CORRELATION ANALYSIS AMONG FOREIGN LANGUAGE ANXIETY, READING ANXIETY, AND READING ACHIEVEMENT OF STUDENTS OF PUBLIC HEALTH FACULTY OF SRIWIJAYA UNIVERSITY

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Abstract

The objectives of this research are to (1) to determine whether there is a significant correlation between the level of students' anxiety in the foreign language and the ability to read text in foreign language; (2) to know whether there is a significant correlation between the students' level of anxiety in the foreign language reading and the ability to read text in foreign language, and (3) to find out whether there is a significant correlation among students' level of anxiety in the foreign language and anxiety in the ability to read text in foreign language and students' reading ability of Faculty of Public Health students Sriwijaya University. This research is a correlational study. The samples of this research are the 240 students of English Education Study Program chosen purposively. The data were gathered by using 2 ready-made questionnaires and TOEFL Reading Section test. The results of this research showed that (a) there was no correlation between students' foreign language anxiety level and reading achievement as shown in Pearson Correlation 0.046 and R-square 0.002; (b) there was statistically correlation between students' reading anxiety level and reading achievement as shown in Pearson Correlation 0.196 and R-square 0.038; and (3) students' foreign language anxiety level and students' reading anxiety level were statistically correlated, as shown in Pearson Correlation 0.199 and R-square 0.04.

Key words: foreign language anxiety level, foreign language reading anxiety, reading achievement.

1. Introduction

In the university level, foreign language learning still considered as the most difficult task for most of the college students. The problem and difficulty those appeared througout the learning process issued traumatic experience to escalate their foreign language skills, especially on their reading skills. Negative views of the literacy skills, especially reading skills have made Indonesia as the most suffered of illiterate adult age country with the highest quantity, both in East Asia or the Pacific region, which is about 69% or about 15,000 million young adults age (UNESCO, 2008). Becoming worse, the results of research on reading literacy skills owned by language learners is reported by the Programme for International Student Assessment (PISA 2012, page 5) shows that Indonesia ranked second bottom after Qatar, of the total members of the 34 PISA countries. It represents that the skill to read a foreign language text of Indonesian youth generation is still lacking.

From the description above, the values of reading skills is still considered to be complex. The complexity of the components of reading skills, both directly and indirectly influenced by internal and external factors (Grabe & Stoller, 2001, page 188). In other words, the success of English language learners in reading skill depends on linguistic factors, the number of diction which is owned by the learner, and also the social background of the learners. In addition, there are other factors which affect reading skills for learners of foreign languages, namely language skills, motivation, anxiety, and cultural backgrounds of the learners (Sellers, 2000, hal.515).

Talking about anxiety in learning a foreign language, MacIntyre and Gardner (1994, page 284) define it as "a state of tension and anxiety related to the context of foreign language learning, including reading skills." In other words, the situation involving the negative emotion reaction when the process of learning a foreign language starts (MacIntyre, 1999, as cited by Dornyei, 2005, page 199). Then, this anxiety on foreign language is seen as complex situation, in terms of self-assessment, trust, affection and behavior related activities of foreign language learning, and that resulted in their uniqueness in the process of language learning

(Horwitz et al, 1986, p. 128). Therefore, this anxious state provides significant influence in foreign language learning in both the formal and informal learning. In its connection with reading skills, anxiety in foreign language generates special difficulty that the learners should be able to understand dictions they had never read before, so in the end learners experienced frustration or give up on understanding the content of that reading text and encounter anxiety. The anxiety that appeared throughout process of reading activity in foreign languages known as anxiety in reading (Saito et al, 199, p. 205).

A study that has been conducted by Wu (2011, p. 273) describes there is a significant relationship between anxiety in reading with anxiety in a foreign language. In that study, the correlation coefficient indicates the value of 0.68 which means that learners with a high level of foreign language anxiety tend to have a high level of anxiety in reading foreign language text either. In addition, the result shows no significant correlation between anxiety level of learners' in reading text in foreign language with learners' reading skills itself. Statistically, learners with a foreign language high level anxiety has the lower ability to read text in foreign language than the learners with medium and low anxiety levels. In other words, the result of the study shows a significant negative correlation between foreign language anxiety and the learners' ability to read text in foreign language. The results of this study are supported by Jafarigohar (2012, p. 159).

From the explanation above, it entered the writer to discuss more about the relationship between anxiety in foreign language (language anxiety), anxiety in reading text in a language (reading anxiety) and the students' ability to read text in a language (reading achievement) to the students of the Faculty of Public Health (non-English major students) in Sriwijaya University. This quantitative research conducted to answer these problems. The measuring instruments used are two different types of questionnaires were used to further examine the anxiety level of students in foreign language and to measure the anxiety level of students in reading text in foreign language. In addition, the researchers gave a reading test to determine the level of students' reading skills. To support the quantitative data, researchers conducted interviews and direct observation in order to strengthen the

existing findings. By getting to know the anxiety level of the learner in the process of learning a foreign language is expected to optimize the learning outcomes of learners themselves.

2. Theoritical Background

2.1. Foreign Language Anxiety

There are two differences in the meaning of anxiety in the process of learning a foreign language. First, anxiety is seen as a learners personal innate character (trait anxiety) as described by Pavlenko (2005, p. 33), anxiety is seen as temporary anxiety just as emotional reactions to the situation at hand (state anxiety) is expressed by Dornyei (2005, p. 198), and special anxiety in a state (situational-specific anxiety) by Ellis (1994, p. 480). Differences in other anxiety conditions is whether the anxiety affects positively on the progress of the progress of learning a foreign language (facilitating anxiety) as proposed by Pavlenko (2005, p. 33) or the anxiety negatively affect the process of learning a foreign language (debilitating anxiety) by Spolsky (1989 , p.113).

The relation to the process of learning a foreign language, foreign language anxiety specifically a manifestation of learners' anxiety state itself. Horwitz et al (1986, p. 127) states that foreign language anxiety in the realm of action involving third worry: anxiety in communication, fear failure and the fear of negative judgment from others. Anxiety in communication (communication anxiety) is an anxiety that affects the process of language learning, in which learners themselves have less self control to the classroom situation where learners continuously experienced regulatory process. In the second sphere, the fear of failure (test anxiety) appears on the manifestation of the desire to be the best. Additionally, concerns over the negative assessment of people around (fear of negative evaluation) is defined as "fear of the judgment of others, the fear of judgment, and expectations are too much on the judgment of others (Horwitz et al, 1986, p. 128).

2.2. Foreign Language Reading Anxiety

Reading is one subject of the affective domains. Furthermore, anxiety regarded as one of the affective factors is provide connection with learning process of reading skills. Anxiety that arises during the process of reading text in foreign language known as anxiety in the foreign-language text reading (Saito et al, 1999). In addition, Saito also explains that there are two aspects that can cause anxiety in the foreign-language text reading, those are vocabulary and very complex writing system and cultural values in the text are still poorly understood. Therefore, consciously or not foreign language learners will feel anxious by the moment they try to understand the meaning of new vocabulary of a foreign language.

The results of the study shows that anxiety can impede language learners' comprehension by damaging readers' cognitive work system while that system responsibles on information processing from the content of reading text. As a result, readers are anxious to experience problems with cognitive ability that in the end ultimately affect the lack of the readers' comprehension. To read text in foreign language cause anxiety and lead to the lack of language learners' achievement "in conjuction of students' levels of reading anxiety and general foreign language anxiety (Saito dkk, 1998, p. 202). In line with the foregoing, Zbornik & Wallbrown (1991, p. 3) in their study confirms that anxiety in reading text in foreign language bore a special aspect of anxiety in general that led to the act of reading language learners itself.

2.3. Reading Achievement in English Language Teaching

Reading is one of the academic language skills. In academic life, reading is one way in getting new information that gives the possibility to increase understanding of the content of the discourse that is read. Also, read the language learning strategies used as a standalone, whether reading activities aimed to the learning process or to improve language skills (Grabe & Stoller, 2001, p. 187).

In addition, the ability to read text in a language requires the reader to get information of a discourse. Nowadays, research in foreign language text reading skills focused on increasing the reading skills of learners, such as the introduction of new vocabulary, the organizational structure of discourse and reading strategies.

2.4. Reading Achievement on the Basis of Foreign Language Anxiety and Reading Anxiety

In the relationship between anxiety in reading foreign language text and reading achievement, research conducted by Sellers (2000, p. 512) and Jafarigohar (2012, p. 19) states that there is a significant relationship between anxiety in foreign language and learners' foreign language reading skills. In this case, the anxiety in reading text in foreign language related to, but distinct from, the anxiety in the foreign language. Clearly, the learners with a high level of anxiety in the foreign language and anxiety in foreign language reading text has a low comprehension on discourse understanding.

3. Method

This research was correlational method. There were 240 samples of the study chosen purposively. The data were gathered by using two ready-made questionnaires (FLCAS and FLRAS questionnaire) and TOEFL Reading Section test. The instruments were tried out and checked out by using Cronbach's Alpha method. The questionnaire of FLCAS consists of 33 items were all valid and reliable items after the try out. The instruments were considered reliable as the cronbach's alpha coefficient 0.756 for the FLCAS questionnaire, 0.849 for

FLRAS questionnaire, and 0.738 for the reading test. They were higher than the r-table at the significant value of 0.05. The normality test using Kosmolgorov-Smirnov test was also conducted to check the normality of the data. The normality test result showed that the significant value of the three instruments were 0.097 for FLCAS questionnaire, 0.200 for the FLRAS questionnaire; and 0.200 for the reading test. Since the significant value was higher than 0.05, the data was considered normal.

4. Results and Discussion

The data from the questionnare showed that the students' score of foreign language ranged from 67 t0 129; 27 students (11.25%) had low level of foreign language anxiety, 212 students (88.33%) felt medium level of foreign language anxiety and 1 students (0.42%) had very high level of foreign language anxiety. In other words, most of the students were in medium level of foreign language anxiety. The description of the students' foreign language anxiety level can be seen in the following table.

Tabel 1.1
Description of Students' Foreign Language Anxiety Level

Scale	Category	Total	Percentage
33-76	Low	27	11.25%
77-120	Medium	212	88.33%
121-165	High	1	0.42%

Description of students' foreign language reading anxiety scale can be seen in the following table. The students score ranged from 33 to 165. They were distributed into 3 categories; 22 students felt low level of foreign language reading anxiety (9.2%), 217 students with medium level of foreign language reading anxiety (90.42%) and only 1 student in high level of foreign reading anxiety scale

(0.42%). In other words, most of the students were in the medium level of foreign language reading anxiety, as described in Table 1.2

Table 1.2
Description of Students's Foreign Language Reading Anxiety Level

Scale	Category	Total	Percentage
33-76	Low	22	9.2%
77-120	Medium	217	90.42%
121-165	High	1	0.42

Talking about students' reading achievement, the score ranged from 0 to 50. There were 35 students (14.58%) had low reading achievement; 194 students (80.83%) were in medium reading achievement and 11 students (4.58%) had high reading achievement. From the description above, it can be seen that students mostly had medium reading achievement. The detailed information can be seen as follows.

Table 1.2
Description of Students's Reading Achievement

Scale	Category	Total	Percentage
0-16	Low	35	14.58%
17-33	Medium	194	80.83&
34-50	High	11	4.58%

Pearson Product Moment statistical analysis was applied to find the correlation between students' foreign language anxiety, foreign language reading anxiety, and reading achievement. The results showed that the correlation

coefficient between students' foreign language anxiety and reading achievement 0.046 with the significant value of 0.477. The significant value was higher than .000, the correlation was not significant. Regression analysis showed R-square 0.002 means that only 0.2% foreign language anxiety contributed to students reading achievement. Besides, to see the significance, the writer did t-test. The output showed that t-value 0.713 and the significance value 0.477. T-table with the significance value 0.05/2=0.025 with df= n-2= 240-2= 238 was 1.19698. T-value<t-table 0.713 < 1.19698 means that H0 was accepted. It can be concluded that students' foreign language anxiety scale did not contribute to students' reading achievement. The detailed information can be shown in the following table.

Table 3
Output of Regression Analysis between X_1 and Y

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.046[a]	.002	-.002	5.975	1.516

a. Predictors: (Constant), LanguageAnxiety

b. Dependent Variable: ReadingAchievement

Then, the correlation analysis was also done to see the correlation between foreign language reading anxiety and reading achievement. The results showed that the correlation coefficient was 0.196 with the significant value 0.002. Regression analysis showed R-square 0.038 means that only 3.8% foreign language reading anxiety contributed to students reading achievement. Besides, to

see the significance, the writer did t-test. The output showed that t-value 3.077 and the significance value 0.002. T-table with the significance value 0.05/2=0.025 with df= n-2= 240-2= 238 was 1.19698. T-value>t-table 3.077 >1.19698 means that H0 was rejected. It can be concluded that students' foreign language reading anxiety scale contributes 3.8% to students' reading achievement. Table 4 shows the detailed information.

Table 4
Output of Regression Analysis between X_2 and Y

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.196[a]	.038	.034	5.866	.038	9.467	1	238	.002

a. Predictors: (Constant), ReadingAnxiety

b. Dependent Variable: ReadingAchievement

Next, the correlation coefficient among the two independent variables and reading achievement was 0.199. Then, the data collected was analyzed by using multiple regression analysis. Regression analysis showed R-square 0.04. It means that only 4% of students' reading achievement was influenced by the two independent variables. Besides, to see the significance, the writer did t-test. The output of students' foreign language anxiety showed that t-value -0.581 and the significance value 0.562. T-table with the significance value 0.05/2=0.025 with df= n-2= 240-2= 238 was 1.19698. T-value<t-table -0.581 >1.19698 means that H0 was accepted. It can be concluded that students' foreign language anxiety contributes to students' reading achievement negatively. At last, t-value of

students' foreign language reading anxiety was 3.042 with the significance value 0.03. The t-value > t-table 3.042 > 1.9698 showed that H0 was rejected. It can be concluded that the students' foreign language reading anxiety level contributed to student's reading achievement. Table 5 showed the detailed information.

Table 5
Output of Multiple Regression Analysis between Two Independent Variables (X$_1$ and X$_2$) and Y

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	15.419	3.971		3.883	.000		
	LanguageAnxiety	-.026	.044	-.040	-.581	.562	.833	1.200
	ReadingAnxiety	.109	.036	.212	3.042	.003	.833	1.200

a. Dependent Variable: ReadingAchievement

Based on the findings, we can see that most non-major English students of Public Health Faculty of Sriwijaya University had medium level of FLCAS, FLRAS and reading achievement. The result of the statistical analysis revealed that there was no correlation between students' foreign language anxiety and students' reading achievement. Then, there was only 3.8% contribution of students' foreign language reading anxiety on student's reading achievement. Only 4% of students' reading achievement was influenced by the two independent variables.

Based on those findings, some interpretations can be drawn. First, although the correlation was not significant, the result still give us some important information regarding the role of self-regulated learning in students' learning.

Based on the data, we can see that most of the students had medium level of foreign language anxiety, medium level of students' foreign language reading anxiety and medium level of student' reading achievement as well. In other words, their foreign language anxiety did not give a lot contribution on their reading achievement; their foreign language reading anxiety contributed 3.8% on reading achievement and also 4% contribution on students' foreign language anxiety and reading anxiety toward the students' reading achievement. Based on the findings, the mean score of each variable in the medium level. In other words, we can say that students are not really good at facilitating their level of anxiety both in FLCA and FLRA. Implementation is very important as it shows the reality of a plan. Unfortunately, it is not easy to execute a plan as it needs a lot of effort, courage, and high committment. Therefore, students still need to reduce or at least minimize their level of the two kinds of anxiety in ELT in order to help the students learn and achieve better.

5. Conclusion and Remark

Based on the findings, it was found that most of the students had medium level of FLCA, FLRA and reading achievement. Despite of the importance of anxiety in ELT, the result of this study showed that there was no correlation between FLCA and reading achievement. There was statistically correlated with students' reading achievement. Level of FLCA and FLRA also showed statistically correlation among the two independent variables and reading achievement. This implied that students might often feel anxiety in their ELT and learning activities. It means, they still need to improve their ability in reading foreign language texts as they are still very weak in managing their level of FLCA and FLRA anxiety.

Regarding the importance of students' anxiety in language learning in supporting someone's success in learning, it is very important for teachers to encourage the students to be as relaxed as possible. Therefore, it is expected that teachers apply interesting and meaningful teaching methodsduring the teaching and learning process which can encourage the students to improve their reading achievement.

References

Dornyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah: Lawrence Erlbaum.

Ellis, R., Loewen, S. and Erlam, r. (2006). Implicit and Explicit Corrective Feedback and the Acquisition of L2 grammar. *SSLA* 28, 339-368.

Grabe, W., & Stoller, F.L. (2001). Reading for academic purpose: Guidelines for ESL/EFL teachers. In: M. Celce-Murcia (Ed.). *Teaching English as a second or foreign language* (pp. 187-203). US: Heinle & Heinle.

Horwitz, E.K., Horwitz, M.B., and Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal* 70 (2), 125-132.

Jafarigohar, M., & Behrooznia, S. (2012). The effect of anxiety on reading comprehension among distance EFL learners. *International Education Studies*, 5(2).

MacIntyre, P.D. and Gardner, R.C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning* 44 (2), 283-305.

MacIntyre, P.D. (1999). Language anxiety: a review of the research for teachers. In Young, D. (Ed.). Affect in foreign language and second language learning: a practical guide to creating low anxiety classroom atmosphere (pp. 24-45). Boston, MA: McGraw-Hill.

Pavlenko, A. (2005). *Emotions and Multilingualism*. New York: Cambridge: Cambridge University Press.

Saito, Y., Horwitz, E.K., & Garza. (1999). Foreign language anxiety. The Modern Language Journal, 83, 202-218, retrieved from http://dx.doi.org/10.1111/0026-7092.00016.

Sellers, V. (2000). Anxiety and reading comprehension in Spanish as a foreign language. Foreign Language Annals, 33(5), 512-521. Retrieved from http://dx.doi.org/10.1111/j.1944-9720.2000.tb01995.x.

UNESCO. (2008). EFA global monitoring report 2008: Education for all by 2015, will we make it?: (Statistical Division) Oxford. [Data file]. Retrieved from http://unesdoc.unesco.org/images/0015/001547/154743e.pdf.

Wu, Hui-Ju. (2011). Anxiety and reading comprehension performance in English as a foreign language. *ASIAN EFL Journal*, 13(2), 273-307.

Zbornik, J.J., & Wallbrown, F.H. (1991). The development and validation of a scale to measure reading anxiety. *Reading Improvement, 28*(1), 2-13.