

## การศึกษาความสัมพันธ์ระหว่างความอดทนต่อภาวะกำกวมทางภาษา และสมรรถภาพ ด้านการเขียนของผู้เรียนชาวไทยที่เรียนภาษาอังกฤษ เป็นภาษาต่างประเทศ

เบญจวรรณ ดอกไม้\*

### บทคัดย่อ

งานวิจัยนี้มุ่งศึกษาความสัมพันธ์ระหว่างความอดทนต่อภาวะกำกวมทางภาษา (Ambiguity tolerance) และสมรรถภาพด้านการเขียนของผู้เรียนชาวไทย ที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ โดยมีผู้เข้าร่วมในงานวิจัยเป็นนักศึกษามหาวิทยาลัยหัวเฉียวเฉลิมพระเกียรติ คณะศิลปศาสตร์ หลักสูตร ภาษาอังกฤษ-ภาษาจีน จำนวน 103 คน เครื่องมือที่ใช้ในการวิจัย ได้แก่ แบบทดสอบภาวะกำกวมทางภาษา (Ely, 1995) และแบบทดสอบทางภาษาอังกฤษสำหรับผู้เรียนที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ (TOEFL ITP) การวิเคราะห์ข้อมูลประกอบไปด้วยการวิเคราะห์ความแปรปรวน (ANOVA) การเปรียบเทียบค่าเฉลี่ยรายคู่ (Scheffe Post Hoc Test) และการหาค่าสหสัมพันธ์แบบเพียร์สัน (Pearson Correlation)

ผลการวิจัยพบว่า ความอดทนต่อภาวะกำกวมทางภาษาและสมรรถภาพการเขียนมีความสัมพันธ์กัน อย่างมีนัยสำคัญ กล่าวคือถ้าผู้เรียนที่มีระดับความอดทนต่อภาวะกำกวมทางภาษามาก จะทำให้คะแนนของการทดสอบสมรรถภาพทางการเขียนมากขึ้นตามไปด้วย ทั้งนี้งานวิจัยได้เสนอข้อเสนอแนะและการอภิปราย ผลที่เกี่ยวข้อง อีกด้วย

**คำสำคัญ :** ความอดทนต่อภาวะกำกวม สมรรถภาพการเขียน การเรียนรู้ทางภาษา  
ผู้เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

\* อาจารย์ประจำสาขาวิชาภาษาอังกฤษ คณะศิลปศาสตร์ มหาวิทยาลัยหัวเฉียวเฉลิมพระเกียรติ

## A Study of Relationship between Ambiguity Tolerance and English Writing Proficiency of Thai EFL Learners

Benjawan Dokmai

### Abstract

This study aims to investigate whether there is a relationship between ambiguity tolerance and writing proficiency among Thai EFL learners. The participants are 103 undergraduate students who are enrolled in International English-Chinese Program of Liberal Arts Faculty, Huachiew Chalermprakiet University. The instruments consist of the Second Language Tolerance of Ambiguity Scale (SLTAS) (Ely, 1995) and the Test of English as a Foreign Language for Institutional Testing Program (TOEFL ITP). An analysis of variance (ANOVA), the Scheffe Post Hoc Test, and the Pearson Correlation are conducted to analyze the obtained data. The results indicate that ambiguity tolerance is significantly correlates with writing proficiency. The more tolerance of ambiguity the EFL learners are, the more scores in writing proficiency they have. Furthermore, the recommendations and discussions are also presented regarding the findings of the study.

**Keywords :** Ambiguity Tolerance, Writing proficiency, Language learning, English as a Foreign Language, EFL learners

## Introduction

In foreign language learning, there are a lot of different teaching methodologies and learning strategies that help learners to promote and achieve their language acquisition. According to Brown (2000), the awareness of individual differences such as left-brain and right-brain dominance, or impulsive and reflective learning, has been necessary for both learners and teachers to be realized since these preferences of individuals have been able to greatly affect their learning. In addition, language is full of ambiguity and contradictory information that is opposite to their learners' knowledge background or their first language: words or vocabulary whose meaning can vary regarding the context, grammar rules that are not consistent due to certain exceptions, and cultural context that is different from their native culture (Brown, 2000). Thus, it is essential for foreign language learners to tolerate ambiguity occurring during their learning, but this is not simply to do and depends on one's learning style and preference. One of the necessary features which can assist learners to handle and overcome these ambiguous circumstances in language learning is ambiguity tolerance (AT) (Ehrman & Leaver, 2003).

Ambiguity tolerance (AT) is one of learning styles and individual differences which enable learners to "tolerate ideas and propositions that run counter to their own belief system or structure of knowledge" (Brown, 2000, p. 119) in order to clearly understand stimuli (Ehrman & Oxford, 1990). Erten and Topkaya (2009) revealed that learners who had more tolerance to language ambiguity intended to be more successful in reading process. In accordance with EL-Koumy (2000) and Kondo-Brown (2006), there was the positive relationship between ambiguity tolerance and reading comprehension in terms of influential factor that affected reading ability. Moreover, the findings of Chapelle (1983) showed that the tolerance of ambiguity was associated with success in English learning, influencing on end-of-semester English placement test and English skill tasks. Based on another study conducted by Lee (1999) who discovered that the degree of tolerance of ambiguity affected task-based writing proficiency in a positive way. In other words, learners who had high tolerance of ambiguity were more likely to get higher scores in task-based writing than the other group which had lower tolerance of ambiguity.

Since research studies regarding ambiguity tolerance generally emphasized on language learning achievement and learning strategies (Sa'dabadi, 2014), few studies aimed to explore the relationship between ambiguity tolerance and writing proficiency (e.g. Tindall, 2005; Erten & Topkaya, 2009; Kamran & Maftoon, 2012) which have still received attention and are part of many standardized tests. In addition, there were studies conducted about affective factors in language learning, but few studies investigated ambiguity tolerance and language proficiency specific to Thai students in learning English as a foreign language (EFL) (e.g. Khamkhien, 2010; Khamkhien, 2012; Samoilova, Thanh, & Wilang, 2017).

Therefore, this present study objects to examine whether ambiguity tolerance has a relationship with Thai EFL learners' English writing proficiency which is defined, in this study, as the ability to recognize structural and grammatical points as well as written expression in standard written English (Educational Testing Service (ETS), 2016). All in all, the investigation of the relationship would be the guideline for teachers to promote and take an awareness of ambiguity tolerance which inclines to affect writing proficiency.

### **Objective of the study**

This present study aims to investigate whether there is a relationship between ambiguity tolerance and writing proficiency among Thai EFL learners.

### **Research Methodology**

The participants included 103 students who were in International English-Chinese Program of Liberal Arts Faculty, Huachiew Chalermprakiet University of the 2016 academic year, randomly selected and calculated by using the sample size determination of Krejcie and Morgan (1970). All of the participants were Thai students who studied English as a foreign language with the age range of 19-23.

The instruments were the Second Language Tolerance of Ambiguity Scale (SLTAS) (Ely, 1995) and the Test of English as a Foreign Language for Institutional Testing Program (TOEFL ITP). Since the scale of the SLTAS (Ely, 1995) was proved to have a high internal consistency of .84, specially designed to measure the construct of tolerance of ambiguity in the specific context of second language learning (Liu, 2015), and has been frequently used by researchers in linguistic domain, the SLTAS was used to measure participants' level of ambiguity tolerance which indicated 3 levels of ambiguity tolerance namely High, Moderate, and Low. In this questionnaire, there were 12 items with a five-point Likert scale from "Strongly Disagree" to "Strongly Agree". The items were meant to measure participants' agreement level with statements depicting intolerance of ambiguity in given situations. The higher the score obtained from the SLTAS, the more intolerant the person is.

Additionally, the Test of English as a Foreign Language for Institutional Testing Program (TOEFL ITP) was used to measure participants' English proficiency in writing. The test was selected from the TOEFL ITP test under the section of structure and written expression. This section included 40 items in multiple choice test, and it had to be answered in 25 minutes. In addition to the validity of the TOEFL test, a number of studies have been conducted to prove the validity of the test and demonstrated the relationship between its scores and English language placement test for international students (Maxwell, 1965; Upshur, 1966).

The two instruments were distributed by the researcher in the class time. By doing this, the Second Language Tolerance of Ambiguity Scale (SLTAS) was administered to the

participants. The researcher clearly explained the instruction and the purpose of the research. Also, the researcher informed that there was no correct answer and their responses were confidential. Immediately after the SLTAS, all participants completed the Test of English as a Foreign Language for Institutional Testing Program (TOEFL ITP). The limited time for the whole test was 25 minutes and the total score of the test was 40 points.

The data obtained from both SLTAS Questionnaire and the raw scores of TOEFL ITP were statistically analyzed in the form of descriptive statistics using the SPSS 23 statistical program. Furthermore, a series of one-way ANOVA was conducted to compare two factors between the degree of ambiguity tolerance (Independent Variable) and the writing proficiency scores (Dependent Variable). In addition, the Pearson Correlation was also performed to determine the relationship between these two factors.

## Research Results

Descriptive statistics in Table 1 were utilized to describe the degree of ambiguity tolerance, analyzed from the Second Language Ambiguity Tolerance Score (SLATS). The degree depended on how much the participants agreed on the statement depicting intolerance of ambiguity. In other words, agreement with the statement presented a sign of intolerance and inclined to be intolerant to ambiguity.

**Table 1 Means and Standard Deviations from the SLTAS**

SLTAS Items	N	Mean	SD
1. When I'm reading something in English, I feel impatient when I don't totally understand the meaning.	103	3.22	.999
2. It bothers me that I don't understand everything the teacher says in English.	103	3.31	1.197
3. When I write English compositions, I don't like it when I can't express my ideas exactly.	103	3.50	.938
4. It is frustrating that sometimes I don't understand completely some English grammar.	103	3.61	1.114
5. I don't like the feeling that my English pronunciation is not quite correct.	103	4.02	.907
6. I don't enjoy reading something in English that takes a while to figure out completely.	103	2.73	1.122
7. It bothers me that even though I study English grammar, some of it is hard to use in speaking and writing.	103	3.38	1.011

SLTAS Items	N	Mean	SD
8. When I'm writing in English, I don't like the fact that I can't say exactly what I want.	103	3.91	1.030
9. It bothers me when the teacher uses an English word I don't know.	103	2.97	1.116
10. When I'm speaking in English, I feel uncomfortable if I can't communicate my ideas clearly.	103	3.56	.946
11. I don't like the fact that sometimes I can't find English words that mean the same as some words in my own language.	103	3.51	1.056
12. One thing I don't like about reading in English is having to guess what the meaning is.	103	2.83	1.115
<b>Total</b>	<b>103</b>	<b>3.38</b>	<b>1.046</b>

According to Table 1, an anchor of “Undecided” of 5-likert scale was a border line ( $M=3.00$ ), meaning neither tolerance nor intolerance of ambiguity. The findings showed that the participants had moderate level of ambiguous tolerance ( $M=3.38$ ,  $SD=1.046$ ) regarding the value which was above the border line.

Additionally, all statements were around the midpoint ( $M=3.38$ ) of 5-likert continuum except statement no.5 ( $M=4.02$ ). As for the statement focusing on writing skills (items 3, 7, 8), they were above the border line with average point of 3.60. The statements of items 1, 6, and 12 represented the intolerance on writing skills and score around the midpoint ( $M=2.90$ ). Similarly, the statements (item 2, 7, 9, 10) depicting speaking and listening skills were also around the midpoint ( $M=3.31$ ). In contrast, the participants seemed to have less tolerance of ambiguity in grammar, pronunciation, and vocabulary (items 4, 5, 11) with average point of 3.61, 4.02, and 3.51, respectively (See Table 1).

**Table 2 Clusters of Ambiguity Tolerance**

Ambiguity Cluster	N	% of Total N	Mean	Std. Deviation	Minimum (SLTAS)	Maximum (SLTAS)
High (H)	7	6.8	26.14	2.193	22.0	28.0
Moderate (M)	63	61.2	37.95	4.221	29.0	44.0
Low (L)	33	32.0	48.55	3.501	45.0	56.0
Total	103	100.0	40.54	7.352	22.0	56.0

An analysis of K –means cluster was conducted on SPSS to categorize participants into three different clusters of ambiguity tolerance according to their Ambiguity Tolerance (AT) scores from the SLTAS, namely low, moderate, and high as can be seen in Table 2.

Moreover, descriptive statistics including cluster analysis revealed that most of the participants (n=63; 61.2%) had moderate levels of ambiguity tolerance (mean=37.95). The partial proportion of the participants (n=33; 32.0%) had low levels of tolerance (mean=48.54) while the small proportion (n=7; 6.8%) had high levels of tolerance (mean=26.14) (See Table 2).

**Table 3 ANOVA Results of Differences among AT Clusters**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3987.657	2	1993.829	130.666	.000
Within Groups	1525.896	100	15.259		
Total	5513.553	102			

An analysis of variance (ANOVA) was also proceeded to validate whether there was distinction among the three clusters of ambiguity tolerance according to the SLTAS scores. The results showed that there was a statistically significant difference (P=0.00) at a significance level of 0.05 which is shown in Table 3.

**Table 4 Descriptive Statistics for the Degrees of Ambiguity Tolerance and Writing Proficiency Scores**

AT Cluster	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum (Writing Score)	Maximum (Writing Score)
					Lower Bound	Upper Bound		
High	7	20.43	5.287	1.9983	15.539	25.318	11.0	27.0
Moderate	63	16.94	4.366	.5500	15.837	18.036	9.0	25.0
Low	33	15.49	3.946	.6869	14.086	16.884	8.0	23.0
Total	103	16.71	4.425	.4360	15.844	17.574	8.0	27.0

A Series of one-way ANOVA was utilized to compare two factors between the degree of ambiguity tolerance and the writing proficiency scores as can be seen in Table 4. These descriptive statistics revealed that these three groups of ambiguous tolerance resulted in writing proficiency differently. As for the high ambiguity tolerance group, their average score of writing proficiency was 20.43 (M=20.43) with maximum score at 27.0. The next group was

moderate ambiguity tolerance with average score of 16.94 ( $M=16.94$ ) and maximum score at 25.0. The final group was low ambiguity tolerance with average score of 15.49 ( $M=15.49$ ) and maximum score at 23.0 (See Table 4).

**Table 5 the Scheffe Test**

(I) AT Cluster	(J) AT Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High	Moderate	3.4921	1.7126	.130	-.763	7.748
	Low	<b>4.9437*</b>	1.7887	.025	.499	9.388
Moderate	High	-3.4921	1.7126	.130	-7.748	.763
	Low	1.4517	.9237	.295	-.844	3.747
Low	High	<b>-4.9437*</b>	1.7887	.025	-9.388	-.499
	Moderate	-1.4517	.9237	.295	-3.747	.844

\* The mean difference is significant at the 0.05 level.

According to the Scheffe Post Hoc Test, the result indicated that a pair of high and low degree of ambiguous tolerance was statistically significant. The group of high ambiguity tolerance had more scores in writing proficiency ( $M=20.43$ ) than the group of low ambiguity tolerance ( $M=15.49$ ) (See Table 4).

**Table 6 Pearson Correlation between Ambiguity Tolerance and Writing Proficiency**

		Ambiguity Tolerance	Writing Proficiency
AT Score	Pearson Correlation	1	-.222*
	Sig. (2-tailed)		.024
	N	103	103
Writing Score	Pearson Correlation	-.222*	1
	Sig. (2-tailed)	.024	
	N	103	103

\*. Correlation is significant at the 0.05 level (2-tailed).



From Table 6, as for the correlation between ambiguity tolerance and writing proficiency of the participants, the Pearson Correlation coefficient revealed that ambiguity tolerance was significantly correlated with writing proficiency ( $r=-.222$ ,  $p=.024$ ) at significance level of 0.05. Additionally, the Pearson analysis demonstrated that the correlation between both of them was negative correlation and extremely weak ( $r=-.222$ ) (Hinkle, William, & Stephen, 1998, p.118).

## Discussion and Recommendation

The present study examined the relationship between tolerance of ambiguity and English writing proficiency in Thai EFL learners. The result showed that the group of high tolerance of ambiguity outperformed in writing scores better than low and moderate groups. In other words, the more tolerance of ambiguity the learners were, the more scores in writing proficiency they had. This result was also in accordance with the research conducted by Başöz (2015), Chapelle (1983), Khoshsima (2017), Lee (1999), Ezzati and Farahian (2016), and Sa'dabadi (2014) which indicated that there was a relationship between ambiguous tolerance and other related writing skills namely, vocabulary knowledge achievement, final exam score, translation errors, task-based writing proficiency, grammar acquisition, and cloze test performance, respectively.

Moreover, the study also insisted the importance of ambiguous tolerance among language learning and should be implemented in the classroom. Teachers are necessary to take an important role to promote and allow students to have awareness of ambiguity tolerance in their language learning. Leading and facilitating through the course to overcome ambiguous circumstances in learning enables them to have more tolerance of ambiguity and succeed more in foreign language learning, not only in writing skill performance (Ellis, 1994, p. 518). This is in line with the related literature of Mclain (1993), he stated that learners with high tolerance of ambiguity tended to take more risk, admit changes, and ignore unclear lingual elements, contributing them to be more achieved in foreign language learning.

However, this present study was not without limitations. The sample size was small and their educational context was not diverse. It is suggested having larger sample size with various context of educational background. Furthermore, the instrument used to measure participants' English proficiency in writing is the Test of English as a Foreign Language for Institutional Testing Program (TOEFL ITP) selected under the section of structure and written expression which was multiple choice of 40 items. It was recommended, for the future research, to use actual writing test with the TOEFL ITP.

## References

- Başöz, T. (2015). Exploring the relationship between tolerance of ambiguity of EFL learners and their vocabulary knowledge. *Journal of Language and Linguistic Studies*, 11(2), 53-66.
- Brown, H. D. (2000). *Principles of language teaching and learning*. White Plains, NY: Longman.
- Chapelle, C. (1983). *The relationship between ambiguity tolerance and success in acquiring English as a second language in adult learners*. Unpublished Doctoral Dissertation, Champaign, IL: University of Illinois at Urbana-Champaign.
- Educational Testing Service (ETS). (2016). *Test taker handbook: The TOEFL ITP assessment series*. NJ, USA.: Princeton.
- Ehrman, M., & Oxford, R. (1990). *Adult language learning styles and strategies in an intensive training setting*. *Modern Language Journal*, 74(3), 311-327.
- Ehrman, M., & Leaver, B. L. (2003). *Cognitive styles in the service of language learning*. *System*, 31, 393-415.
- El-Koumy, A. S. A. (2000). Differences in FL reading comprehension among high-, middle-, and low-ambiguity tolerance students. *Paper presented at the national symposium on English language teaching*. Ain Shams University, Egypt (ED 445534), March 21-23.
- Ely, C. M. (1995). Tolerance of ambiguity and the teaching of ESL. In Reid, J. M. (Ed.), *Learning styles in the ESL/EFL classroom* (pp. 87-95). NY: Heinle & Heinle Publishers.
- Erten, I. H., & Topkaya, E. Z. (2009). Understanding tolerance of ambiguity of EFL learners in reading classes at tertiary level. *Novitas-Royal*, 3(1), 29-44.
- Ezzati, M., & Farahian, M. (2016). Exploring tolerance of ambiguity and grammar achievement of advanced EFL learners. *Journal for the Study of English Linguistics*, 4(2), 1-12.
- Hinkle, D.E., William, W., & Stephen G. J. (1998). *Applied statistics for the behavior sciences (4th ed)*. NY: Houghton Mifflin.
- Khamkhien, A. (2010). Factors affecting language learning strategy reported usage by Thai and Vietnamese EFL learners. *Electronic Journal of Foreign Language Teaching*, 7(1), 66-85.
- Khamkhien, A. (2012). Demystifying Thai EFL learners' perceptual learning style preferences. *The Southeast Asian Journal of English Language Studies*, 18(1), 61-74.
- Khoshsima, H. (2017). An introduction to the ambiguity tolerance: As a source of variation in English-Persian translation. *International Journal of Applied Linguistics & English Literature*, 6(4), 91-103.
- Kondo-Brown, K. (2006). Affective variables and Japanese L2 reading ability. *Reading in a Foreign Language*, 18(1), 55-71.
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lee, E. (1999). The effects of tolerance of ambiguity on EFL task-based writing. *Seoul National University*. Retrieved from [http://s-space.snu.ac.kr/bitstream/10371/70570/1/vol9\\_7.pdf](http://s-space.snu.ac.kr/bitstream/10371/70570/1/vol9_7.pdf)

- Liu, C. (2015). Relevant researches on tolerance of ambiguity. *Theory and Practice in Language Studies*, 5(9), 1874-1882.
- Maxwell, A. (1965). A comparison of two English as foreign language tests. *Unpublished manuscript*, University of California (Davis).
- Sa'dabadi, N. (2014). The relationship among level of ambiguity tolerance and cloze test performance of Iranian EFL learners across gender. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 6(4), 337-347.
- Samoilova, V., Thanh, V. D., & Wilang, J. D. (2017). Anxiety among engineering students in a graduate EFL classroom. *Proceedings of the 3rd International Conference on Innovation in Education*. (pp. 286-296). Thailand: Institute for Innovative Learning, Mahidol University.
- Upshur, J. A. (1966). Comparison of performance on "Test of English as a Foreign Language" and "Michigan Test of English Language Proficiency." *Unpublished manuscript*, University of Michigan.