

LOGICAL FALLACIES ON STUDENTS' ARGUMENTATIVE WRITING

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ABSTRACT

In writing an argumentative paragraph, there will be some fallacies that can be explained as students' misunderstanding in interpreting source language to target language, in this context English is as a target language. This misunderstanding called logical fallacies where it can broke the meaning in TL. Therefore, the aim of this research was to identify and analyze types of logical fallacies done by the fourth semester students in argumentative writing at English department of IAIN Bukittinggi. The design of this research was descriptive quantitative. The population was the fourth semester students who take writing for professional context subject. The sample was 28 students. The instrument used was documentation of student's argumentative writing tasks. The result showed that, some informal logical fallacies found in students' writing. 76% students wrote inductive fallacy on their writing which means that students drew a conclusion without providing enough evidence on their writing.

Keyword: *Fallacies, Logical Fallacies, Writing, Argumentative Essay*

INTRODUCTION

In argumentative writing, students learn how to share opinions, ideas or arguments in form of writing. The students are required to have the sufficient knowledge to support their ideas about the given topic. This condition encourages the students to be able to develop or elaborate their arguments in order to strengthen their explanation. Sometimes the student did not know what and how write well, so there were some fallacies on their writing. In argumentative writing, the presence of logical fallacy which can be simply defined as error in reasoning shows either illegitimate arguments or irrelevant points that will undermine the strength of a claim. Forgelin (2010) states that logical fallacies can simply be defined as defective conclusion. Interestingly, these mistakes in reasoning may be intentional or unintentional. The knowledge on this logical fallacy is important for students to prevent them

making the mistake as well as to make them more alert to the flaws in other people's argument.

Despite the significant role in the quality of an argument in writing, the topic of logical fallacies has to be explored in the context of academic writing, the facts show that there are other aspects that need immediate response in writing such as grammar, mechanism and organization (Paul Stapleton, 2015; Diab, 2011; Hansen, 2020; El Khoiri, 2017;. While (Hitchcock, 2017) explains that arguing the original sense of a statement or ideas is an appropriate strategy in order to address the interlocutor commitments in drawing a conclusion briefly, (Hansen, 2020) states that being able to analyze and avoid fallacies has been showed as a compliment criteria in a good reasoning.

Diab (2011); Paul Stapleton (2015) assessing the relationship between types and the quality of an arguments in writing. The previous research found that the important of peer-editing and self-editing reflected the way of argument written in a writing task. Both peer or self-editing had more or less the same ability in revising the writing. However, the later revealed that several patterns in adequacies in the reasoning were exposing the need to bring a great assumption to the reasoning quality of a persuasive writing. Then, Paul Deane (2014) focused on the important of argumentation as a literacy practice. His model try to measure the development of critical argumentation skills in a writing task which supports teachers' instructional decisions in teaching writing.

The classification of fallacies describes by Mayfield in (Johnson, 2014)divided informal fallacies into four broad categories: fallacy that manipulates through language, fallacy that manipulates through emotions, fallacy that manipulates through distraction, and inductive fallacy. Analyzing fallacies by those criteria is often referred to as fallacy approach. The assessment will be focused on identifying specific fallacies that weaken the strength of an argument in writing. Therefore by studying informal logical fallacies, one's analytical and critical capabilities will increase and they can gain confidence to challenge that assumption of belief in giving argument in a paragraph or essay. It means that informal logical fallacy is able to prepare the students' opinion about something, so that they do not need to make unnecessary mistake in writing when they think it is in accordance with the reality. They can provide evidence in their writing as well.

Gao and Yang say that the application of critical thinking on writing argumentative essay is needed to avoid fallacy on writing (Gao and Yang, 2013). Also, Paul defines fallacy

as an ambiguous sentences create when students write an argumentative paragraph. Through the background that has been explained, here researchers state that the research problem what kind of logical fallacy made by the fourth semester students on their argumentative writing at English education program IAIN Bukittinggi?. So that the objective of this study is to analyze the type of informal fallacy made by the students. It is crucial in order to help the students understand more about the fallacy therefore they can produce a good writing.

METHOD

This research was a descriptive quantitative research. Creswell explains that identifying the people and places to be studied is crucial to collect a quantitative data (Creswell, 2012). Therefore, the participants in this research were fourth semester students of English department in IAIN Bukittinggi. There were 28 participants join this research which is selected from 101 of population. Documentation was used as an instrument of this research. Document analysis was used as the technique of data collection. The document was the student's argumentative writing that have been submitted to the lecturer as a mid-term test. The data was analyzed by using quantitative data analysis in form of statistical testing which is presenting in a pie chart.

FINDINGS AND DISCUSSION

The finding and discussion of this research showed the logical fallacy made by students in their argumentative writing. Inductive fallacy appeared mostly in the argumentative writing task which answer the research question related to the type of informal logical fallacy made by the students.

Findings

All the participants in this research have passed writing III subject which is aimed to be able to make a good argumentative paragraph. However, the syllabus did not explain the way of using logical fallacy in writing argumentative paragraph. The decision to include logical fallacy as a material to be learned was left to the discretion of the lecturers. Should the topic be delivered, it was also for the lecturer to decide whether it will be taught in an explicit fashion or implicitly as a part of students writing process. 28 documents of students' argumentative writing has been analyzed based on the concept of logical fallacy proposed by Mayfield: fallacy that manipulates through language, fallacy that manipulates through

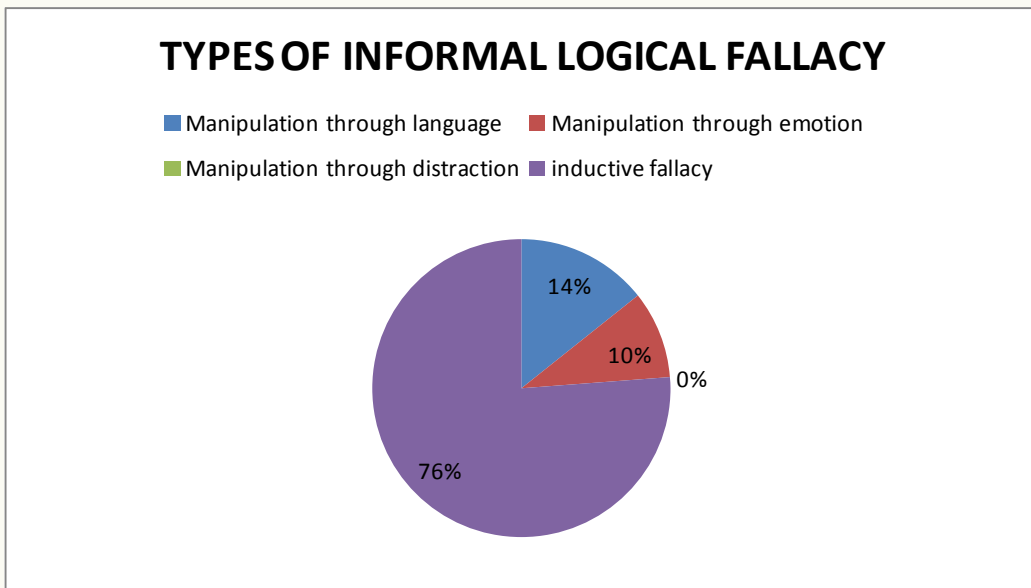
emotions, fallacy that manipulates through distraction, and inductive fallacy. This kind of analysis called fallacy approach.

Table 1. Data description for informal fallacy on students' argumentative writing.

Participants	Argumentative Paragraph			Types of Informal Fallacy
	Title	1 st reason	2 nd reason	
Student 1	Should school require students' uniform?	To distinguish students' level	Improving students' discipline	Inductive fallacy on the second reason
Student 2	Should school require students' uniform?	To show the discipline of the students	To avoid social gap	Inductive fallacy on the first reason
Student 3	Should teachers use technology in teaching?	Create students interesting in the class	More easier to present the material	Inductive fallacy for both reasons
Student 4	Toddlers should go to school earlier	Easier in memorizing in such a golden age	Parents can spent more time at home	No fallacy
Student 5	Should teachers use technology in teaching?	More flexible in teaching	Use technology positively	Inductive fallacy for both reasons
Student 6	Should school require students' uniform?	Discipline students	Avoid differential among students	Manipulation through language for first reason
Student 7	Should teachers use technology in teaching?	Technology is crucial	Motivate students in learning	Inductive fallacy for both reasons
Student 8	Full day school	Provide times for learning	Decrease the anxiety of parents	Inductive fallacy on the first reason
Student 9	Should school require students' uniform?	For uniformity	For neatness	No fallacy
Student 10	Education should be free for everyone	Beneficial for the poor	Students enjoy a longer education process	Inductive fallacy for both reasons
Student 11	Full day school	Can control the students activity	More times for learning	Inductive fallacy for second reason
Student 12	Should teachers use technology in teaching?	Support the learning process	Beneficial for teachers and students	No fallacy
Student 13	Full day school	In the context of society	Add the burden of teachers and students	Manipulation through language
Student 14	Should school require students' uniform?	Look formal	Eliminate social class	No fallacy
Student 15	Should school require students' uniform?	Avoid students' group	Reduce social conflict	No fallacy
Student 16	Teacher should not be the centre of learning	Students can learn by reading a book	Using smartphone to learn	Inductive fallacy for both reasons
Student 17	Toddlers should go to school earlier	Don't force the children to learn early	Easy to get bored	No fallacy
Student 18	Teacher should not be the centre of learning	Teachers can control the class	All the materials explain clearly	No fallacy
Student 19	Should school require students' uniform?	Identity of the school	Avoid discrepancy among students	No fallacy
Student 20	Should school require students' uniform?	Focus on learning	Show similarity	No fallacy
Student 21	Toddlers should go to school earlier	Retrench toddlers' activity at home	To develop children physically	Inductive fallacy for both reasons
Student 22	Full day school	Burden the psychology	Teachers will be tired	Manipulation through language for first reason
Student 23	Toddlers should go to school earlier	Brain works well in children	Preparing children to go to school	Inductive fallacy for both reasons
Student 24	Should teachers use technology in teaching?	Students will be more understand	Easy in learning	Inductive fallacy for both reasons
Student 25	Toddlers should go to school earlier	Play together with friends	Develop cognitive process	No fallacy
Student 26	Full day school	Give bad influence	Not good for condition	Manipulation through emotion

Student 27	Full day school	Bad impact for students	No time with parents	Manipulation through emotion
Student 28	Full day school	Students will be overwhelmed everyday	More social	No fallacy

Figure 1. Type of informal logical fallacy made by the students on their argumentative writing.



It found that 76% students wrote informal logical fallacy in form of inductive fallacy. 14% students wrote informal logical fallacy in form of manipulation through language. The other informal logical fallacy wrote by the students were manipulation through emotion (10%) and manipulation through distraction (0%). The latest form did not appear on the students argumentative writing because during the test there were no distractions from others.

Discussion

Students mostly wrote inductive fallacy on their argumentative writing. It proved that the students draw a conclusion without providing sufficient evidence and the sample used were not enough to make a good conclusion. It was similar with the idea from (Gao, 2013) Providing evidence in an argumentative writing is crucial in order to make the writing more reasonable. He describes that hasty generalization in inductive fallacy which argument is based on a small number of events or facts but is brave to be generalized as the root of the problem or the cause of a phenomenon. In other word, the fact that has not been validated has become the basis of generalization the idea in writing argumentative paragraph.

Another informal logical fallacy made by the students was misleading euphemism which refers to the type of manipulation through language. It was happened because the students draw a conclusion on their argumentative writing without mentioning the meaning of their argument, so that their arguments were ambiguous to the readers. As Johnson (2014) explains that misleading euphemism is hides meaning by created words which make less acceptable idea seems positive in their argumentative writing. Finally, it was indicated that most of the students draw conclusion uses informal logical fallacy in argumentative writing. The research result give valuable research information for the lecturer and students about the existence of logical fallacy on their writing.

CONCLUSION AND SUGGESTION

Fallacies are error of reasoning. It occurs accidentally as a trick of reasoning if a speaker or writer uses it in order to deceive or manipulates his audiences. Fallacies can be either formal or informal which its use undercuts the validity and soundness of any arguments. Therefore logical fallacies can damage the credibility of the speaker or writer and improperly manipulate the emotions of the audience or reader. The research result shows that the students produce several types of informal logical fallacies in their argumentative writing. Some of them were basically simple that can actually be avoided through a simple instruction. Moreover, hasty generalization was a type of fallacy that is widely used by students in their argumentative writing. The students draw conclusion without providing evidence from experts and samples from their conclusion were not sufficient, so people will immediately think about their fallacy logically. Furthermore, it is needed to do more researches in the area of reducing fallacy in writing and the way to anticipate fallacy in a paragraph or essay.

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