The Correlation Between Students' Reading Anxiety and Their Reading Comprehension in ESP Context

Nunung Mardianti
Keguruan Bahasa, Universitas Negeri Malang, Indonesia
Email: nunung.mardianti.1702128@students.um.ac.id

Primardiana Hermilia Wijayati
Pendidikan Bahasa Jerman, Universitas Negeri Malang, Indonesia
Email: primardiana.hermilia.fs@um.ac.id

Nurul Murtadho
Sastra Arab, Universitas Negeri Malang, Indonesia
Email: nurul.murtadho.fs@gmail.com

Abstract
This study was aimed at analyzing the correlation between reading anxiety and reading comprehension of ESP students in Universitas Muhammadiyah Malang. The participants in this study were 50 first-year Governmental Science students who took intensive reading I. This study used correlational design to analyze the relationship between two variables (Reading anxiety and Reading comprehension). In collecting the data, the English Foreign Language Reading Anxiety Inventory (EFLRAI) questionnaire was used to investigate the level and potential causes of reading anxiety. Moreover, in assembling students' reading comprehension data, the researcher constructed a reading comprehension test specifically for governmental science students. Based on the study results, the non-English department students belong to moderate a level of reading anxiety. Specifically, reading anxiety is divided into three main aspects; top-down reading anxiety, bottom-up reading anxiety, and classroom reading anxiety. It was found out that the most potent sources of reading anxiety were bottom-up reading anxiety, that is to say unclear-meaning vocabulary in English written text. Regarding students reading comprehension level, the ESP students have a low reading comprehension score. The research findings also illustrated a negative moderate-strong relationship between reading anxiety and Comprehension of ESP students. It means, the higher anxiety the students have, the lower their comprehension score they obtained.

Keywords**:** Language Anxiety, Reading anxiety, English for Specific Purposes, Level of Reading Anxiety, Reading Comprehension

Introduction

Reading is a fundamental skill for foreign language learners in an academic context. Mohammadpur &Ghafournia (2015) stated that reading skills are hugely required, especially for university students to access necessary information and broaden their knowledge. Saville-Troike

(2006) asserted that reading is the primary device for second language learners' input and the source of vital exposure to connect literature and other aspects of the second language culture. In other words, many experts stated that reading is the essential language skill among others (Alderson, 2005; Chawwang, 2008);

Based on Progress's International Reading Literacy Study (PIRLS) data (2011), Indonesian students' scores are at a low reading performance level. Concerning students' poor performance on reading, Ratri (2015) investigated factors influencing Indonesian student reading literacy. The result showed that the factors like home parental involvement, students' perceptions of reading, reading outside school, and ICT application were significantly related to the students' reading literacy.

Another study was conducted by Suryanto (2017), who investigated English reading comprehension problems in the Indonesian cultural context. The result showed that reading comprehension problems are caused by cultural-based issues, English teaching and learning concerns, and social-contextual problems. Lack of using strategy in reading activities was said as part of factors related to English teaching and learning concern. Therefore, the research mentioned above indicates that reading skills undoubtedly need to be emphasized in language study, especially in Indonesia, as EFL learners.

Under the context of English as a foreign language or second language, students' affective factors may contribute to acquiring the target language. Krashen (1982) has narrowed down the elements based on the frequency of its use in research variables into motivation, self-confidence, and anxiety. Within the area of anxiety or specifically mentioned as language anxiety, MacIntyre & Gardner (1989) defined it as "the worry and negative emotional reaction aroused when learning or using a second language." The negative feelings could hinder the process of learning a language. Moreover, Aina & Wijayati (2019) agreed that language anxiety as a part of academic stress possibly causes the students to worry during learning the target language or could be their learning achievement as a final process.

Particularly, when comprehending new ideas through reading text, the reader often feels difficult to concentrate while reading a text that confuses them to understand its content. The state of uneasiness and stress when reading text is commonly called reading anxiety. "Reading anxiety is a specific aspect of general anxiety that has been invested in the reading process." (Zbornik & Wallbrown, 1991). It will occur when students feel uneasy and confused during reading activities, resulting in decreased cognitive performance. They will face difficulties, encourage negative value toward themself, and finally minimize their self-efficacy.

About EFL settings in Indonesia in which English is taught as a foreign language obviously cannot escape from reading anxiety. A study from Faruq (2019) can represent reading anxiety faced by EFL undergraduate students. The purpose of the research was to investigate students' reading anxiety in undergraduate EFL students. This case study invited 37 ESP students as a research subject. The data were collected though Foreign Language Reading Anxiety Scale (FLRAS) reading anxiety questionnaire developed by Ahmad et al. (2013). The research found out that most students identified anxiety as a medium level. The study showed that most of the students reported medium-level anxiety. Reading anxiety among students was based on the most grounded material features like unknown vocabulary and unfamiliar culture. The personal factor found was fear of making mistakes that were less than concerned about the impact of reading.

In the same line, Aisyah (2017) examined the levels of anxiety among students and the causes of anxiety among students in the English reading class. The data were obtained using FLRAS, a reading anxiety questionnaire, and an interview to explain the questionnaire that had

been developed. The result found that most students were at a medium level of anxiety. Students' reading anxiety factors were focused on the text function, including unknown vocabulary, which becomes the first rank triggering reading anxiety, followed by an unfamiliar subject. The last is the exotic culture.

Thus, the elaboration of the study above accommodates us that reading anxiety may become a severe obstacle the students faced. Therefore, it is necessary to deepen the understanding of these affective factors, especially reading anxiety and its relationship to other components in EFL or ESL teaching, to facilitate learners.

Several studies showed that reading anxiety is unquestionably related to students' achievement in English. Jafarigohar & Behrooznia (2012) examined the effect of anxiety on reading comprehension among distance EFL learners. Through the questionnaire called the Foreign Language Reading Anxiety Scale (FLRAS), it was found that there was a significant negative relationship between FLRAS and reading comprehension tests. The higher degree of reading anxiety, the fewer score the students got from their reading comprehension test. In the Indonesian setting, mainly, Santoso et al. (2013) investigated whether reading anxiety affects the students' reading comprehension. To obtain the data, they used FLRAS and reading comprehension tests as a research instrument. The result showed a significant difference in reading comprehension between higher-level anxiety students and lower-level anxiety students. Hence, the studies above suggest that reading anxiety is a crucial issue for foreign language learners to face.

To support the elaboration related to the study variables, the researcher has conducted preliminary research by interviewing ESP students and ESP teachers randomly. It involved fourth-semester ESP students who already took Reading I and II at the University of Muhammadiyah Malang. Regarding reading anxiety, most students revealed that they feel unconfident when they do not understand the meaning due to the text's unfamiliar topic. As a result, in an attempt to understand the text, they translate word to word. Another student stated that she was frequently distracted by stories she cannot read well when she read English text, causing her to be stuck and lost in reading.

Moreover, coping with the grammar and structure of sentences increase their stress. In reading strategy, the students confirm that they were taught to use an appropriate reading strategy based on their tasks. For instance, when asked to find specific information in the text, they should use scanning, but skimming is a suitable strategy when the study sees the main topic. The other students add more methods, like translating and note-taking. In students' reading comprehension, the teacher has some high mean classes, but some other courses have a medium or low score. According to the teacher's explanation, it was happened because of the different levels of students. Although the ESP program (Language Center) has designed a syllabus containing teaching methods, material, and evaluation methods, every teacher has their way of delivering a material; hence, the score may differ.

Based on the result of temporary research above and previous studies that uncover the relationship of English department students' affective factors with reading comprehension, the researcher intended to conduct similar research. However, of course, the gap is ESP students' involvement in investigating reading anxiety's relationship to ESP students' reading comprehension.

Literature review
Reading and reading comprehension
Commonly, reading has two types; those are extensive and intensive reading. Patel & Jain (2008) elaborated extensive reading as the kind of reading to get pleasure and joy. They further

stated that people who were doing extensive reading do not care about specific or essential information. The most important is they can keep updating certain information and feel satisfied with it. Meanwhile, intensive reading tends to get detailed knowledge and information.

Moreover, it can be said that this type of reading is suitable for English for specific purposes classroom. Mart (2015) argued that intensive reading focuses on accuracy rather than fluency. The employment of guided reading in the language classroom may help students to improve their achievement. Thus, a detailed analysis of the reading materials by intensive reading allows learners to master the language.

Wolf (in Yamashita, 2015) believed that "reading does not only require cognitive processes, but it also involves emotional states of the learners." The way students interact with the text will be influenced by the emotional intelligence they have. Therefore, every teacher is suggested to help the students develop their cognitive skills and understand some potential factors related to students' psychology to increase their reading comprehension. Ni (2012) clarified that affective factors could significantly affect students' language acquisition process. One of the affective factors contributing to students' language acquisition is anxiety.

When dealing with teaching in a foreign language, one problematic issue is language anxiety. Many psychologists and educators realize that anxiety can occur in productive skills (Speaking and Writing) and receptive skills (Listening and Reading) (e.g., reading, listening, speaking, and writing). In speaking skills, Wijayati et al. (2018) investigated speaking anxiety in German students as a foreign language. The study revealed that speaking anxiety's potential sources consist of challenging topics, unresponsive class, lack of preparation in speaking activity, lecturer's expressionless face, and fear of native-speaker lecturers. Early language research trends shifted from productive skills to receptive skills, namely reading (Santoso et al., 2013).

Reading is a complex and challenging process, even in one's native language (Saito et al., 1999). Thus, foreign or second language learners may become anxious when reading in a foreign language because it is an important skill and critical in language acquisition. They developed the Foreign Language Reading Anxiety Scale (FLRAS) used or adapted in afterward research to measure FL reading anxiety. These investigations have resulted in mixed findings of the relationship between reading anxiety and L2 reading performance.

Brantmeier (2000) examined 92 university students' reading anxiety who registered on advanced Spanish grammar and composition courses. Results indicated that the learners generally did not feel anxious about reading in a second language. They were more nervous about post-L2 reading tasks (both oral and written) than the act of reading itself. Students felt less anxious about reading when immediate communication apprehension was not a concern.

On the other hand, Wu (2011) investigated the relationship between language anxiety, reading anxiety, and reading comprehension performance. Analyses of the data collected from 91 university students showed that reading anxiety was related to language anxiety. Furthermore, students with low language anxiety and reading anxiety tended to perform better in the reading comprehension test. Students' language anxiety decreased with their learning in reading classes, while reading anxiety showed no differences. Moreover, it was also found out that there were no significant differences between males and females in their levels of language anxiety and reading anxiety. These results suggest that reading anxiety was a more stable construct compared to language anxiety.

Research method

This study belongs to the correlational research since it aims to find the relationship between reading anxiety and ESP students' reading comprehension. The population of this study

is all students from the non-English department compulsory subject in the ESP Program. Moreover, 50 first-year of Governmental Science students participated in this study through the cluster random sampling technique.

To collect the data, the researcher used the English Foreign Language Reading Anxiety Inventory (EFLRAI) that is a questionnaire in the form of a Likert-scale developed by Zoghi & Alivandivafa (2014). EFLRAI consists of 27 close-ended statements regarding reading anxiety in the way of a 5-point range Likert scale. To avoid misunderstanding in filling out the questionnaire, the researcher translated the questionnaire into Bahasa Indonesia.

The researcher, then consulted the translated version with the ELT lecturer to ensure translation appropriateness. In developing a reading comprehension test, the researcher followed seven steps in making a test by Sulistyo (2015). However, the efforts of making tests were justified based on the needs of the research. In terms of the validation process, the researcher invited experts in English language assessment to check the test's validation. It is focused on the test's content, whether it is suitable for the student's major.

The test contained four passages with six items in each passage, thus the total of questions is 24 items. Those items measure the students' ability to find main ideas, explicit information, implicit information, word meaning, and pronoun reference. In terms of the reading comprehension test, the used of short answer test item produces dichotomous data.

Sulistyo (2015) stated that a try-out test is crucial to determine each item's characteristics, such as item difficulty, item discrimination, and item validity. The researcher chose another class which was to have similar characteristics as a sample of the current study to conduct try out. This step is based on what Latief (2019) has affirmed that the pilot test respondent should have similar characteristics with the research subjects. Therefore, to select participants for the pilot test, the researcher chose 40 students in offering class C, Government Sciences study program academic year 2019/2020.

As has previously mentioned, a correlational study aims to measure the relationship between two or more variables. Data analysis procedures were conducted as follows: In the first step, the researcher checked the completeness of all EFLRAI submitted by learners. An incomplete questionnaire would be discarded. EFLRAI consists of 27 items with a 5-point range Likert scale. Each questionnaire's point was calculated to determine the high frequency of factors contributing to students' reading anxiety.

To determine the relationship between reading anxiety and reading comprehension, the researcher used the Pearson Product Moment correlation formula to get the correlation coefficient. Furthermore, this study utilized the categorization of the correlation coefficient (R) proposed by Lodico et al. (2010).

Result and discussion
Level of reading anxiety

Students' reading anxiety is classified into high anxiety, moderate anxiety, and low. The student is said to have increased anxiety when their reading anxiety score in the EFLRAI questionnaire is around 104 to 127. It means they strongly feel anxious when reading anxiety. For moderate reading anxiety levels, the students with this level obtained a score of around 81 to 103. In other words, they somehow feel anxious about the reading activity. Last, the students with reading anxiety scores of approximately 57 to 80 belong to the low reading anxiety which means they feel less anxious in reading English text. Furthermore, Chart 1 contained further explanation related to students' reading anxiety level:
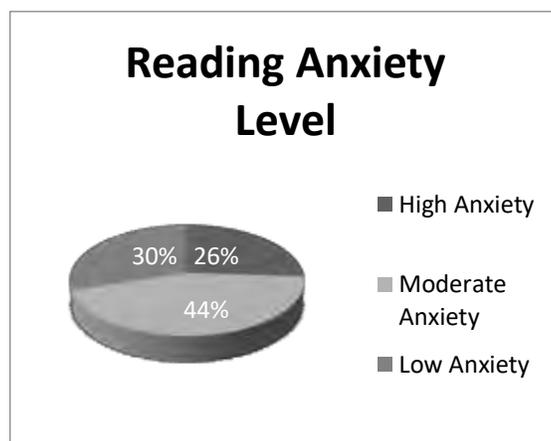
Chart1.Level of reading anxiety

Based on the Chart 1, most ESP students represented by 44% of total respondents belong to moderate anxiety levels. It means that their anxiety is not too high or too low by seeing the score range from 81 to 103. Furthermore, 30% of students are at a low level of reading anxiety. The ESP students who are at a low level of reading anxiety are less anxious when they are in the reading activity. Nevertheless, 26% of the respondents belong to a high anxiety level. This group of students has the most elevated anxiety since their reading anxiety score is around 104 to 127, which means they face higher anxiety and stress than others.

Potential causes of English Foreign Language Reading Anxiety.

In this subchapter, based on the previous explanation, the questionnaire consists of three aspects: top-down reading anxiety, bottom-up reading anxiety, and classroom reading anxiety with 27 items. Furthermore, each aspect is also divided into two parts except the classroom anxiety aspect. Further explanation will be given in the following subchapters.

Top-down reading anxiety

The statements in the reading anxiety questionnaire represent a situation in which the ESP students feel anxious when reading English text. It is divided into background and cultural knowledge as well as general reading ability. The cultural knowledge consist of unfamiliar text titles, unclear cultural parts, and lack of previous knowledge. Meanwhile, the general reading ability comprises inability of recognizing the details, inability of spotting the main idea, and inability of expressing opinion.

Based on the questionnaire analysis result, the summarized result of the investigation on the respondents' reading anxiety reveals the statistics as illustrated in Table1.

Table 1. Top-down reading anxiety

No	Statement / Top-down Reading Anxiety	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	a. Background and Cultural Knowledge	F	P	F	P	F	P	F	P	F	P
1	Unfamiliar text title	2	4%	15	30%	12	24%	13	26%	8	16%
2	The ideas in the text are culturally unclear	1	2%	9	18%	15	30%	21	42%	4	8%

No	Statement	F	P	F	P	F	P	F	P	F	P
3	Lack of previous knowledge about the ideas in the text.	2	4%	9	18%	16	32%	16	32%	7	14%
	b. General reading ability										
4	Cannot get the point of the text although no unfamiliar vocabulary and grammar	4	8%	8	16%	18	36%	14	28%	6	12%
5	Cannot recognize the details.	2	4%	7	14%	21	42%	16	32%	4	8%
6	Cannot express opinions of feelings about the text.	4	8%	18	36%	12	24%	12	24%	4	8%
7	Cannot spot the main idea of the certain paragraphs.	1	2%	9	18%	6	12%	29	58%	5	10%

Regarding the top-down reading anxiety under background and cultural aspects, 42% of ESP students worry when the text's ideas are culturally unclear. Nevertheless, only 16% of the students feel uneasy when the text's title is unfamiliar. Moreover, 30% of students perceived neutral about the items when having a lack of previous knowledge about the text's ideas makes them upset.

For general reading ability, 58% of total students are worried when they cannot spot a particular main idea of paragraph. Furthermore, 32% of students get nervous when they cannot find the the detail information of the text. The Table 1 also illustrates that 24% of ESP students' inability of expressing their opinions or feelings about the text makes them stress.

Bottom-up reading anxiety

This part is about the criteria that can be used to illustrate the reading anxiety faced by ESP students. It consists of two parts, those are vocabulary and grammar. The vocabulary part includes the unclear meaning of words, inability to find intended words in a dictionary, a different sense of words, unfamiliar idioms, words with many syllables, and difficult pronunciation. Likewise, the second part consists of unclear tenses, unable to differentiate parts of speech, passive voice, unfamiliar grammar structure, and complex structure sentences. The second aspect of reading anxiety, that is bottom-up anxiety, is presented in the following table.

Table 2. Bottom-up reading anxiety

No	Statement / Top-down Reading Anxiety	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	a. Vocabulary	F	P	F	P	F	P	F	P	F	P
1	Cannot figure out meaning of unknown words.	1	2%	12	24%	7	14%	24	48%	6	12%
2	Encounter a lot of words with unclear meaning.	1	2%	5	10%	5	10%	35	70%	4	8%
3	Cannot figure out meaning of unknown words which have been seen before.	1	2%	8	16%	8	16%	26	52%	7	14%

4	Unable to find out a word in a dictionary.	2	4%	7	14%	5	10%	30	60%	6	12%
5	Finding the word with multiple meaning.	4	8%	5	10%	6	12%	30	60%	5	10%
6	Finding unfamiliar idioms.	3	6%	12	24%	8	16%	24	48%	3	6%
7	Unfamiliar words made up of several syllables.	3	6%	14	28%	5	10%	25	50%	3	6%
8	Feels difficult to pronounce several words.	2	4%	10	20%	5	10%	31	62%	2	4%
b. Grammar											
9	Unclear tenses.	1	2%	11	22%	14	28%	17	34%	7	14%
10	Cannot differentiate part of speeches.	4	8%	9	18%	22	44%	10	20%	5	10%
11	Finding passive voice.	1	2%	11	22%	19	38%	11	22%	8	16%
12	Unfamiliar grammatical form of the sentence.	1	2%	8	16%	23	46%	14	28%	4	8%
13	Misinterpret the grammatical point.	2	4%	8	16%	22	44%	9	18%	9	18%
14	Sentence with long and complex structure.	1	2%	6	12%	5	10%	13	26%	25	50%

Based on Table 2, the bottom-up reading anxiety aspects are divided into vocabulary and grammar. In terms of vocabulary, 70% of ESP students confirm their agreement about finding many words with unclear meaning bothers them. Moreover, 14% of the total students get upset when they cannot discover the definition of a word they have seen before. Meanwhile, 28% of ESP students do not feel anxious when finding words made up of several syllables.

Related to grammar, 34% of total students are nervous due to unclear tenses in the text. Furthermore, 50% of ESP students feel uneasy when they found a long and complex sentence structure. Meanwhile, 46% of the total students slightly feel anxious when they read sentences with unfamiliar grammar. And at last, 22% of students get bothered because of passive voice sentences.

Classroom reading anxiety
In classroom reading anxiety, the criteria that illustrate students reading anxiety occur in a

classroom setting. It includes read out the text, translating, read aloud the comprehension questions, uninteresting topic, correcting the students' pronunciation directly, and instructor frequently using English. Regarding classroom reading anxiety, the result of students' responses is given in the following table.

Table 3. Classroom reading anxiety

No	Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	Top-down Reading Anxiety										
	Teaching Method	F	P	F	P	F	P	F	P	F	P
1	Called by the instructor to read aloud.	5	10%	14	28%	2	4%	10	20%	19	38%
2	Asked to translate a piece of English text into Bahasa.	5	10%	12	24%	1	2%	5	10%	27	54%
3	Asked to answer comprehension question.	2	4%	16	32%	2	4%	5	10%	25	50%
4	The instructor chooses uninteresting text to read.	4	8%	12	24%	3	6%	14	28%	17	34%
5	The instructor directly corrected the pronunciation and translation.	8	16%	15	30%	4	8%	5	10%	18	36%
6	The instructor dominantly used English in the delivering the material.	5	10%	9	18%	6	12%	10	20%	20	40%

Seeing the table above, 54% of the ESP students were worried when they were asked to translate one-page English text into the Indonesian language. 28% of ESP students get upset when the lecturer chooses uninteresting texts to read in the class. However ,12% of students responded neutrally of being nervous when the instructor frequently uses English as a medium of instruction and rarely use the Indonesian language. Nevertheless, 32% of students are not worried when they asked them to answer the comprehension questions.

To sum up, the highest rank about reading anxiety in each element is presented as follows. For top-down reading anxiety, the highest percentage comes to item number 7, represented by 58% of ESP students who are nervous when finding a specific paragraph's main idea. In bottom-up reading anxiety, most of ESP students figured by 70% of respondents get bothered when finding many words with unclear meaning. Finally, in classroom reading anxiety, 56% of students feel worried when they were asked to translate a piece of an English text into Indonesian language.

Reading comprehension level

On investigating ESP students' reading comprehension, the initial data are given in terms of its level. The researcher classified students' reading comprehension into a high, average, and low score. The student is said to have a high score when their reading comprehension score ranged between 15 to 20 points. It means they can answer more than 15 items comprehension question correctly. With an average reading comprehension score, the students obtained a score of around 10 to 14 points. In other words, they have an average score because they can answer more than half of the total comprehension questions correctly. Last, the students with reading comprehension

scores around 4 to 9 points belong to low score students. In other word, they only can answer less than half of the comprehension questions correctly.
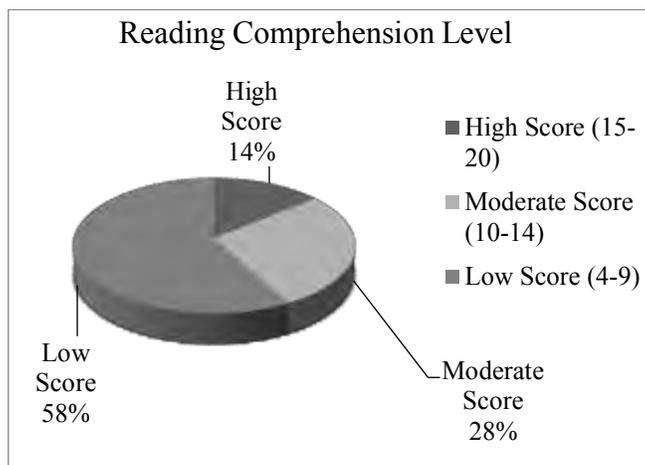

Chart 2. Reading comprehension level

Regarding Chart 2, most ESP students, shown by 58% of total students, obtained a low reading comprehension score. The score of this group range from 4 to 9. Moreover, 28% of the total respondents belong to an average score. It means they can answer more than half of the real comprehension questions. The reading comprehension score in this group range from 10 to 14. Nevertheless, 14% of ESP students belong to the group with high reading comprehension scores because their score is around 15 to 20. In other words, they can answer almost all of comprehension questions correctly.

The researcher presented it based on the reading comprehension question regarding the frequency and percentage of students reading comprehension scores. Therefore, the following table contained those data:

Table 4.Students' reading comprehension score

Number of Question	Correct Answer	
Text 1	F	P
1	26	52%
2	24	48%
3	20	40%
4	35	70%
5	37	74%
Text 2		
6	34	68%
7	22	44%
8	30	60%
9	28	56%
10	18	36%

Text 3		
11	37	74%
12	11	22%
13	23	46%
14	23	46%
15	10	20%
Text 4		
16	32	62%
17	19	38%
18	26	52%
19	35	70%
20	14	28%

Based on the table above, the four texts consists of 20 questions was used to indicate the students' reading comprehension. Each text consists of 5 questions. In-text 1, most of the respondents figured by 74% of ESP students can answer question number 7 correctly, and the rest of them, 26% of students, fail to answer it correctly. However, question number 3 is considered the most challenging question among others since them only 40% of total students answer the questions correctly, whereas 60% of them answer the item incorrectly.

For text 2, 68% of total respondents can answer question number 6 correctly, and the rest, 32% of them are failed. Meanwhile, only 36% of the students can answer question number 10 correctly and the others, 64%, answer it incorrectly.

Regarding text 3, 74% of ESP students successfully answer question number 11, and 26% of them cannot answer the question correctly. However, only 20% of the total respondents answer question number 15 correctly, and the rest of them, 80%, fail to give a correct answer.

Finally, for text 4, 62% of ESP students can answer question number 16 correctly, and 38% of the students are failed to answer the question correctly. Question number 20 is considered the most challenging problem because 28% of total respondents can answer the question correctly, whereas 72% of total students are failed to answer correctly.

In conclusion, based on the table above, most of the respondents shown by 74% of total students can answer question number 11 correctly. It means that item number 11 is the easiest among the other questions in the reading comprehension test.

The correlation of reading anxiety and reading comprehension

In revealing to students the relationship between reading anxiety and reading comprehension, the Pearson product-moment correlation was applied using SPSS. The result can be seen in the following table:

Table 5. Correlation between Reading Anxiety and Reading Comprehension

		Reading Anxiety	Reading Comprehension
Reading Anxiety	Pearson Correlation	1	-.455[**]
	Sig. (2-tailed)		.001
	N	50	50
Reading Comprehension	Pearson Correlation	-.455[**]	1
	Sig. (2-tailed)	.001	

N	50	50

Based on the table above, the correlation coefficient is .001, which means a relationship between reading anxiety and reading comprehension. Furthermore, according to Lodico et al. (2010), the r-value (-.455) indicates that its relationship's strength belongs to medium correlation. The minus sign on the r-value can be interpreted as a negative relationship between reading anxiety and reading comprehension. In other words, the higher the students feel anxious in reading activity, the lower score of reading comprehension they obtained.

Discussion

Commonly, based on the result obtained from the questionnaire about reading anxiety, the current study showed that the level of students' reading anxiety is on the medium level. It means the group of reading anxiety face by students is not too high or low. In the same line, studies conducted by Muhlis (2017) clarified that students' reading anxiety level is moderate. It means the students feel anxious when reading activities in the class. Recently, the study done by Faruq (2019) was also consistent with the current study results that students feel nervous when involved in the reading activity. The explanation was given at the beginning of the finding section, and the reading class was taken in the pavilion near UMM's park. Since the reading activity was outside the classroom, it can be assumed that the learning situation outside the classroom may reduce the students' stress. However, it was still at the medium level.

Specifically, reading anxiety falls into three possible sources: top-down reading anxiety, bottom-up reading anxiety, and classroom reading anxiety. Among these sources, most students stated that bottom-up reading anxiety related to words with unclear meaning and difficulties in pronouncing the words as the most impactful factors causing reading anxiety. Following this finding, Aisyah (2017) said that vocabulary is the most causative factor affecting students reading anxiety. The students feel stress when they have to deal with reading activity since the English written text they read contains many complicated vocabulary. This kind of situation then led them to experiencing reading anxiety since they have a lack of vocabulary knowledge.

It was followed by top-down reading anxiety; the students were nervous looking for the main idea in a particular paragraph. When it comes to the main idea, it is also related to vocabulary retention. Students who lack vocabulary knowledge will find difficulties identifying the main idea since they need to understand the text as a paragraph or as a whole text. Besides, determining central concepts can be difficult because, in some texts, the main idea is not always clearly stated. Correspondingly, Guimba & Alico (2015) said that when students find it challenging to identify main ideas, reading anxiety could occur. Particularly, students may feel uneasy when they have inadequate reading skills. The minor potential factor causing reading anxiety is classroom anxiety; when the instructor calls on the students to translate apiece of an English text into the Indonesian language makes them worried. To translate their first language into the target language and vice versa, the students must have sufficient vocabulary knowledge because the linguistic aspect of English as the target language is entirely different from Indonesian language. However, if the students do not have adequate experience, they will fall into confusion and will end up with misinterpretation of the text.

Concerning reading comprehension tests containing 20 questions, it has the most correct and incorrect answers. Question number 11, which is part of text 3, was considered the easiest because most students could answer it correctly. In contrast, there is also a question considered as the most difficult, namely question number 15, as even part of text three because only fewer

students of the total students can answer the question correctly. It means more than half of students are failed to answer correctly. In terms of students' classification, the high achiever is those who acquire a score of around 15 to 20. The moderate achiever consists of the students who can answer correctly, about 10 to 15. Those who have score 4 to 9 are included in the low score because they can only answer less than half the question correctly.

From the previous elaboration, two points should be highlighted, the easiest and the most challenging question. The easiest one refers to question number 11 about asking for explicit information. Detailed information means the report is stated clearly in the text. Since it can be read at a glance, the student is comfortable finding out the correct answer. On the other hand, the most challenging question represented by item number 15 about word meaning. This kind of material is categorized as vocabulary since it belongs to the word level. In the same line, Aisyah (2017) also confirms that vocabulary is a serious obstacle in the students' reading activity because it causes stress to them in reading class. Since reading comprehension emphasizes mastering the message content in the reading, the students must master vocabulary to make them more manageable in understanding the text. Moreover, according to Astuti (2020), reading comprehension is considered an open center for reading. It is expected that reading comprehension is at the top of the reading abilities and the basis for all reading processes.

Based on the findings, linking reading anxiety to reading comprehension might be interpreted as a negative relationship, which means the more students feel anxious when they are involved in reading activity, the lower the reading comprehension score they will get. Moreover, these findings are consistent with studies conducted by foreign researchers Guimba &Alico (2015). Jafarigohar & Behrooznia (2012) conducted a survey that resulted in a negative relationship between reading anxiety and reading comprehension. Moreover, this study confirms the previous research that reading anxiety and reading comprehension have a moderately significant relationship. In other words, there is substantial potential for reading anxiety to see how considerable reading activity is. Guimba &Alico (2015) further explained that reading is a skill that promotes other skills, such as writing and speaking. Throughout the reading, the language input is absorbed and then produced in the target language through speaking and writing.

Conclusion

The result of this study illustrates that the majority of non-English department students perceived anxiety at a medium level. Based on the data and elaboration in findings and discussion, it can be seen that students' levels of anxiety are varied. There are three groups of reading anxiety levels, i.e. high level, moderate level, and low level. Most students grouped into an average level. ESP students' reading anxiety sources were from three high-ranked statements representing each aspect of causing reading anxiety. Most students agreed that vocabulary with unclear meaning is the most significant factor that raised their reading activity anxiety. Then, it was followed by the main idea and translation from English into Bahasa Indonesia, respectively.

Regarding students reading Comprehension, the ESP students belong to a low reading comprehension level. It means most ESP students are failed to answer correctly of more than half of the total questions. Besides, the result of the study revealed that there was a negative relationship between reading anxiety and reading comprehension of ESP students. In other words, the higher anxiety the students have, the lower their comprehension score they obtained. The existence of students reading anxiety can disturb them in comprehending English texts. This finding implied that the teacher should use and justify teaching methods in their ESP classroom to help the students minimize their reading anxiety. Thus, ESP teachers should design a positive and fun learning

environment to encourage the students improving their reading comprehension and cope with their anxiety.

Declaration of conflicting interest

Funding acknowledgement

References

Ahmad, I. S., Al-Shboul, M. M., Nordin, M. S., Rahman, Z. A., Burhan, M., & Madarsha, K. B. (2013). The Potential Sources of Foreign Language Reading Anxiety in a Jordanian EFL Context: A Theoretical Framework. *English Language Teaching*, *6*(11), p89. https://doi.org/10.5539/elt.v6n11p89

Aina, Q, & Wijayati, P., H. (2019). Coping the Academic Stress: The Way the Students Dealing with Stress. *KnE Social Sciences*, *3*(10), 212. https://doi.org/10.18502/kss.v3i10.3903

Aisyah, J. (2017). Students' Reading Anxiety in English Foreign Language Classroom. *Journal of English and Education*, *5*(1), 56–63.

Alderson, J. C. (2005). *Assessing reading* (5. print., transferred to digital print). Univ. Press.

Astuti, R. T. (2020). Improving students' reading comprehension ability using task-based language teaching. *Lingua Pedagogia, Journal of English Teaching Studies*, *2*(1), 1–13. https://doi.org/10.21831/lingped.v2i1.28023

Brantmeier, C. (2000). *The Relationship Between Reader's Gender, Passage Content, Comprehension, and Strategy Use in Reading Spanish as a Second Language*. Indiana University.

Chawwang, N. (2008). *An Investigation of English Reading Problems of Thai 12th-Grage Students in Nakhonratchasima Educational Regions 1, 2, 3, and 7*. Srinakharinwirot University.

Faruq, A. Z. A. (2019). Reading Anxiety in English As A Foreign Language for Undergraduate Students in Indonesia. *Journal of Teaching & Learning English in Multicultural Contexts*, *3*(2).

Guimba, W. D., & Alico, J. C. (2015). Reading Anxiety and Comprehension of Grade 8 Filipino Learners. *International Journal of Humanities and Social Sciences*, *Special Volume*, 44–59.

Jafarigohar, M., & Behrooznia, S. (2012). The Effect of Anxiety on Reading Comprehension among Distance EFL Learners. *International Education Studies*, *5*(2), p159. https://doi.org/10.5539/ies.v5n2p159

Krashen, S. D. (1982). *Principles and practice in second language acquisition* (1st ed). Pergamon.

Latief, M. A. (2019). *Research Methods on Language Learning: An Introduction* (7th ed.). Universitas Negeri Malang.

Lodico, M., Spaulding, D., & Voegtle, k. (2010). *Methods in Educational Research: From Theory to Practice* (2nd ed.). Jossey-Bass.

MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and Second-Language Learning: Toward a Theoretical Clarification*. *Language Learning*, *39*(2), 251–275. https://doi.org/10.1111/j.1467-1770.1989.tb00423.x

Mart, C. T. (2015). Combining Extensive and Intensive Reading to Reinforce Language Learning. *Journal of Educational and Instructional Studies in the World*, *5*(4), 85–90.

Mohammadpur, B., & Ghafournia, N. (2015). An elaboration on the effect of reading anxiety on reading achievement. *Canadian Center of Science and Education*, *8*. https://doi.org/0.5539/elt.v8n7p206

Muhlis, A. (2017). Foreign Language Reading Anxiety among Indonesian EFL Senior High School Students. *English Franca*, *1*(1), 19–44.

Ni, H. (2012). The Effects of Affective Factors in SLA and Pedagogical Implications. *Theory and Practice in Language Studies*, *2*(7), 1508–1513. https://doi.org/10.4304/tpls.2.7.1508-1513

Patel, M., F., & Jain, P. M. (2008). *English Language Teaching (Methods, Tools and Techniques)*. Sunrise Publishers and Distributors.

Ratri, S. Y. (2015). Student factor influencing Indonesian student reading literacy based on PIRLS data 2011. *Journal of Education*, *1*, 9.

Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign Language Reading Anxiety. *The Modern Language Journal*, *83*(2), 202–218. https://doi.org/10.1111/0026-7902.00016

Santoso, J. S. P., Sutarsyah, C., & Sudirman. (2013). *An Analysis of Student's Reading Anxiety and Its Effect on Reading Comprehension*.

Saville-Troike, M. (2006). *Introducing second language acquisition*. Cambridge University Press. https://doi.org/10.1017/CBO9780511808838

Sulistyo, G. H. (2015). *EFL Learning Assessment at School* (1st ed.). CV. Bintang Sejahtera.

Suryanto. (2017). An Investigation On English Reading Comprehension Problems In Indonesian Cultural Contexts. *International Conference on Education, Science, Art, and Technology*.

Wijayati, P. H., Rofi'ah, R., & Ayub, A. F. M. (2018). "My lecturer's expressionless face kills me!" An evaluation of learning process of German language class in Indonesia. *Research and Evaluation in Education*, *4*(2), 94–104. https://doi.org/10.21831/reid.v4i2.22466

Wu, H.-J. (2011). Anxiety and Reading Comprehension Performance in English as a Foreign Language. *Asian EFL Journal*, *13*(2).

Yamashita, J. (2015). In Search of Nature of Extensive Reading in L2: Cognitive, Affective, and Pedagogical Perspective. *Reading in A Foreign Language*, *27*(1), 168–181.

Zbornik, J., & Wallbrown, F., H. (1991). The Development and Validation of a Scale to Measure Reading Anxiety. *Reading Improvement*, *28*, 2–13.

Zoghi, M., & Alivandivafa, M. (2014). EFL Reading Anxiety Inventory (EFLRAI): Factorial Validity and Reliability. *Journal of Psychoeducational Assessment*, *32*(4), 318–329. https://doi.org/10.1177/0734282913513686