THE CORRELATION BETWEEN THE USE OF AUTOMATED WRITING EVALUATION AND THE LEVEL OF WRITING ANXIETY IN ARGUMENTATIVE WRITING CLASS

Ainun Rahmadia Asih

Universitas Negeri Surabaya
ainun.18037@mhs.unesa.ac.id

Abstrak

Penelitian ini bertujuan untuk menyelidiki tingkat dan jenis kecemasan menulis di kalangan mahasiswa bersama dengan penggunaan AWE di kelas *argumentative writing*. Selain itu, penelitian ini juga untuk mengetahui hubungan antara penggunaan *Automated Writing Evaluation* (AWE) dan kecemasan menulis mahasiswa. *Second Language Writing Anxiety Inventory* (SLWAI) dan kuisioner tentang penggunaan AWE digunakan pada 40 mahasiswa jurusan Pendidikan Bahasa Inggris di salah satu perguruan tinggi di Surabaya. Hasil dari penelitian ini menunjukkan bahwa 29 mahasiswa (72%) berada pada kecemasan menulis tingkat sedang, 8 mahasiswa (20%) berada pada kecemasan menulis tingkat rendah, dan 3 siswa (8%) berada pada kecemasan menulis tingkat tinggi. Selanjutnya terdapat 35 mahasiswa (88%) yang memiliki tingkat penggunaan AWE yang tinggi, 5 mahasiswa (12%) memiliki tingkat penggunaan sedang, dan tidak ada mahasiswa yang memiliki tingkat penggunaan AWE yang rendah. Penelitian ini juga melaporkan tidak ada korelasi antara tingkat kecemasan menulis dan penggunaan AWE selama kelas *argumentative writing* dengan *p*-value = 0.136 dan r = 0.240.

Kata Kunci: Kecemasan dalam menulis, Evaluasi Penulisan Otomatis, Menulis Argumentatif

Abstract

This present study aims to explore the level and the types of writing anxiety among the students, along with the use of AWE in argumentative writing class. This study also examined the correlation between the use of Automated Writing Evaluation (AWE) and students' writing anxiety. The Second Language Writing Anxiety Inventory (SLWAI) and the questionnaire about the use of AWE were employed on 40 students majoring in English Language Education at a university in Surabaya. The result of this study showed that 29 students (72%) at a moderate level of writing anxiety, 8 students (20%) at a low level of writing anxiety, and 3 students (8%) at a high level of writing anxiety. Furthermore, there are 35 students (88%) who have a high level of the use of AWE, 5 students (12%) have a moderate level of the use of AWE, and there are no students who have a low level of the use of AWE. This study also reported there is no correlation between the level of students' writing anxiety and the use of AWE during argumentative writing class with *p*-value = 0.136 and r = 0.240.

Keywords: Writing Anxiety, Automated Writing Evaluation, Argumentative Writing.

INTRODUCTION

Integrating technology into classroom activity is needed to enhance the quality of education in the twenty-first century. Kalyuga & Liu (2015) stated that using technology in the learning process could give opportunities that could not be accomplished in the traditional learning process. Hence, the use of technology in this era has developed and adapted to various subjects of study, including language learning. The emergence of technology can assist the language learning process through several learning tools or media which have multiple advantages to enhance the students' language proficiency (Nova, 2018). The emergence of language learning tools can be utilized to make the language learning process more effective and also to improve the students' language proficiency, especially in academic writing.

In academic writing, technology has an important role and can be integrated in the writing process which occurred through the emergence of several writing tools, including Automated Writing Evaluation (AWE). In writing, AWE can be used to replace the common feedback such as teacher corrective feedback and peer feedback, which seems less effective. Zheng & Yu (2018) found that teacher corrective feedback is time consumed and less accurate since the teacher might provide explicit feedback for the students to interpret the errors by themselves. This makes the students need more time to revise their writing, which is ineffective in improving their writing skills. Compared to teacher-written corrective

feedback and peer feedback, Automated Writing Evaluation provides feedback such as grammatical and mechanical errors more effectively (Tian & Zhou, 2020). The use of AWE can be beneficial for teachers in saving time through implementing the Automated Writing Evaluation (AWE) in the learning process so that the learning process becomes more effective (Liao, 2016).

In writing, AWE can be used as an assistant for the students' self-learning process due to the convenience and the efficiency in providing feedback. Students can get immediate feedback in their writing by submitting their works on the AWE platform. Then, the AWE program will analyze the students' writing based on the database related to the language features and provide students with suggestions to improve the students' writing (Hockly, 2019). The students will be motivated to learn about the feedback they have got by themselves while they revise their writing assignments which can also lead the students to become autonomous learners (Zhang & Hyland, 2018).

Most of the AWE platforms provide a similar feature to help check things related to writing, such as grammar, punctuation, vocabulary, spelling, sentence structure, and some of them also provide facilities to check plagiarism or even paraphrasing. Students can use several AWE platforms to support their writing assignments, such as *Turnitin*, *Grammarly, Reverso, Quill Bot*, and many others. Those AWE platforms provide in-depth correction and real-time feedback toward the students' writing assignments. Thus, the convenient use of AWE can help the students enhance their writing skills effectively due to the importance of the students in developing this skill.

One of the language skills that should be comprehended by the students is writing. According to Hasani (2016), writing is an activity that consists of indirect communication skills, language structures, writing techniques, and skills to elicit the ideas into the text that make writing different from other language skills. However, writing is considered a challenging subject in learning a language for most EFL students, especially students in Indonesia. Students need practice and more concentration because writing in a foreign language is considered problematic.

Fadda (2012) stated that EFL students tend to experience difficulties in writing, especially academic writing, because of the distinction between writing in the first language and writing in English. Moreover, Fadda (2012) also asserts that students' lack of knowledge can also lead them to face several difficulties in writing in English. As it is known, writing is not the skill that has been acquired since the moment someone is born, but writing is a skill that developed because of the training process. Someone cannot produce good writing

spontaneously, but it needs several practices to comprehend this skill.

Therefore, the students should optimize their language knowledge to produce the proper writing, especially in writing for academic purposes. According to Saville-Troike (2012), students who enrolled in academic writing in their courses have to use their linguistics understanding, including vocabulary, phonology, syntax, morphology, and discourse structures, to combine the words into phrases, clauses, or paragraphs during the writing activity. This leads to writing becoming the most difficult language skill to comprehend due to the amount of time and effort to produce it.

Moreover, the difficulties that are faced by the students come not only from the students but also from their environments or situations. This is related to the study by Wahyuni & Umam (2017). They found that writing in English is considered a difficult subject because of the students' lack of linguistic knowledge and the feelings of worry about the negative feedback from the teacher and classmates, and also the deadline of their assignments. Thus, Wahyuni & Umam (2017) assert that those problems can lead the students to experience writing anxiety in their writing class.

From those findings, writing anxiety often occurred in university students, including students who take an argumentative writing course. Vanderheide (2017) stated that argumentative writing has a variety of forms and patterns to write an argument. Students may feel under pressure and hesitate with their works because of several rules and patterns in argumentative writing, and they cannot develop their writing skills effectively. Thus, students need immediate feedback that can assist them in preparing their writing assignments properly before submitting their works, which could be obtained through the use of AWE.

Several prior studies have been investigating the use of the AWE platforms in EFL students' writing. One of them is the use of *Grammarly* that popular to use in students' writing. Nova (2018), in the study about the use of *Grammarly*, found that the use of *Grammarly* can have several positive impacts on students' writing. He said that *Grammarly* provides feedback with brief explanations and examples, in which the students can learn independently from that feedback. Moreover, he also found that *Grammarly* offers a high rate of evaluation which saves the students' time when evaluating their academic writing.

Another study also found that *Grammarly* is beneficial for students. Cavaleri & Dianati (2016) assert that *Grammarly* can enhance the students' confidence and understanding of grammatical use. Thus, prior studies have examined the advantages of AWE platforms that can assist students in developing their writing. Thus, the

convenient use of AWE can help the students enhance their writing skills effectively due to the importance of the students in developing this skill.

There is also a previous study that explored the effect of AWE on the students' writing anxiety that conducted by Waer (2021). In this study, Waer (2021) discovered that the use of AWE in writing class can help the students overcome their writing anxiety. In this study, the students who experienced writing anxiety were more likely to utilize AWE while working on their writing assignments. As a result, the immediate feedback from AWE that they could not be acquired in the regular classroom, can reduce the students' writing anxiety level and increase their language knowledge. In addition, several studies have examined the benefits of AWE toward the students' writing.

However, the majority of the previous studies have not directly examined whether there is a relationship between the uses of Automated Writing Evaluation with the students' writing anxiety level in argumentative writing class. Therefore, a study about the correlation between AWE and writing anxiety should be employed to explore whether the use of AWE can affect to the level of students' writing anxiety and vice versa. This study focus on the university students' attitude toward the use of AWE and the level of their writing anxiety during argumentative writing class along with the correlation between them.

The results of this study are expected to give an insight for the students so they can be able to optimize the use of AWE while working on their writing assignments in order to gradually overcome their writing anxiety and improve their writing skills. Moreover, the results of this study are also expected to give insight for the teacher or the lecturer about how the students engage with the AWE, so that they can utilize the AWE platforms as the learning strategy to provide immediate feedback for the students.

Furthermore, the results of this study are also expected to provide an insight about the use of AWE and the students' writing anxiety from different points of view, which can assist the other researchers to have a better understanding to conduct further research related to the use of AWE and the level of writing anxiety. Hence, this study aims to analyze whether there is a correlation between the levels of the students' writing anxiety and the use of AWE in argumentative writing class.

According to the explanation above, this study is conducted to address the following research questions:

a. What are the levels and the types of the students' writing anxiety?

b. What are the levels and the aspects of students' use of the AWE platform on their argumentative writing?

c. Is there any correlation between the students' writing anxiety and the use of the AWE in argumentative writing class?

METHOD

In this study, a quantitative research method employed to investigate the students' writing anxiety level and the use of AWE, also the correlation between them in argumentative writing class. The use of the quantitative research method aimed to obtain factual data along with the help of a structured data collection technique. This study conducted for students of a university in Surabaya who have taken argumentative writing as the course. However, this study uses 40 students that were chosen through a screening process as the sample of this study. The subjects were chosen because of the compatibility of the participant with the criteria of this study.

There were two kinds of questionnaire used as the instrument in this study. The first questionnaire was adopted from Second Language Writing Anxiety Inventory (SLWAI) which was invented by Cheng (2004). This questionnaire was used to examine the level of the students' writing anxiety level due to the accuracy and reliability of this questionnaire, which has been confirmed as highly dependable and accurate through analysis of correlation and factors (Wahyuni & Umam, 2017). SLWAI questionnaire consists of 22 items three subcategories (cognitive anxiety, somatic anxiety, and avoidance behaviour), which can be used to divine the students' writing anxiety level. This questionnaire used to answer the first research question.

Furthermore, to answer the second research question, this study used a questionnaire adapted from the previous study conducted by Wang *et al.* (2013) about the impacts of applying AWE on the students' writing. This questionnaire consists of 30 items that include the writing accuracy, students' autonomy, and also students' interaction with AWE. However, this study only used 15 question items with 5 questions for each category because all of the questions have been represented by the chosen item. Both of the questionnaires were 5 points Likert-scale format from strongly disagree (1) until strongly agree (5) that distributed online by sending the *Google Form* link through *WhatsApp*.

Data obtained from questionnaires were analyzed using quantitative data analysis. For answering the first and the second research questions, data obtained from SLWAI and the use of AWE questionnaires analyzed through descriptive statistical analysis. In order to examine the level of writing anxiety and the use of AWE, the researcher calculated the score, mean, and standard deviation. Then, the calculated scores categorized into

three categories, namely low, moderate, and high levels, based on the formula created by Azwar (2012).

Table 1. The Categories for Writing Anxiety Levels

Categories	Formula
Low Anxiety	X < 64.7
Medium Anxiety	64.7 <= X < 86.7
High Anxiety	X > 86.7

Table 2. The Categories for the Use of AWE

Categories	Formula
Low	X < 35
Medium	35 <= X < 55
High	X > 55

Afterward, the researcher analyzed the correlation to answer the third research question. Before analysing the correlation, the researcher conducted a normality test distribution through the Kolmogorov-Smirnov test. The result showed that the p-value of the normality test was 0.167, which the data distribution was considered normal. Hence, this study uses Pearson correlation product-moment to find out the correlation between the level of writing anxiety and the use of AWE.

RESULTS AND DISCUSSION

The Level and the Types of Students' Writing Anxiety

In relation to the first research question, this study has measured the level of students' writing anxiety using the Second Language Writing Anxiety Inventory questionnaire created by Cheng (2004). The SLWAI questionnaire consists of 22 items that are used as the instrument to determine the level of students' writing anxiety levels into three categories. In this study, the total scores more than 86.7 show a high level of anxiety; the total scores below 64.7 show a low level of writing anxiety; and the total scores between them show a moderate level of writing anxiety. Thus, the researcher gains the results of this instrument as described below.
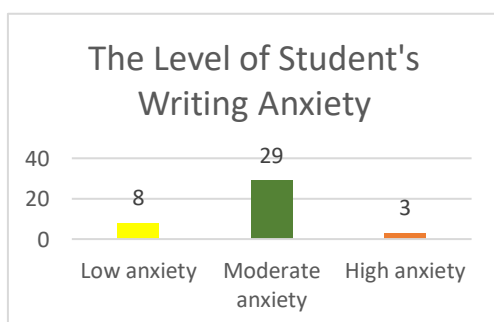
Chart 1. The Level of Students' Writing Anxiety

Chart 1 shows the level of writing anxiety experienced by the students based on the SLWAI questionnaire (n = 40, mean = 75.7, SD = 11.0) with the central tendency represented by the mean (75.7), mode (80), and median (80). Based on the results in figure 1, the researcher found out that most of the students had experienced the moderate level of writing anxiety. There were 29 students (72%) who have a moderate level of writing anxiety, 8 students (20%) have a low level of writing anxiety, and 3 students (8%) have a high level of writing anxiety. Those results can give insight that most of the students did not feel that they have any anxiety with their argumentative writing essay, which has several adjustments for the students.

According to Vanderheide (2017), the students should learn about reasoning argumentatively to connect between claims and evidence, using the expert strategies to create excellent writing, and the different formats of argumentative writing that might cause the students to experience the kind of writing anxiety. However, in this study, most of the students did not encounter any significant problems related to writing anxiety during argumentative writing class, and only a few students at a high level encounter more problems related to writing anxiety.

Besides examining the levels of students' writing anxiety, the researcher has also figured out the categories of students' writing anxiety. There are three categories of students' writing anxiety based on Cheng (2004), including cognitive anxiety, somatic anxiety, and avoidance behaviour. The researcher calculate the mean of each category to find out the dominant type of students' writing anxiety as presented in Table 3.

Table 3. The Types of Students' Writing Anxiety

Types of Writing Anxiety	Number of Students	Total Score	Mean Score
Cognitive Anxiety	40	1184	29.6
Somatic Anxiety	40	1042	26.05
Avoidance Behaviour	40	803	20.08

Table 3 depicts the main type of writing anxiety experienced by the students. The result founds that cognitive anxiety becomes the main type of the students' writing anxiety with the highest mean score (29.6). Moreover, the mean score of somatic anxiety is 26.5 and the mean score of avoidance behaviour is 20.08.

According to Cheng (2004), cognitive anxiety is the aspect of anxiety, in which the students feel worried about their performances, negative expectation, and others'

opinion about their performances. The students might feel worried about their scores and evaluations since their writings were assessed during the class. The students might feel worried about their scores and evaluations since their writings were assessed during the class. The students expect a good grade and evaluation of their writings so that they would be worried about the slightest mistake in their writings (Arindra & Ardi, 2020). Thus, they would be encouraged to produce perfect argumentative writing.

The second type of the students' writing anxiety is somatic anxiety which can cause students to feel nervous and afraid when they are given the task to write (Cheng, 2004). The students might feel their hearts is pounding, trembling, panicking, or even freezing up during the argumentative writing process. This feeling occurred because they feel pressured to write argumentative writing due to the several rules that they have to pay attention to. The last type of the students' writing anxiety is the avoidance behavior. Avoidance behavior is a kind of writing anxiety that includes hesitation, withdrawal, or avoidance of writing in English language (Cheng, 2004). Based on the result, this type of writing anxiety has the lowest mean score. This means that the students in this study were not trying to avoid argumentative writing nor feel hesitant to write it.

The Use of Automated Writing Evaluation in Argumentative Writing Class

In order to answer the research question number two, 15 items of questionnaire adapted from Wang *et al.* (2013) were used to examine the use of AWE in the argumentative writing class. The researcher categorized the use of AWE into three, namely low usage, moderate usage, and high usage. Moreover, the researcher also formulated the range score to categorize it, which are the score below 35 is considered a low usage, the score above 55 is considered as a high usage, and the score between them is considered as a moderate usage. The finding of this questionnaire is presented in the chart 2.

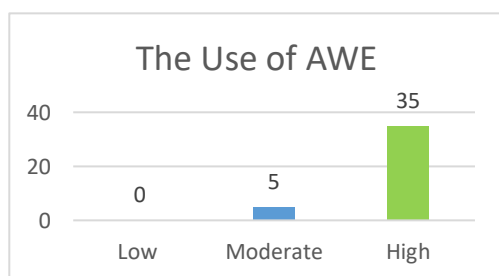Chart 2. The Use of AWE in Argumentative Writing Class

Chart 2 depicts the level of student's use of AWE in argumentative writing class (n = 40, M = 59.05, and SD = 5.6). The central tendency of the figure above was represented by the mean (59.05), median (59). Moreover, most of the students have the high usage of AWE during their argumentative writing class. There are 35 students (88%) who have a high level of the use of AWE, 5 students (12%) have a moderate level of the use of AWE, and there are no students that have a low level of the use of AWE.

Furthermore, the questionnaire about the use of AWE has also discovered three aspects of using AWE platforms in the writing class. Those three aspects were about writing accuracy, learner autonomy, and interaction with AWE that presented in the tables below.

Table 4. Writing Accuracy

Categories	Items	Statements	Means
Writing Accuracy	1	AWE helps me figure out grammatical errors which I have not noticed before.	4.55
	2	I had a hard time using appropriate words in sentences. After using AWE, I learn to use accurate words in specific contexts.	4.05
	3	My argumentative writing becomes more accurate after receiving feedback from AWE.	4
	4	With the support from AWE, I try to use different sentence structures to improve my writing skills.	4.28
	5	I think the feedback from AWE is not useful because it is too simple for me.	3.78
Total mean			4.13

Table 5. Leaner Autonomy

Categories	Items	Statements	Means
Leaner Autonomy	6	The functions of AWE, such as grammar, tips for formats, and bilingual dictionary, can guide me to self-	4.18

		control the whole process of writing.	
	7	I can examine my own writing weaknesses by myself after using AWE.	4.38
	8	AWE makes me understand more about writing because during the process of using AWE, I learn how to find out the major points by myself.	4.08
	9	I think it's hard to learn by myself in the AWE because I do not understand all of the English feedback.	3.95
	10	I am willing to produce more writing because of the convenience of using AWE without the limitation of time and frequency of usage.	3.78
Total mean			4.07

Table 6. Interaction with AWE

Categories	Items	Statements	Means
Interaction with AWE	11	I like feedback from AWE because I can get more ideas in writing.	4.2
	12	I think the feedback from AWE is mechanistic, not humanistic.	2.48
	13	My writing ability cannot be improved because in the AWE, I cannot discuss my own writing problems with it.	3.3
	14	I think AWE is interactive because the feedback is instant.	4.15

	15	It is faster to interact with AWE software than with human beings.	3.95
Total mean			3.16

Based on table 4 about writing accuracy, the majority of the students agree that the use of AWE can help them understand the grammatical errors that they have not noticed before (M = 4.55). Moreover, the students also agree that AWE can help them to learn about the accurate words to use in argumentative writing (M = 4.05) and their writing improves to be more accurate after received feedback from AWE (M = 4). Those results were in line with the benefits of using AWE which can help the students to deal with grammatical errors, punctuation, choice of words, sentence structure, and vocabulary (O'Neill & Russell, 2019). Hence, the use of AWE in terms of writing accuracy was good and approved by the students.

Moreover, table 5 discovered the students' attitude toward the use of AWE in the aspect of learner autonomy. Based on the result, the students can examine their writing weaknesses by themselves after using AWE in the argumentative writing class (M = 4.38). They also agree that the use of AWE during argumentative writing class can lead them to do self-control during process of writing (M = 4.18) and makes the students understand more about the process of writing by themselves (M = 4.08).

Those results prove that using AWE during the writing process can lead the students to be autonomous learners (Zhang & Hyland, 2018). Through the use of AWE in the writing process, students will be motivated to learn about the feedback they have got by themselves while they revise their writing assignments. The students can also become more creative since they have a confident to produce a good essay without relying on the lecturer during the class.

The last aspect of the use of AWE is the interaction with AWE. Based on the result in table 6, the majority of the students are agreed that instant feedback from AWE is interactive (M = 4.15). The students are also like the feedback from AWE because it provides new ideas for the students' writing (M = 4.2). AWE is a sophisticated language learning tool that can provide instant feedback for the student's writing (Koltovskaia, 2020).

Students can get immediate feedback on their writing by submitting their works on the AWE platform. Then, the AWE program will analyze the students' writing based on the database related to the language features and provide students with suggestions to improve the students' writing (Hockly, 2019). Thus, the convenience and sophisticated use of AWE can be beneficial for the students during the argumentative writing process. Moreover, the use of AWE

can also motivate the students to finish their works immediately.

The Correlation between the Students' Writing Anxiety and the Use of AWE in Argumentative Writing Class

In order to understand the correlation between the level of students' writing anxiety and the use of AWE, the researcher conducted a Pearson Product Moment Correlation technique to analyse the data. The researcher correlated the data from the SLWAI questionnaire and the use of AWE questionnaire using the SPSS application.

Table 7. The Result of Pearson Product Moment Correlation

Correlations

		Writing Anxiety	The Use of AWE
Writing Anxiety	Pearson Correlation	1	.240
	Sig. (2-tailed)		.136
	N	40	40
The Use of AWE	Pearson Correlation	.240	1
	Sig. (2-tailed)	.136	
	N	40	40

The result on table 7 shows that there was no correlation between the level of students' writing anxiety and the use of AWE. According to Cohen (2007), the data have a relationship if the significance or *p*-value was <0.05. Meanwhile, the result of the correlational analysis in this study shows that the *p*-value is 0.136 and the correlation coefficient was r=0.240, which means that the data did not have any relationship. As a result, this study accepted the null hypothesis (H$_0$) which means that there is no relationship between the level of students' writing anxiety and the use of AWE in argumentative writing class.

Several previous studies have investigated the effects of using AWE on the students' writing process. A previous study from Waer (2021) examined the effects of integrating AWE on the students' writing anxiety. The result of that study showed there was a decrease in the students' writing anxiety levels who have been exposed to the AWE during the writing process. She also stated that students with writing anxiety tend to use AWE during the writing process more than students without writing anxiety. This can justify that both the level of writing anxiety and the use of AWE have a relationship that can affect each other.

However, the result of this study was contradictory to the result of the study conducted by Waer (2021). Based on the result in table 7, there is no relationship between the level of students' writing anxiety and the use of AWE during argumentative writing class. It can be seen from the result of the Pearson Product Moment Correlation analysis which shows that this study was accepting the null hypothesis (H$_0$) with the *p*-value was more than 0.05. It can be interpreted that the use of AWE and the level of writing anxiety cannot influence each other. The different results between this recent study and the previous study might happen due to the different conditions of the subject, including the course and the level of writing anxiety.

The majority of students in this study have a moderate level of writing anxiety and they tend to use AWE during argumentative writing class. However, the students' writing anxiety did not affect their usage of AWE and vice versa, which indicates that they do not have a correlation. Therefore, this study seems in line with the study from E. Fisher (2017), which stated that the use of AWE platform (*Autograder* application) did not have significant effects on the students' writing anxiety levels. She also stated that the use of *Autograder* application cannot assist the students to decrease the level of writing anxiety.

The possible reason for that condition is because writing anxiety is an affective factor caused by the student itself (Aula Blasco, 2016) which cannot be prevented by the use of AWE. The students in the present study seems only use AWE platforms to assist them in producing good argumentative essays. Hence, the students can still experience writing anxiety even though they have used AWE during the class, including feelings of nervousness, afraid, negative expectations, and hesitation to write.

CONCLUSION

This present study aimed to explore the correlation between the use of AWE and the level of students' writing anxiety level during argumentative writing class. Furthermore, this study also reported the level of writing anxiety and the use of AWE from the students during argumentative writing class. Two questionnaires were used as the instrument in this study, which are the Second Language Writing Anxiety Inventory (SLWAI) and the questionnaire about the use of AWE.

The results from SLWAI questionnaire showed that from 40 students, most of them have a moderate level of writing anxiety during argumentative writing class. This can be inferred that most of them did not have a serious problems related to the writing process. Additionally, cognitive anxiety becomes the main type of anxiety that can affect the students' performance in producing argumentative essays. This type of writing anxiety can cause the students to feel worried about the scores and

evaluation since they have high expectation about their writing.

Furthermore, the questionnaire about the use of AWE also reported that most of the students were tend to use AWE during argumentative writing class with a high level of usage. As explained before, the students agreed that the use of AWE during the writing process was helpful to improve their vocabulary, sentence construct, punctuation, and grammatical understanding; lead them to autonomous learning; and provide them with attractive feedback. However, another finding discovered that there is no correlation between the use of AWE and the level of students' writing anxiety in argumentative writing class.

Based on this result, AWE cannot be completely relied to overcome writing anxiety. However, AWE becomes a tool that can help the students to produce a good writing through the instant feedback. The students only use AWE to assist them in producing a good argumentative essay, but it cannot affect their level of writing anxiety. Therefore, this study was in line with E. Fisher (2017) that the use of AWE did not provide significant effects to the level of students' writing anxiety and vice versa. Moreover, this study complements another previous studies in which there is not always a correlation between the use of AWE and the level of students' writing anxiety.

SUGGESTION

Regarding the results of this study, the researcher would like to give several suggestions. As explained in the discussion section, the use of AWE in argumentative writing class did not correlate with the level of writing anxiety. It means that the use of AWE cannot be influenced by the level of students' writing anxiety and vice versa. Hence, the students should be aware with their writing anxiety and practice more to write English compositions to decrease the anxiety during the writing process.

Furthermore, this study still has limitations in particular aspects. Thus, further research is needed to conduct the same study with different aspects of writing or with the specific AWE platform. Further research can also explore the causes of students' writing anxiety since there are difference results of the students' writing anxiety levels. Moreover, this study is limited to the students in argumentative writing class, the further research may use the larger participant in different courses.

REFERENCES

Arindra, M. Y., & Ardi, P. (2020). The correlation between students' writing anxiety and the use of writing assessment rubrics. *LEARN Journal: Language Education and Acquisition Research Network*, *13*(1), 76–93.

Aula Blasco, J. (2016). The relationship between writing anxiety, writing selfefficacy, and Spanish EFL students' use of metacognitive writing strategies: a case study. *Journal of English Studies*, *14*, 7. https://doi.org/10.18172/jes.3069

Azwar, Saiffudin (2012). *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Pelajar

Cavaleri, M., & Dianati, S. (2016). You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students. *Journal of Academic Language and Learning*, *10*(1), A223-A236–A236.

Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, *13*(4), 313–335. https://doi.org/10.1016/j.jslw.2004.07.001

Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education. In *Research Methods in Education* (6th editio). New York, USA: Routledge. https://doi.org/10.4324/9780203029053

E. Fisher, J. (2017). The Intelligent Essay Assessor Autograder and Its Effect on Reducing College Writing Anxiety. *Doctoral Disertation of Keiser University*. ProQuest Dissertations Publishing

Fadda, H. Al. (2012). Difficulties in academic writing: From the perspective of King Saud University postgraduate students. *English Language Teaching*, *5*(3), 123–130. https://doi.org/10.5539/elt.v5n3p123

Hasani, A. (2016). Enhancing Argumentative Writing Skill through Contextual Teaching and Learning. *Educational Research and Reviews*, *11*(16), 1573–1578. https://doi.org/10.5897/ERR2016.2806

Hockly, N. (2019). Automated writing evaluation. *ELT Journal*, *73*(1), 82–88. https://doi.org/10.1093/elt/ccy044

Kalyuga, S., & Liu, T. C. (2015). Guest Editorial: Managing cognitive load in technology-based learning environments. *Educational Technology and Society*, *18*(4), 1–8.

Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*, *44*(September 2019), 100450. https://doi.org/10.1016/j.asw.2020.100450

Liao, H. C. (2016). Using automated writing evaluation to reduce grammar errors in writing. *ELT Journal*, *70*(3), 308–319. https://doi.org/10.1093/elt/ccv058

Nova, M. (2018). Utilizing Grammarly in Evaluating Academic Writing: a Narrative Research on Efl Students' Experience. *Premise: Journal of English Education*, *7*(1), 80. https://doi.org/10.24127/pj.v7i1.1332

O'Neill, R., & Russell, A. M. T. (2019). Stop! Grammar time: University students' perceptions of the automated feedback program Grammarly. *Australasian Journal of Educational Technology*, *35*(1), 42–56. https://doi.org/10.14742/ajet.3795

Saville-Troike, M. (2012). Introducing Second Language Acquisition. In *Introducing Second Language Acquisition*. https://doi.org/10.1017/cbo9780511808838.002

Tian, L., & Zhou, Y. (2020). Learner engagement with automated feedback, peer feedback and teacher feedback in an online EFL writing context. *System*, *91*, 102247. https://doi.org/10.1016/j.system.2020.102247

Vanderheide, J. (2017). Classroom Talk as Writing Instruction for Learning to Make Writing Moves in Literary Arguments. *Reading Research Quarterly*, 1–22. https://doi.org/10.1002/rrq.196

Waer, H. (2021). The effect of integrating automated writing evaluation on EFL writing apprehension and grammatical knowledge. *Innovation in Language Learning and Teaching*, *0*(0), 1–25. https://doi.org/10.1080/17501229.2021.1914062

Wahyuni, S., & Umam, M. K. (2017). An Analysis on Writing Anxiety of Indonesian Efl. *Jeels*, *4*(1), 105–128.

Wang, Y. J., Shang, H. F., & Briody, P. (2013). Exploring the impact of using automated writing evaluation in English as a foreign language university students' writing. *Computer Assisted Language Learning*, *26*(3), 234–257. https://doi.org/10.1080/09588221.2012.655300

Zhang, Z. (Victor), & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, *36*(February), 90–102. https://doi.org/10.1016/j.asw.2018.02.004

Zheng, Y., & Yu, S. (2018). Student engagement with teacher written corrective feedback in EFL writing: A case study of Chinese lower-proficiency students. *Assessing Writing*, *37*(January), 13–24. https://doi.org/10.1016/j.asw.2018.03.001