LINGUISTIC VARIATION BETWEEN MALE AND FEMALE STUDENTS IN ACADEMIC WRITING

Surya Asra[1], Grace Josephine Tiwon Wiradisastra[2]
[1]Universitas Samudra, Langsa, Indonesia
[2]Universitas Indonesia, Depok, Indonesia
E-mail: suryaasra2019@unsam.ac.id

Abstract

The variation of linguistic characteristics in academic writing between male and female is inevitable to happen. Therefore, this study aimed at finding out the differences of male and female students in linguistic characteristics of academic writing from perspective of linguistics, especially at the level of text analysis. The quantitative research method with convergent parallel design was used to analyze sixty students' essay writing chosen by using a purposive sampling technique. The result revealed that there were some differences of linguistic characteristics in academic writing between male and female. The female students outperformed male students in all linguistic characteristics in text-level analysis. The female students were found more capable in paragraphing competences, linking devices, text output counts, topical organization, and ending. The findings generally support the notion that differences of linguistic characteristics between male and female should be considered in teaching academic writing to create a friendly teaching-learning process for both genders.

1. Introduction

The research on the influence of gender in language teaching has been carried out by many experts (Andini & Prasetyowati, 2021; Cameron, 1997; Fattahi & Nushi, 2021; Gtowka, 2014; Mahmud, 2018; Sunderland, 2000, 2006). The studies have been conducted since gender becomes one of factors that causes diversity in language (Holmes, 2013). However, there are only a few of the studies that examine gender focused on writing skill (Reynolds et al., 2015; Sunderland, 2000; Waskita, 2008). This fact has an explanation that many people including some researchers consider speaking skill as a benchmark in assessing someone's language skill (Waskita, 2008). As a result, the other skills (listening, reading, and writing) are rarely used as research topics, especially in relation to gender influence.

The above assumption is not fully wrong, yet the contribution of literacy skill, especially writing skill cannot be ignored. Writing skill is one of the important factors to achieve a better future career. Tuan (2010) reveals that the success of EFL learners in English writing skill brings benefits not only for the learning process but also for a better career in the future. Many tasks in working life must be accomplished by writing, such as compiling report, writing scientific journal, composing speech, and so on. Therefore, writing skill is an

important factor in academic life, especially in university. In the context of higher education, the function of writing skill becomes very important. Students are required to write an academic paper at the end of their study at university. Besides, they are also required to take academic written tests such as TOEFL and IELTS. Therefore, gender studies in relation to writing skill is very necessary to conduct.

The influence of gender is manifested in language products produced by men and women, both in writing and speaking. Newman, Groom, Handelman, and Pennebaker (2008) state that gender differences in language use between men and women are consistent. Furthermore, Hamdan and Hamdan (2013) state that from birth both genders have followed different codes of conduct according to existing community rules and this has caused men and women to have different life experiences, ways of speaking, and ways of writing. In summary, writing skill as one of language skills cannot be separated from the influence of gender in it. Therefore, the study of gender influence in writing skill is the first step to understand the differences and then applies it to teaching-learning process of writing.

There are three perspectives developed by Jones (2011) to explain the influence of gender in writing skill, namely cognitive psychology, socio-cultural, and linguistic perspectives. This study focused on linguistic perspective for analyzing written text (student writing product). Linguistic analysis is in line with characteristics of academic writing in the classroom context, especially for academic writing in higher education. The linguistic perspective analyzed the linguistic features of a text, such as text and lexical diversity. The analysis carried out in this study was limited on analysis of linguistic characteristics in text level.

2. Literature Review

The linguistic perspective is a comprehensive analysis that analyses written text based on linguistic characteristics in text and sentence (Jones & Myhill, 2007). Linguistic characteristics in text-level analysis consist of topical organization, paragraphing competence, closing paragraph (endings), linking devices, and text output counts.

Topical organization is a topic setting process of a paragraph to fit the topic of text writing. The topic of text writing is usually determined by the organizer of writing test, and this is an absolute requirement in writing text. In this study, there are four aspects of topical organization analyzed, consisting of: (1) paragraphs commencing with a topic sentence, (2) logical order to paragraphs or following a systematic compilation of paragraphs into a logical text, (3) paragraphs drifting off topic, and (4) paragraphs needing subdivision.

Paragraphing competence is a process to arrange paragraphs into good text in a writing. A good paragraph according to Oshima and Hogue (2006) and Johns (1997) must have the following requirements: (1) topic sentence, (2) arranged logically, and (3) only one main idea. In addition, Jones and Myhill (2007) and Johns (1997) state that a good paragraph must use meta-discourse signs, references, and conclusion (it is not absolute). Whereas a poor paragraph can be seen from partial paragraphs (incomplete paragraphs), paragraphs with one sentence, and the absence of paragraphs conditioned.

Endings is a conclusion paragraph of an article. It consists of (1) thematic link with previous paragraph, (2) thematic link with opening paragraph, (3) repetition of words or phrases in opening paragraph, (4) repetition of proper nouns in opening paragraph, and (5) summaries, conclusions/ suggestions, or comments (Jones and Myhill, 2007).

Linking devices is hyphens that the author uses to connect words, sentences, and paragraphs into a complete article. The linking devices analyzed in this study consist of (Jones and Myhill, 2007): (1) temporal adverbials, (2) ordinal adverbials, (3) place adverbials, (4) manner adverbials, (5) additive adverbials, (6) adversative adverbials, (7) causal adverbials (8) repeated words; (9) repeated phrases; (10) repetition of proper nouns, (11) synonyms, (12) hyponyms-hypernyms, (13) anaphoric pronouns, and (14) determiners.

Text output counts is the total of characters, words, sentences, and paragraphs produced by the author. There are eight aspects of text output counts that are analyzed in this study, including (Jones & Myhill, 2007): (1) number of characters (not including commas and spaces), (2) number of words, (3) number of sentences, (4) number of paragraphs, (5) number of sentences per paragraphs, (6) number of words per sentences, (7) number of characters per words, and (8) number of passive sentences.

For a brief description of text-level analysis, it can be seen in the following table.

Category	Criteria	Sub-criteria
Topical organization	Paragraphs commencing with a topic sentence	
	Logical order to paragraphs	
	Paragraphs drifting off topic	
	Paragraphs needing subdivision	
Paragraphing competence	Complete paragraphs	Having a topic sentence, arranged logically, explaining only one main idea
		Using meta-discourse signs
		Using references
		Having a conclusion sentence
	Incomplete paragraphs	Partial paragraphs
		Paragraphs with one sentence
	No paragraphs	
Endings	Thematic link with previous paragraph	
	Thematic link with opening paragraph	
	Repetition of words or phrases in opening paragraph	
	Repetition of proper nouns in opening paragraph	
	Summaries, conclusions/ suggestions, or comments	
Linking devices	Adverbials	Temporal
		Ordinal
		Place
		Manner
		Additive
		Adversative
		Causal

	Repetition	Words
		Phrases
		Proper nouns
	Synonyms	
	Hyponym-hypernyms	
	Anaphoric pronouns	
	Determiners	
Text output counts	Number of characters	
	Number of words	
	Number of sentences	
	Number of paragraphs	
	Number of sentences per paragraphs	
	Number of words per sentences	
	Number of characters per words	
	Number of passive sentences	

Adapted from Jones and Myhill (2007)

Table 1. Criterions for linguistic analysis in text-level analysis

3. Research Method

The method used in this research was a quantitative method. Quantitative data in this study is in the form of numerical data obtained from coding linguistic characteristics of students' essay writing and then this data is analyzed statistically (descriptive and inferential). Meanwhile, the convergent parallel design approach was used since the data from statistical analysis and data from coding linguistic characteristics in students writing paper were compared to find patterns and draw research conclusions (Creswell & Plano-Clark, 2011; Nunan & Bailey, 2009).

3.1 Participants

The population of this study were students of English Education Department who were in the fourth semester 4 and they took Essay Writing course. There were 108 students who participated in this study consisting of 48 male students and 60 female students. Meanwhile, the sample of this study was selected by purposive or judgmental sampling technique as the process of selecting a sample is based on the researcher's belief that the sample can be a representation of the population based on the researcher's knowledge of the characteristics the group (Gay, Mills, & Airasian, 2006; Arikunto, 2013). As a result, 60 students were used as research samples consisting of 30 male students and 30 female students who were selected based on the characteristics that match the research objectives, namely based on the average writing ability score.

3.2 Instruments

Data for this study were collected through an academic written test of five-paragraph essay. The test was a paper-based test consisting of five paragraphs with one paragraph of introduction, three paragraph of body, and one paragraph of conclusion.

3.3 Data analysis

The data analysis procedure was by using SPSS v.22 and coding of the writing adapted from Jones and Myhill categories (2007), particularly analysis in text level (see table 1). The statistical analysis was conducted to obtain an overview of the significance level of differences between male and female students. Descriptive and inferential statistical analysis used included *t-test* to see the significance of the overall linguistic characteristics and *two-way* ANOVA *test* (two-way analysis of variance) to see the level of significance of aspects of linguistics. The results of statistical analysis from the SPSS program were presented in the form of a table of mean and significance values with a comparative significance level of 5% (p=0.05). It means that the significance value was categorized to be "significant" if it was lower than p=0.05 and "insignificant" if it was higher than p=0.05.

4. Results and Discussion

It was found that there were differences in linguistic characteristics produced between male and female students. The researchers found that female students outperformed male students in all linguistic characteristics in text-level analysis.

4.1. Topical organization

The researchers found that female student ability to organize a topic in academic writing were better than male student ability. This is due to the tendency of male students not to follow the rules of good paragraph compilation, for example not having the same topic among paragraphs and not arranging paragraphs in logical order. The following table shows a different frequency of topical organization aspects between male and female students.

Aspects of topical organization	*Frequency of gender differences*	
	Male	*Female*
Paragraphs commencing with a topic sentence	96	118
Logical order to paragraphs	7	18
Paragraphs drifting off topic	54	32
Paragraphs needing subdivision	54	38

Table 3. Frequency of topical organization.

Firstly, for paragraphs commencing with a topic sentence, female students produced 118 paragraphs, while male students produced 96 paragraphs. There are 22 paragraphs of difference. Secondly, for logical order to paragraphs, there were only 7 male students who arranged their paragraphs sequentially and logically, while there are 18 female students who arranged their paragraphs sequentially and logically. The difference is 11 students. Thirdly, for paragraphs drifting off topic, male students wrote 54 paragraphs that do not fit the topic, while female students only wrote 32 paragraphs. The difference is 22 paragraphs. Fourthly, for paragraphs needing subdivision, male students wrote 54 paragraphs, while female students only wrote 38 paragraphs. The difference is 16 paragraphs.

Generally, it was found that female students produce more paragraphs than male students in aspects of paragraphs commencing with a topic sentence and logical order to paragraphs. While male students produce more paragraphs than female students in aspects

of paragraphs drifting off topic and paragraphs needing subdivision. The statistical analysis on each aspect of topical organization can be seen in the table below.

Aspects of topical organization	Mean			Sig. of ANOVA Test
	Male	Female	Difference	
Paragraphs commencing with a topic sentence	3.2	3.9	.7	.006
Logical order to paragraphs	.233	.6	.367	.003
Paragraphs drifting off topic	1.8	1.067	.733	.006
Paragraphs needing subdivision	1.8	1.267	.533	.031

Table 4. Statistical test of topical organization

All aspects of topical organization have a significant difference value. Their values are lower than significance level p=0.05. It means that the difference is statistically significant. In other words, female students' ability on topical organization is better than male students. Therefore, writing instructors must emphasize to their students that they need to write paragraphs according to the topic required by test organizer are important in writing academic. In addition, they also need to state to their students that they must be logical and avoid writing two different ideas in one paragraph.

4.2. Paragraphing competence

It was found that female students were better than male students to form paragraphs. They tend to follow some rules in writing a good paragraph, such as having a topic sentence, writing in logical order, and explaining only one main idea. On the contrary, male students tend to violate the rules of good paragraph compilation. In addition, male students also tend not to pay attention to the conditions requested by the test organizer, including number of paragraphs needed. The following table presents a different frequency of paragraphing competence aspects between male and female students.

Aspects of paragraphing competence		Frequency of gender differences	
		Male	Female
Complete paragraphs	Having a topic sentence, arranged logically, explaining only one main idea	111	126
	Using meta-discourse signs	36	75
	Using references	0	2
	Having a conclusion sentence	16	38
	Total	163	241
Incomplete paragraphs	Partial paragraphs	73	23
	Paragraphs with one sentence	8	4
	Total	81	27
No paragraphs		2	0
	Total	2	0

Table 5. Frequency of paragraphing competence.

Firstly, for complete paragraphs with a topic sentence, logical arrangement, only one main idea, female students produced 126 paragraphs, while male students produced 111 paragraphs. The difference is 15 paragraphs. For complete paragraphs using meta-discourse

signs, female students wrote 75 paragraphs, while male students wrote 36 paragraphs. There are 39 paragraphs of difference. For complete paragraphs using references, female students compiled 2 paragraphs, while there were no male students compiling paragraphs with references. Then, for complete paragraphs with a conclusion sentence, female students produced 38 paragraphs, while male students produced 16 paragraphs. The difference is 22 paragraphs. If all those aspects are summed, female students produced 241 paragraphs for aspect of complete paragraphs, while male students produced 163 paragraphs. There are 78 paragraphs of difference.

Secondly, for incomplete/partial paragraphs, female students only produced 23 paragraphs, while male students produced 73 paragraphs. The difference is 50 paragraphs. Then, for incomplete paragraphs with one sentence, female students wrote only 4 paragraphs, while male students wrote 8 paragraphs. If both of them are summed, female students only produced 27 paragraphs, while male students produced 81 paragraphs. There are 54 paragraphs of difference. Thirdly, for no paragraphs, there is no mistake made by female students, while male students had the lack number of paragraphs required by the test organizer (no two paragraphs).

It can be concluded that the number of good paragraphs with a topic sentence, logical arrangement, only one main idea, meta-discourse signs, references, and conclusion sentence produced by female students is more than male students. While male students produced more bad paragraphs, such as partial paragraphs and paragraphs with one sentence than female students. Even, they made the absence of 2 paragraphs (no paragraphs) out of the total 150 paragraphs that should have been produced in the test. The statistical analysis on each aspect of paragraphing competence can be seen in the table below.

Aspects of paragraphing competence		Mean			Sig. of ANOVA Test
		Male	*Female*	*Difference*	
Complete paragraphs	Having a topic sentence, arranged logically, explaining only one main idea	3.7	4.2	.5	.028
	Using meta-discourse signs	1.2	2.5	1.3	.001
	Using references	.000	.067	.065	.155
	Having a conclusion sentence	.533	1.267	.734	.009
Incomplete paragraphs	Partial paragraphs	2.433	.767	1.666	.000
	Paragraphs with one sentence	.233	.133	.1	.374
No paragraphs		.067	.000	.067	.155

Table 6. Statistical test of paragraphing competence

It appears that there are four aspects of paragraphing competence that have a statistically significant difference between male and female students (their values are lower

than significance level p=0.05). There are (1) complete paragraphs with a topic sentence, logical arrangement, and only one main idea, (2) complete paragraphs using meta-discourse, (3) complete paragraphs with a conclusion sentence, and (4) partial paragraphs. Related to complete paragraphs and partial paragraphs, writing instructors must emphasize to their student that there are three absolute requirements in compiling a good paragraph, especially on a condition that there should be only one main idea in one paragraph.

4.3. Endings

It was found that the closing paragraph quality of female students was better than male students. Yet, the difference is not so prominent between them because it only focuses on the last paragraph. To see the difference on aspects of endings (closing paragraph) between male and female students, the following table presents their different frequency.

Aspects of endings	Frequency of gender differences	
	Male	Female
Thematic link with previous paragraph	21	28
Thematic link with opening paragraph	20	28
Repetition of words or phrases in opening paragraph	7	11
Repetition of proper nouns in opening paragraph	0	0
Summaries, conclusions/ suggestions, or comments	20	29

Table 7. Frequency of endings

Firstly, there were 28 female students who had closing paragraph related to previous paragraph, while there were 21 male students who had it. The difference is 7 students. Secondly, there were also 28 female students who had closing paragraph related to opening paragraph, while there were 20 male students who had it. There are 8 people of difference. Thirdly, for repetition of words or phrases in opening paragraph, there were 11 female students who repeated words or phrases in opening paragraph, while there were 7 female students who did it. The difference are 4 students. Fourthly, for repetition of proper nouns in opening paragraph, there were no students who did it, both male and female students. Fifthly, there were 29 female students who had closing paragraph containing summaries, conclusions/ suggestions, or comments, while there were only 20 male students who had it. The difference were 9 students. From those points, it can be concluded that closing paragraph aspects of female students are better than male students. The statistical analysis on each aspect of endings (closing paragraph) can be seen in the table below.

Aspects of endings	Mean			Sig. of ANOVA Test
	Male	Female	Difference	
Thematic link with previous paragraph	.7	.933	.233	.019
Thematic link with opening paragraph	.667	.933	.266	.009
Repetition of words or phrases in opening paragraph	.233	.367	.134	.267
Repetition of proper nouns in opening paragraph	.000	.000	.	.
Summaries, conclusions/ suggestions, or comments	.667	.967	.3	.002

Table 8. Statistical test of endings

It can be seen that there are three aspects of endings that have statistically significant differences between male and female students, namely thematic link with previous paragraph, thematic link with opening paragraph, and summaries, conclusions/ suggestions, or comments. Their values are lower than significance level p= 0.05. Therefore, writing instructors must pay attention to their student ability in compiling a closing paragraph, especially on significantly different aspects.

4.4 Linking devices

The researchers found that female students were better in using linking devices than male students, both in terms of usage and number. However, female students did more word repetition. This is because the number of words produced by female students is also more than male students. Besides, female students were also better at using hyponym-hypernym. Therefore, female student's writing became more detailed, and their argument became stronger due to adding examples. To see each aspect of linking devices, the following table presents a different frequency between male and female students.

Aspects of linking devices		Frequency of gender differences	
		Male	*Female*
Adverbials	Temporal	174	228
	Ordinal	26	61
	Place	2	3
	Manner	77	90
	Additive	141	158
	Adversative	126	131
	Causal	140	135
Total		**686**	**806**
Repetition	Words	4444	5548
	Phrases	381	383
	Proper nouns	0	0
Total		**4825**	**5931**
Synonyms		231	241
Hyponym-hypernyms		68	87
Anaphoric pronouns		404	608
Determiners		1093	1280

Table 9. Frequency of linking devices

Firstly, for temporal adverbials, female students produced 228 items, while male students produced 174 items. There are 54 items of difference. For ordinal adverbials, female student made 61 items, while male students made 26. The difference is 35 items. For place adverbials, female students wrote 3 items, while male students wrote 2 items. There was only one item for difference. For manner adverbials, female students made 90 items, while male students made 77 items. The difference was 13 items. For additive adverbials, female students produced 158 items, while male students produced 141 items. the difference is 17 items. For adversative adverbials, female students wrote 131 items, while male students wrote 126. There are 5 items of difference. Then, for causal adverbials, female

students produced 135 items, while male students produced 140 items. There are also 5 items of difference, but male students produced more causal adverbials than female students. However, if all aspects of adverbials are summed, female students still produced more adverbials than male students. Female students wrote 806 items, while male students wrote 686 items with 120 items of difference.

Secondly, for repeated words, female students produced 5.548 words, while male students produced 4.444 words. The difference is 1.104 items. For repeated phrases, female students wrote 383 phrases, while male students wrote 381 phrases. There are only 2 phrases. Then for repetition of proper nouns, it was not found in all writings, both male and female students. If those repetitions are summed, there are 5931 repetitions made by female students, while there are 4825 repetitions made by male students. There are 1105 repetitions of words, phrases, and proper nouns. However, the small number of repetitions does not make writing of male students better than female students because the small repetition also shows a small amount of text output (number of words and phrases produced).

Thirdly, female students used 241 synonyms, while male students used 231 synonyms. The difference is 10 synonyms. With that slight difference, it can be concluded that the ability to use synonyms between genders is no different. An article is categorized to be good if the repetition of words/phrases is few and the use of synonyms increases. Yet, this study found that the use of synonyms between male and female students is almost the same.

Fourthly, female students produced 87 hyponyms-hypernyms, while male students produced 68 hyponyms-hypernyms. The difference is 19 hyponyms-hypernyms. It means that the ability of female students to use hyponyms-hypernyms is better than female students. Therefore, the writing of female students becomes more detailed using more specific terms. Fifthly, female students produced 608 anaphoric pronouns, while male students used 404 anaphoric pronouns. The difference is 204 anaphoric pronouns. Sixthly, female students used 1280 determiners, while male students used 1093 determiners. There are 187 determiners of difference. It means that the writing of female students has more words than male students.

Generally, it can be concluded that for the use of adverbials, repetitions, synonyms, hyponyms-hypernyms, anaphoric pronouns, and determiners, female students outperformed male students. The statistical analysis on each aspect of linking devices can be seen in the table below.

Aspects of linking devices	Mean			Sig. of ANOVA Test
	Male	Female	Difference	
Temporal adverbials	5.8	7.6	1.8	.046
Ordinal adverbials	.867	2.033	1.166	.014
Place adverbials	.067	.1	.033	.703
Manner adverbials	2.567	3	.433	.438
Additive adverbials	4.7	5.267	.567	.392
Adversative adverbials	4.2	4.367	.167	.833
Causal adverbials	4.667	4.5	.167	.796
Repeated words	148.133	184.933	36.8	.001

Repeated phrases	12.7	12.767	.067	.962
Repetition of proper nouns	.000	.000	.	.
Synonyms	7.7	8.033	.333	.612
Hyponym-hypernyms	2.267	2.9	.633	.094
Anaphoric pronouns	13.467	20.267	6.8	.009
Determiners	36.433	42.667	6.234	.028

Table 10. Statistical test of linking devices

It can be concluded that there are five aspects of linking devices that have significant differences between male and female students for significance level of p=0.05, namely temporal adverbials, ordinal adverbials, repeated words, anaphoric pronouns, and determiners. Therefore, writing instructors must pay attention to all significant aspects of linking devices when teaching writing skill.

4.5 Text output counts

From the analysis of student writing using *Markin* 4, it was found that number of text output counts of female students was better than male students. It means that female students produced a greater number of text output count than male students. It makes the writing of female students is better and more detail than female students. To see the different aspects of the number of text output counts, the following table presents the different frequency between male and female students.

Aspects of text output counts	*Frequency of gender differences*	
	Male	*Female*
Number of characters	34049	40529
Number of words	7601	9081
Number of sentences	475	601
Number of paragraphs	148	150
Number of sentences per paragraphs	96	120.2
Number of words per sentences	494.24	452.96
Number of characters per words	133.29	133.73
Number of passive sentences	31	38

Table 11. Frequency of text output counts

Firstly, for number of characters, female students produced 40529 characters, while male students produced 34049 characters. The difference is 6480 characters. Secondly, for number of words, female students produced 9081 words, while male students only produced 7601 words. The difference is 1480 words. Thirdly, for number of sentences, female students produced 601 sentences, while male students produced 475 sentences. The difference is 126 sentences. Fourthly, for number of paragraphs, female students produced 150 paragraphs. while male students produced 148 paragraphs. It has only 2 paragraphs of

difference because there are 2 male students who only write 4 paragraphs. It should be the same if male students followed the requirements stated by the test organizer. It has been discussed in the aspect of no paragraphs. Fifthly, for number of sentences per paragraph, female students got 120.2 sentences, while male students got 96 sentences. The difference is 24.2 sentences. It means that female students have more sentences for each paragraph than male students.

Sixthly, for number of words per sentence, female students got 452.96 words, while male students got 494.24 words. The difference is 41.28 words. Male students have more words for each sentence than female students in this aspect. This is due to the smaller number of sentences of male students than female students. Seventhly, for number of characters per word, female students got 133.73 characters, while male students got 133.29 characters. There is only 0.44 characters of difference. It means that both male and female students have the same number of characters for each word. Eighthly, for number of passive sentences, female students produced 38 sentences, while male students produced 31 sentences. The difference is 7 sentences.

Although the difference of text output counts is not too many, it can still be inferred that the writing of female students is better than female students. The statistical analysis on each aspect of text output counts can be seen in the table below.

Aspects of text output counts	Mean			Sig. of ANOVA Test
	Male	Female	Difference	
Number of characters	1.134.967	1.350.967	216	.003
Number of words	253.367	302.7	49.333	.002
Number of sentences	15.833	20	4.167	.000
Number of paragraphs	4.933	5	0.067	.155
Number of sentences per paragraphs	3.2	4	0.8	.001
Number of words per sentences	16.475	15.56	0.915	.218
Number of characters per words	4.443	4.458	0.015	.817
Number of passive sentences	1.033	1.267	0.234	.500

Table 12. Statistical test of text output counts

It can be concluded that there are four aspects of text output counts that have significant difference values for significance level of p=0.05, namely number of characters, number of words, number of sentences, and number of sentences per paragraph. These four aspects, especially number of words sentences must be writing instructors' attention in teaching writing skill. In addition, although number of passive sentences does not experience a significant difference, writing instructors should also emphasize to their student about the importance of using passive sentences in academic writing to produce formal writing and objective writing styles (Jordan, 2003).

Female students had better abilities than male students in all linguistic characteristics of text analysis. They can excel almost in all of these linguistic characteristics in text-level analysis (topical organization, paragraphing competences, ending, linking devices, and text

output counts. Besides, it was also found that all of these linguistic characteristics obtained significant differences at a significance level of p=0.05. However, the differences are not statistically significant. From previous research conducted by Jones and Myhill (2007), it was also found that men tend to write long paragraphs. On the contrary, this research proves that female students tend to write longer paragraphs with a higher number of sentences.

5. Conclusion

The highest significant difference of linguistic characteristics in text-level analysis is paragraphing competences. Paragraphing competences consist of complete paragraphs (topic sentence, one main idea, logical order, paragraphs with meta-discourse, paragraphs with references, and paragraphs with conclusion sentences), incomplete paragraphs (partial paragraphs and paragraphs with one sentence), and no paragraphs. For this linguistic characteristic, it is found that female students produced more complete paragraphs. In other words, female students outperformed male students. Otherwise, male students produced more partial paragraphs, paragraphs with only one sentence, and no paragraphs. The most dominant cause that makes female students are superior to male students in paragraphing competences is meta-discourse. Female students in writings tend to use meta-discourse signs, such as *first* (*ly*), *second* (*ly*), *third* (*ly*), *last* (*ly*), *in conclusion*, *therefore*, and *so* in their writing. The use of meta-discourse signs also influences other linguistic characteristics, such as topical organization and endings. Meta-discourse signs make topical organization easier, and endings (closing paragraphs) has a good quality.

There are several notions that need to be considered by writing instructors and further researcher. Writing instructors (teachers, lecturers, tutors, etc.) should consider gender differences in teaching English, especially in teaching academic writing skill and pay more attention when teaching students with different gender in one class. This attention can be focused on aspects of linguistic characteristics of academic writing in order to specifically help their students in teaching-learning process. Besides, further researchers can do more written tests as a research instrument, not just one written test in order to validate research data. Further researchers can also use different types (genres) of text, such as analyzing student daily journals, both in text and sentence levels.

Acknowledgements

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