	3.36	5.30	8.66
English reading	3.06	2.42	5.48

From Table 2, it can be seen that the students spent their time exposing to Thai and English text approximately 15 hours a day ($8.66+5.48=14.14$). The average number of 15 might seem to be high but for the case of university students who are in the age of studying, this can be understandable. Moreover, the number does not include just only reading various types books but it also include the use of internet and social media which are very popular among university students today. In addition, it is observed that Thai students normally read for pleasure rather than for knowledge. In other words, apart from study hours, Thai students prefer reading and exposing something more entertaining in order to relax themselves from studying. On the other hand, for English, reading for knowledge seems to be more important for them than reading for pleasure. This might be because the university uses English and medium of instruction. Students are required to perceive English text through teachers' lectures, textbooks, supplementary materials, quizzes, and examinations. As for Thai students who study English as a foreign language, they have to work hard in order to be able to catch up and follow the lessons throughout the semesters.

It is said that reading is not an innate skill of human beings. Accordingly, to be able to read, one has to learn to know at least characters, their pronunciations and combinations, and their meanings. Reading fast or slow depends on individual habit and training. From the use of "Reading Speed Test", Table 3 illustrates maximum, average (mean), and minimum number of words Thai students can read both Thai and English text in one minute.

Table 3 Thai and English reading speed of Thai students

	Reading speed (words per minute)	
	Thai	English
Maximum	620	373
Average	249	149
Minimum	107	14

Table 3 shows that as mother language, Thai students can normally read Thai text faster than the English text (249:149 words per minute in average). Consider the case who read the fastest, it can be seen that the fastest student for Thai language reading is two times faster than the fastest English language reader (620:373 words per minute). For the slowest cases, the gap between Thai and English reading speed is dramatically expanded (107:14 words per minutes). The results obviously show that speed reading in first language is basically faster than that of the second or foreign language at least because you use and expose with the first language every day.

It should be noted that the participants were asked to do the Reading Speed Tests for three times. In order to examine the nature of reading repeatedly and its effects on first and foreign language, average number of words read per minute and the increased number of words read for the second and the third times of reading are presented in Table 4.

Table 4 Average number of words per minute for the three times of reading and the number of words increased after repetitive readings (the second and the third times)

Times	Average number of words per minutes	
	Thai	English
	no. of words (no. of words increased)	no. of words (no. of words increased)
1	249	149
2	328 (+79)	186 (+37)
3	393 (+65)	212 (+26)

From Table 4, it was found that students are able to read more or faster when they read both Thai and English texts for the second and the third times. This indicates that the information stored in their working memory (short-term memory) is recalled and help them go through the text faster. However, comparing the reading speed in Thai and English, it can be seen that the increased number of words for Thai text is higher than that of English (+79:+37 for the second time and +65:+26 for the third time). This evidence conforms to the finding in Table 3 about the dominance of first language proficiency over the second or foreign language. Although the number of words per minute will increase when the students read again and again, the rate of increase does not seem to increase. Consider from the increased number of words for the second and the third times of reading, for Thai text, it is +79 and +65, while for English text, it is +37 and +26 respectively. The non-increasing number of words might show readers' normal reading capacities which have nothing to do with information retrieval in their working memory but this might rather deal with the long-term memory because the readers have to work with new information.

So far, two kinds of reading behaviors were investigated. It is questioned, then, that will readers who spent a lot of time in reading read faster than the ones who seldom read? And as first language, does reading Thai help reading English faster? Accordingly, correlation values between the number of reading hours and reading speed were calculated as shown in Table 5

Table 5 Relationship between number of reading hours and reading speed

Component 1	Component 2		df	r value
Thai Reading hours	Reading speed	Thai	100	0.27054**
		English		0.22081*
English Reading hours	Reading speed	Thai		0.09147
		English		0.28703**

$$* r \geq 0.197, p < 0.05; ** r \geq 0.256, p < 0.01$$

Consider from Thai reading hours in relation to speed reading, it was found from Table 5 that, according to Pearson correlation, the correlation value between Thai reading hours and Thai reading speed is highly significant, $r(100) = 0.27054, p < 0.01$). In addition, the correlation between Thai reading hours and English reading speech is also high, $r(100) = 0.22081, p < 0.05$). This means that students who spent a lot of time reading and exposing with Thai texts tend to be able to read Thai and English text fast. On the contrary, students who do not read Thai much tend to be slower in both reading Thai and English.

However, as a foreign language, Table 5 illustrates that English reading hours have no correlation with Thai reading speed. In other words, the speed in Thai reading does not depend on how much one reads English texts. In addition, it is clear that English reading hours correlate with English reading speed, $r(100) = 0.28703, p < 0.01$.

Reading proficiency of Thai students

In relation to reading proficiency of Thai students, participants were asked to complete Thai and English Reading Comprehension Tests. With the total of 30, Table 6 illustrates the maximum, average and minimum scores.

Table 6 Maximum, average and minimum scores for Thai and English Reading Comprehension Tests

	Reading comprehension scores (total scores = 30)	
	Thai	English
Maximum	27	27
Average	17.7	14.6
Minimum	0	0

From Table 6, it is surprising that Thai students have equal minimum and maximum Thai and English comprehension tests. However, the average scores show that students tend to have higher understanding for the Thai test than the English test. In addition, from the examination of the relationship between Thai and English proficiencies of the Thai students, it was found that Thai and English proficiencies closely correlate, $r(100) = 0.3014$, $p < 0.01$).

Relationship between reading behaviors and reading proficiency

In this part, the relationship between reading behaviors and reading proficiency was examined. For reading proficiency (Component 1), it was divided into Thai and English reading proficiency. For reading behaviors (Component 2), they were split into total Thai and English reading hours, Thai and English number of hours in reading for knowledge

and reading for pleasure, and Thai and English reading speed. The correlation between Component1 and Component 2 was done by calculating correlation values (*r* values) using the Excel Program. As the results, Table 7 illustrates correlation analysis between reading proficiency and reading behaviors.

Table 7 Correlation analysis (*r* value) between reading proficiency and reading behavior

Component 1	Component 2		df	r value
Thai Reading Proficiency	Reading hours	Thai	100	0.15205
		English		0.113736
	Reading for knowledge	Thai		0.077908
		English		0.068992
	Reading for pleasure	Thai		0.228573*
		English		0.171829
	Reading speed	Thai		0.203336*
		English		0.084078
English Reading Proficiency	Reading hours	Thai	100	0.051638
		English		0.117243
	Reading for knowledge	Thai		0.009772
		English		0.215854*
	Reading for pleasure	Thai		0.105072
		English		0.138012
	Reading speed	Thai		0.197394*
		English		0.263723**

* $r \geq 0.197$, $p < 0.05$; ** $r \geq 0.256$, $p < 0.01$

From Table 7, it can be seen that there are some correlation between Thai reading proficiency and reading speed, $r(100) = 0.203336$,

$p = 0.05$, as well as reading for pleasure $r(100) = 0.228573$, $p = 0.05$. This shows that students with high reading proficiency of Thai tends to have high reading speed and spent a lot of time for external reading while student with low Thai reading proficiency do not normally read much and their reading speed is tentatively low.

In relation to English reading proficiency, Table 7 illustrates some correlations with reading English for knowledge, $r(100) = 0.215854$, $p = 0.05$, Thai reading speed, $r(100) = 0.197394$, $p = 0.05$, and English reading speed, $r(100) = 0.263723$, $p = 0.01$, respectively. These can be interpreted that Thai students who have high English reading proficiency usually read texts which are related to their study and something enhancing their knowledge. Moreover, this group of students tends to have high level of Thai and English reading speed. On the other hand, Thai students with low level of English reading proficiency seem to spend very less time reading English textbooks. Besides, their reading speed both for Thai and English is quite low.

In sum, reading proficiency in the particular language seems to go along with reading speed of that language. Moreover, for Thai which is the first language of Thai people, reading ability tends to have some relationship with the number of hours spent in reading for pleasure while for English which is a foreign language, reading ability tends to have some relationship with the number of hours spent in reading for knowledge. It might be because the students acquire linguistic knowledge of their first language (Thai) and also expose with surrounded environment through Thai rather than English. Accordingly, it is easier for them to learn and look for other information from elsewhere in addition to class time using Thai language. Then their exposure with something entertaining is mostly in

Thai. On the other hand, in Thai society, regardless of personal interest, English can be mostly exposed in classroom. Accordingly, new knowledge and information that come with the English language will be academic format like textbooks, journals or other academic texts. Moreover, as a foreign language, students do not fully acquire English as the native speakers so there are some limitations for them to access some types of non-academic texts such as texts with slang and spoken language. As a consequence, Thai students rarely read English external reading in their leisure time.

Discussion

From the investigation of reading behaviors, it was found that as a foreign language Thai students in average spent less time reading English than Thai (9 : 5 hours/day). As their first language, the students can choose other external readings for their pleasure in addition to reading what related to their studies. On the other hand, as a foreign language, they focus their attention mainly on the academic reading which provides knowledge related to their studies. This might be because of the limitation of students in English linguistic knowledge such as vocabulary and grammar. It should also be noted that, the numbers of hours spent in reading both Thai and English text for knowledge are similar (about 3 hours/day). This result might be affected by the fact that the participants are studying in Mae Fah Luang University where English is used as medium of instruction. As a consequence, they are forced to expose with English everyday. It might be said that students who study in Thai-medium universities—which are majority of Thai universities—tend to spent less time with English text. This might affect students' reading speed and reading proficiency in general. As found in the study that students who

spent a lot of time in reading tend to be able to read fast; and the students who can read fast tend to be the ones who have high reading proficiency. In other words, if you read a lot, you seem to be able to read fast and comprehend the message well. Accordingly, it is important to encourage students to read a lot more because this might help enhance their reading ability. In order to draw students' attention, teachers might set up reading activities as extracurricular activities such as a reading contest or provide their students non-academic reading assignments using authentic audio visual materials such as songs, soundtrack movies with English subtitles, games, and social network and etc. In addition to the promotion of reading exposure, students' attitudes and motivation to learn English will be increased.

It was also found that students with high English reading proficiency tend to be Thai and English speed readers. Moreover, Thai speed readers tend to be the ones who read Thai for pleasure, while English speed readers tend to be the ones who read English for knowledge. Accordingly, it might be suggested that, for Thai students, the improvement of reading skill is based on the exposure with external reading for Thai language and academic reading for English language. Such findings suggest the importance of types of text that teachers might prepare for their students in reading activities. Topics of their interest should also be taken into account because to develop reading ability cannot be done in a short period of time so their interests must be primarily used in order to gain their attention to reading.

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