

## **An Analysis of Argument Structure of Research Article of English Postgraduate Program of Bengkulu University Published In Journal**

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### **Abstract**

This study investigates the argument pattern in research articles by postgraduate students of English and Education University Bengkulu, based on Toulmin's Theory (1958). This study analyzed the argument pattern, and reveal the type of data used by the student to support the claim in their argument contains in introduction section and discussion section of Journal Applied Linguistic and Literature (JOALL) 2016. The data analysis result show that (a) the common argument pattern employed for arguments in introduction section of Research Article published in JOALL is Semi-complete pattern; (b) in discussion section the authors also commonly employ Semi-complete pattern. In addition (c) there are five types of data used by the authors to ground their arguments they are, Facts, Statistics, Example, Expert Opinion, and A Note on Visual. It can be conclude that the Research Article author published in JOALL have a good argumentative text based on Toulmin's theory.

**Keyword:** Argument structure, argument pattern, research Article, toulmin's argument theory, introduction section, discussion section, types of data in arguments.

### **1. INTRODUCTION**

As a product of academic writing Indonesian research article has played as a media in sharing important information, publishing the research article means that the scientist join the scientific community, later scientist use the information contained in research article as a factual source to construct a new research in order to gain a new knowledge, from the new knowledge scientist evaluate or revise the current knowledge. These communicative events between scientists are very important for the scientific community in order to enhance their credibility (Safnil, 2000).

Today these communicative events forcing Indonesian researchers from different disciplines to write their research article in English as an International Languages which is used by majority people in the world, it seems that by publishing Research Article in English, Indonesian Scientist can communicate to other scientist and scientific community around the world, these international communicative events accelerated by the technology advances such as electronic journal that can be accessed online (Mirahayuni, 2002).

#### **1.1 Argumentation in research article**

Studies on research article focused in discussion section reveal the researchers not only present information or knowledge but also express their opinions or points of view, therefore the main focus of discussion section is to answer the research question made in the introduction section (Bavdekar, 2015), researchers give a brief explanation by interpreting and analyzing the data found in the research finding, relating to the research questions or research hypothesis (Branson, 2004), On the other hand, discussion section claimed as an important sections of Research Articles to show that the research finding fill the gap of current knowledge (Safnil 2013) by relating the research finding to the current knowledge, discussion section also indicate the researchers knowledge in order to persuade the reader, if the research questions raised in background sections remain unanswered, along with suggestions for the kinds of research that would help to answer them.

Another study focused on research article found that the discussion section as an Argument and research finding as an evidence to prove the author's knowledge claim (Parkinson, 2011), For that reason in discussion section researchers construct an argument to influences the readers to accept the new knowledge claimed based on the data of research finding. Construct a clear arguments are the basic ability to convince the reader to accept new knowledge (Stab and Gurevych, 2016), therefore in discussion section of research article, structured argument is needed for readers to get information from the article because of the arguments that have enough explanation and description about context discussed will become a determining point whether the readers agree with the findings of research or not, next for researchers through a structured argument would greatly help to present their interpretation of the research results.

## **1.2 Argument in scientific writing**

From the current knowledge, the component of an argument consist at least claim, support and warrant (Rotenberg, 1988), as well as in logic and philosophy theory define several components of an argument for example claim and premise (Toulmin,1958; Walton et al, 2008), several studies investigate argument in academic discourse such as the relation between each component of argument (Kirschner, 2015), the relation between one argument to another argument (Cohen, 1987; Henkemans, 2000; Stab and Gurevych, 2016).

Consider that argument discourse in academic writing are similar to formal logic and contribute the same base of claim and evidence (Toulmin, 2003), The argument model which are widely used for academic discourse to provide a structure of written argument is Toulmin argument pattern. The arguments include a claim, data that support the claim, warrants that provide a link between the data and the claim, backings that strengthen the warrants and rebuttals that indicate the circumstances under which the claim would not be true. Toulmin also considered qualifiers as showing the degree of reliance that can be placed on conclusions arising from arguments.

Toulmin's theory (1958) is still acceptable and valid to be used in analyzing the argumentative text. it can be seen by the commonly used of this theory by the researchers in analyzing written and spoken argument despite this theory is not the newest theory. Further, Toulmin's theory (1958) can be used to provide a pattern for arguments.

A study by Rusfandi (2015) on Indonesian argumentative essay reveals that the absence of refutation section which in this part aims to provide counter-argument, this happens when they write an argumentative essay in English. The possible reason is that the students seem not aware of the important from this refutation section and the lack of confidence in using English, this problem influence on students argumentative essay in constructing credible and persuasive essays. Another study also shows that the students most at level 2 of argumentation, they are able to make claim and present support and warrant for their argument, but only a few of the students provide rebuttal section in their argument, the statements which contradict the data or warrant. This study reveals the similarities between Indonesian and Australian students argumentation Pattern present Toulmin argument pattern (Widodo et.al, 2016).

### **1.3 Rationale for this study and research questions**

An effective research article actually Persuasive or Argumentative writing and follows the rules of Formal rhetoric in order to convince the reader to accept new knowledge contained in the research article as a form of scientific writing. Given the importance of the argument in research article, the results from initial analysis and to writer knowledge, there is no one conduct a research focus on the argumentation of research article from postgraduate students of Bengkulu University, and this show a need to conduct a study that discusses the arguments quality contained in the research article.

This study aimed to analyze the written argument in research article of postgraduate students of English and education university Bengkulu, and analyze the argument components to determine the quality of written arguments in a postgraduate students research article, by using Toulmin Argument Pattern (TAP). Therefore, the researcher sets out the research question as follow:

- a) What is the common argument pattern found in Introduction section Journal Applied Linguistics and Literature 2016?
- b) What is the common argument pattern found in Discussion section Journal Applied Linguistics and Literature 2016?
- c) What kind of data was used to ground the argument in introduction section and discussion section of Journal Applied Linguistics and Literature 2016

## **2. RESEARCH METHOD**

This study was used a qualitative approach, which qualitative study aims to understand the phenomenon of what is experienced by the subject of the study such behavior, perception, motivation, action, etc. in holistic view of a phenomenon (Moleong, 2006, Darlington and Dorothy, 2002), a qualitative research using non-structured approach which in the preparation process such as object of research, study design, sample more flexible, in other word Qualitative research was aimed at gaining a deep understanding of a specific organization or event.

This research was qualitative descriptive which focus on the event without giving treatment to the event (Gall, 2007), moreover Gay (2009) add that descriptive research involves collecting data in order to test a hypothesis or to answer Research Question. In

this study, qualitative descriptive method used to analyze and describe arguments structure in research article of JOALL (journal of applied linguistics and literature)

The main data sources in qualitative research are text and additional data taken from documents and others (Meleong, 2006), in this case, a variety of additional data from written sources such as books and magazines, thesis, dissertation, journals and other scientific works are used. Primary data in this study was the whole paragraphs contained in research article of Journal of Applied Linguistic and Literature (henceforth JOALL).

Table 1 The Distribution of Research Articles in the Corpus of this Study

No	JOALL Vol Date	Number of Research Articles
1	1 <sup>st</sup> June 2016	10
2	2 <sup>nd</sup> Dec 2016	10

JOALL was a collection of research article from postgraduate students of English and Education Program Department of Teacher Training and Education Faculty of University Bengkulu. The population of this study was JOALL volume 1 published on 1<sup>st</sup> June and 2<sup>nd</sup> December 2016.

Observation and record were used as data collection techniques (in this case read), each paragraph in the research article were read and then recorded then the data was taken from the observation into research instrument. Observation was useful for generating in-depth descriptions of organizations or events,

Unit analysis technique was used in this study, in which the unit analysis was the argumentation paragraphs consist in the JOALL vol 1 and vol 2, from the result of unit analysis, a general conclusion raised about the pattern of argument, the type of data to ground the argument in unit paragraphs contained in the research article of JOALL. Further, from the analysis the argument patterns was identified, and also the type of data to ground the arguments.

The formula based on Sudjiono (2012) was used to calculate the percentage of argument pattern in the introduction and discussion section. This formula also used to calculate the types of data used to ground the argument. The formula as follow :

$$P = (F/N) \times 100\%$$

Note :

P : The percentage of argument pattern and the percentage of types of data used to ground the argument in research article.

F : Frequency of argument pattern and the frequency of types of data used to ground the argument research article.

N : Total number (accumulation) of unit argument in the introduction and discussion section.

100% : The rule of formula.

Inferential method also used in study, which in this method uses researcher knowledge and interpretation (Krippendorff, 2004). The instrument of this research was researcher, Below are the steps used to collect and analyze the data:

This study used inferential method in which in the process and the result of analysis relied on the subjective judgment. The classifications of argument components were the core analysis in this study because argument pattern and types of data used by the author in the argument were drawn from the result of arguments components. By consider the important of validity from the analysis result, therefore, in this study two raters employed to help ensure the validity of the results analysis such as argument pattern and types of data. This means that the results were double checked by the raters.

The two raters was an Indonesian who was a postgraduate student. The inter-rater reliability was calculated and interpreted into percent agreement in order to correlate the score from two raters. The score called correlated when the score from rater I and rater II are in the same category interval. Further, if the score were not correlated short discussion done to get the same perception about the results of analysis. The category interval used in this study based on Mchugh (2012). The categories illustrated in the following table.

Table 2 Interpretation of Cohen's Kappa

Value of Kappa	Level of Agreement	%
0-20	None	0-4
21-39	Minimal	4-15
40-59	Weak	15-35
60-79	Moderate	35-63
80-90	Strong	64-81
Above 90	Almost perfect	82-100

### 3. RESULTS

#### 3.1 Common Argument Pattern in Discussion Section

For the first purpose of this research, the data were taken based on argument components contained in the argumentation paragraph of research article then classified the patterns formed from the component based on the completeness of the components the patterns namely, Incomplete, Semi Complete, Almost complete and Complete pattern.

Table 3 Argument Pattern in Introduction Section of Research Article

Pattern	Description	Frequency	%
Complete	Arguments in paragraphs contain six components of Toulmin argument model. For	0	0%

	example argument contain : claim, ground, warrant, backing, rebuttal, and qualifier		
Almost complete	Arguments in paragraphs contain four or five components of Toulmin argument model. For example argument contain : claim, ground, warrant, backing, rebuttal/qualifier	25	22,3%
Semi complete	Arguments in paragraphs contain three components of Toulmin argument model. For example argument contain : claim, ground, warrant	63	56.2%
Incomplete	Arguments in paragraphs contain only two components of Toulmin argument model. For example argument contain : claim and ground	24	21,4%
<b>Total</b>		<b>112</b>	<b>100%</b>

From the table above it can be seen that the most common argument pattern found is semi-complete argument pattern found in 63 (56,2%) unit of argument. The argument pattern determined based on the completeness of argument components. This pattern consists of three components of Toulmin argument model they were claim, ground, and warrant. The example of this pattern can be seen below.

#### Example1

**Claim** : Mastering speaking in junior high school level still becomes the common problem found in Indonesia

**Ground** : This skill cannot be easily acquired by the learners as it is a productive skill that consists of producing systematic verbal utterances to convey meaning (Nunan, 2003). In the implementation, this activity is different from other skills, reading for example, where process is only focusing on the transforming the written words into sound and readable words while speaking is an interactive process of conducting meaning that involves producing, receiving, and processing information (Brown, 2001; Nunan, 2003).

**Warrant** : Hence, the conditions of speaking to be done include of sharing idea and internalizing process of information, (A12-P10-p1)

Based on Toulmin argument model the argument above could be drawn schematically as below.

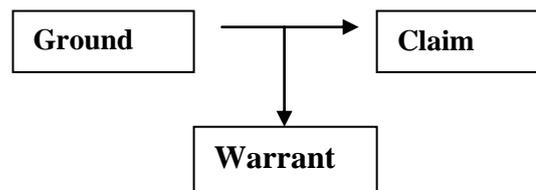


Figure 1 Schematic semi-complete argument pattern in introduction

The unit argument was taken from research article number 12, page 10, and paragraph number 1, from the figure above the author starts the argument with a claim that *Mastering speaking in junior high school level still becomes the common problem found in Indonesia*. The authors try to support the claim by giving expert opinion indicated by the use of citation. Further, the author produces more statement *Hence, the conditions of speaking to be done include of sharing idea and internalizing process* as a bridge between claim and ground.

The second common argument pattern called almost-complete pattern which consists of four to five Toulmin argument component. This pattern is found in 25 unit arguments. The example of this pattern can be seen below.

Example 2

**Claim** : Teaching speaking highly requires teachers to be more creative and innovative. The ability to ensure students and make the situation in which students might feel confident and comfortable in speaking is necessarily needed for every teacher.

**Ground** : Unfortunately, very few teachers are concerned with the importance of speaking skill.

**Warrant** : As a result, students lose their opportunities to explore their potential and have less chance to practice their English skill. Moreover, Lawtie (2004) states that if students do not learn how to speak or do not get any opportunity to speak in the classroom, they may soon get de-motivated and lose interest in learning. On the other hand, if the right activities are taught in the right way, speaking in class can be a lot of fun, raising general learner's motivation and making English language classroom a fun and dynamic place. One of ways to overcome this issue is by using literature.

**Backing** : Literature might be enjoyable instrument for English teacher in teaching language skill including speaking. To help students improve their speaking skill through literature, Colie and Slater (1987) in their book *Literature in the Language Classroom* recommended some technique that can be applied by teachers in teaching to improve language skill. One of which the writer highly interested in is *chessboard technique*. (A12-P3-p3)

From the example 2 above it can be seen that the authors employ four Toulmin argument components. The schematically almost-complete pattern can be seen in the figure below.

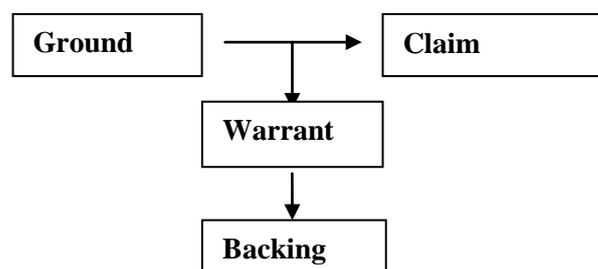


Figure 2 Schematic Almost-complete argument pattern in introduction

The argument above starts with a claim about teaching speaking requirements, the author provides ground with a real condition that very few teacher are concerned with the importance of speaking skill. Here, the author present warrant, it can be seen that the claim and ground was causally connected the author also provide solution in his warrant ...*One of ways to overcome this issue is by using literature.* The author realizes that this warrant was not enough without backing in order to support the warrant. Thus, the author presents evidence to support warrant.

The third common argument pattern commonly found in this study is an Incomplete pattern which consists of two arguments components, this pattern found in 24 arguments or 21,4 %. the example from the Incomplete pattern can be seen below.

## Example 3

Ground : Based on preliminary research

Claim : students face some problems in mastering the questions. First, they get difficulty in making distinction of the kind of questions such as yes/no question or information question. (A1-P3-p9)

The schematically incomplete pattern can be seen in the figure below.



Figure 3 Schematic incomplete argument pattern in introduction

From the example and figure above it can be seen that the authors employ two argument components from Toulmin argument model. The author produces arguments with a claim on student's problem based on the result of preliminary research The argument starts with a claim directly followed by ground.

### 3.2 Common Argument Pattern in Discussion Section

To answer the second research question, the argument analyzed based on the completeness of the arguments components. The patterns formed from the component based on the completeness of the components the patterns similar to the argument pattern analysis in introduction section namely, Incomplete, Semi Complete, Almost complete and Complete pattern

Table 4 Argument Pattern in Discussion of Research Article

Pattern	Description	Frequency	%
Complete	Arguments in paragraphs contain six components of Toulmin argument model.	0	0%

	For example argument contain : claim, ground, warrant, backing, rebuttal, and qualifier		
Almost complete	Arguments in paragraphs contain four or five components of Toulmin argument model. For example argument contain : claim, ground, warrant, backing, rebuttal/qualifier	31	25,2%
Semi complete	Arguments in paragraphs contain three components of Toulmin argument model. For example argument contain : claim, ground, warrant	56	45,5%
Incomplete	Arguments in paragraphs contain only two components of Toulmin argument model. For example argument contain : claim and ground	36	29,2%
<b>Total</b>		<b>123</b>	<b>100%</b>

From the table above it can be seen that the most common argument pattern found is semi-complete argument pattern found in 56 (45,5%) unit of argument. The components which construct the argument were similar to the semi-complete argument in the introduction section. The component contained in the argument were from the first triad (Claim, Ground, and warrant), the example from this pattern can be seen in example 4.

Example 4

**Ground** : From the result of the research, the responses to personal problems employed by male and female students of the English Study program, as shown in table 1.

**Warrant** : Table 1 shows that responses to personal problems occurred in two groups, they are; male and male sex, where as female group 16 responses to personal problems occurred, and 13 responses to personal problems occurred in male group

**Claim** : So, the highest use of responding to personal problems occurred in female group and the lowest occurrence in male group. (A17-P67-p1)

From the example above it can be seen that the authors employ three Toulmin argument component. Based on the Toulmin argument model the argument above could be drawn schematically as below.

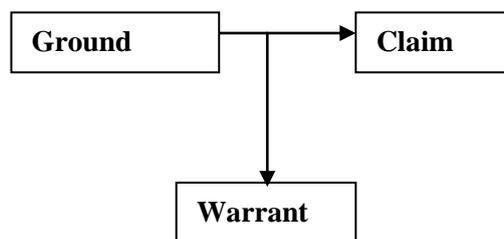


Figure 4 Schematic semi-complete argument pattern in discussion section

The argument above taken article 17. the arguments start with a ground based on the author's research result and directly followed by a claim about the highest use of responding to personal problems was occurred in female group and the lowest occurrence in the male group. After that, the author writes more sentences for his argument to show the connection between ground and claim by giving a description about the table 1.

The second common argument pattern found in the data called Incomplete pattern. This pattern found in 36 arguments or 29,2 %, the example from the Incomplete pattern can be seen in the following example.

Example 5

- Ground : Based on the try out result, among 50 reading test items, there were 40 valid items to be accepted as the research instrument. The reliability result was 0.89,
- Claim : and it showed that the instrument had very high reliability. (A19-P88- p1)

The unit argument produce by the author consist of two Toulmin argument components they were claim and ground, the argument schematic can be seen below.

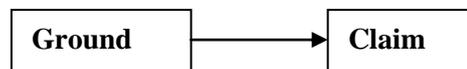


Figure 5 Schematic incomplete argument pattern in discussion

From the schematic above the authors concluded that his instrument had very high reliability, this claim already supported by the tryout result in which among 50 reading test items, there were 40 valid items to be accepted as the research instrument.

The third common argument pattern found in the discussion section called Almost-complete pattern which consists of four to five Toulmin argument component, this pattern found in 31 arguments from overall arguments found. The example of this pattern can be seen in the following example.

Example 6

- Rebuttal : Although the using of cue cards to improve students' descriptive speaking competence in grade VIII 2 of SMPN 3 Bengkulu city could not achieve the level of satisfaction as expected,
- Claim : it did not mean that this media fail.

- Ground** : The result showed that 56% of students were improved in descriptive speaking competence.
- Warrant** : This media can give the even opportunity to practice and develop students' descriptive speaking competence (Brown, 2004). The motivation of speaking was also increased because students know exactly what to say. Besides, the implementation of cue cards in speaking class proved that students became active and interested in speaking English as stated by Hamalik (1998)..
- Backing** : Those finding was caused by several reasons. Firstly was students' focus on cue cards description was the big challenge. the grammatical competence of students was found as the second challenge in improving students' speaking competence. The last was students' vocabulary mastery limited students in describing pictures. (A2-P16,17-p16)

This example taken from discussion section of article 2 page 16 and 17 paragraph 16. The pattern is similar to the almost complete pattern in introduction section, the difference is the use of Toulmin argument component but the total component used were similar it can be four component or five component, schematically this argument pattern can be seen below.

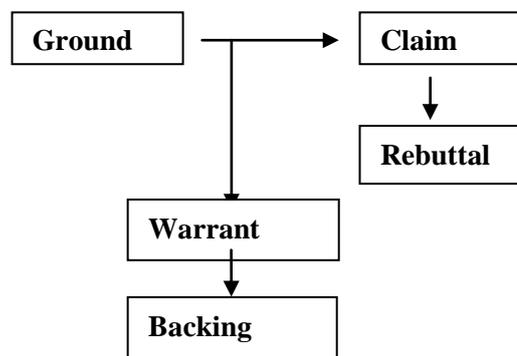


Figure 6 Schematic almost-complete argument pattern in discussion

In the argument above the author present counter argument for his argument it can be seen by the use although as indicator word. After that the author mentions his claim that the use of cue cards to improve students' descriptive speaking competence was not fail. The authors support his argument by provide the result which showed that 56% of students were improved in descriptive speaking competence. Further, the author provide warrant by mentioned the other advantages from the use of cue card, and then the author provide support for his warrant based on his finding on the advantages of using cue card.

### 3.3 Types of Data used to Ground the Arguments

To answer the third research question of this research, the data to ground the argument classified into five types there were, (1) Facts, (2) Statistics, (3) Example, (4) Expert Opinion, and (5) A Note on Visual,

Table 4 Types of data used to Ground the Argument

Types of data	The Frequency of Unit Argument	Percentage
Facts	116	49,3%
Statistic	26	11%
Example	22	9,3%
Expert Opinion	54	22,9%
A note on Visual	17	7,2%
Total Argument	235	

As can be seen in the table above the use of fact to ground the argument was more frequent. It also can be noticed that the data in form of fact was used more dominantly in the introduction section and discussion section of JOALL 2016. Although in its use the claim could have more than one ground, in this study most dominant ground were determined to represent the data in the argument. The first types of data used by the author were facts refer to all information come from observation, findings or personal experience, through these characteristic researchers found most of the arguments employed this type of data as grounds. In example 13 the author uses a form of fact derived from preliminary research.

#### Example 7

Based on preliminary research (ground), The students face some problems in mastering the questions. First, they get difficulty in making distinction of the kind of questions such as yes/no question or information question. (A1-P3-p9)

Another type of data to ground the argument was statistics. The authors use statistics because statistics use logic and facts. Statistics was also used in various argument patterns, one of them as in the followed example.

#### Example 8

Based on the table 3 and explanation above that students' ability in constructing information question could be seen from the five indicators. First, in determining the question word, 87% students answered the question word correctly (Ground). It means the students have excellent ability in determining the question word. (A1-P7-p10)

From the example 14, the author employs a percentage of student answer question word correctly and directly followed by the claim that the students have excellent ability in determining question word.

The next type of data used by the research article author was example in this case example used in 26 arguments or 8,6 % from all arguments, the example as follow,

#### Example 9

Have you ever heard someone use a fancy word, but you could tell that they didn't know how to use it? This can be quite humiliating (Ground). One thing that I must emphasize to you is that using a fancy word improperly is just as bad as having poor grammar. When you do this, it becomes apparent that you are trying to sound intelligent and well informed, and people will be able to see through you like glass. (A5-P40-p11)

The example above shows that the author tries to convince the reader by giving a real-life example of someone use a fancy word but they do not understand how to use it, from the example above it's clear that this type of data can be used as a ground of argument, because this type of data give a clear description on the writer assumption, besides it also provides specific and details in support of a claim.

In this study there was found the use of Expert Opinion as ground in arguments, the Expert opinion refers to the use of someone knowing it can be in form of citation or quotation, one of the examples as follows.

#### Example 10

The picture is effective to use because it can attract the students and give them motivation in writing, and through picture the students can get enough stimuli (Wright, 1989:2) (Ground). When the students' attention was attracted and they could feel that the atmosphere of the teaching and learning process were 'lived' and interesting, they would participate in the teaching and learning process enthusiastically. According to Oller (1979:105), "no one seems to doubt that attitudinal factors are related to human performances. So, using pictures to attract the students' attention will be effective to stimulate their activities in writing narrative text. (A11-P7-p3,4 )

The last type of data used by the authors to ground the argument was a note on visual, which integrated into the paper as charts, figures, tables, or illustration.

#### Example 11

Table 1 gives insight of the lexical density measured over the 12 reading texts contained in the K13 English textbook of class X (Ground). From the table above, it can be seen that the lexical density index is considerably high, with the average lexical density for all reading texts in K13 English textbook is 51.55%. Text titled

BJ Habibie has the highest lexical density with percentage of 62.32%. And the lowest one is title Diary with percentage of 43.98%. The text titled Issumboshi has the highest total number of words is 670 with the lexical density come number second with 57.91%. (A14-P33-p1,2)

The example taken from discussion section of article 14 page 33 paragraf 1 and 2, from above the authors employ a note on visual as a ground for his arguments, the data in form of table, contained with lexical density measure as ground directly followed by claim and then warrant.

## **DISCUSSION**

As presented in the results of this study. Semi-complete argument pattern is the most common argument pattern. This pattern consists of claim, ground, and warrant (Toulmin 1984). This in line with Huda (2016) who found that in introduction section the authors provide claim, data, and a warrant. Further Alfiyatun (2015) point out that the argument quality in a semi-complete pattern can be classified into the medium quality of arguments. the second common argument pattern in introduction section is the almost-complete pattern, and the third common pattern is incomplete pattern. This indicates that the authors of Research Article realize the importance of argument for their introduction section. As stated by Safnil and Dian (2014) readers relied on the argument contained in introduction section if the authors impressed the readers they will continue reads the entire article.

Similar to the common argument pattern in the introduction section the most dominant argument pattern found in the discussion section is also a semi-complete pattern. It implies that the authors commonly generate one side argumentation (Hatch in Safnil 2015:113). One-side argumentation means that the argument provides claim, ground, and warrant without considering readers possible opposing views or rebuttal. In line with Rusfandi (2015) who found that the Indonesian essay tends to employ a one side argumentative structure when writing in English. However, as suggested by Parkinson (2011) argument in discussion section leads the reader from the proof of data to the proof of the claim via explanation. The findings of this study confirm the findings of Safnil (2013) who found that one of the most dominant moves were explanation (move 5) in which the authors rhetorically convince the readers logically in order to show the contribution of research finding to the current knowledge.

Berland and Hamer (2012) states a person has the argumentation ability through his acquisition in understanding the phenomena by expressing what he understands and then trying to convince people to accept his idea and to do this it is required sufficient knowledge and critical thinking ability. We suppose that we agree that the completion of argument component reflects the author's knowledge, but not all arguments can have a complete component. The argument will go wrong by forcing arguments to have complete components without consider the relevance from each components. As stated by Toulmin (1984) one important step in assessing the strength of any argument is recognizes the relevance or irrelevance of the argument components.

In this study semi-complete pattern consists of three arguments components (Toulmin, 1984), in which the component used in constructing the argument based on the basic component of the argument. According to Rottenberg (1988) argument consists of at least claim, ground, and warrant. It seems that the Research Article authors focus on the argumentation for introduction and discussion section but they were less focused to present the complete argument component. It was proved by the absence of complete pattern which consists of six Toulmin (1984) arguments components from the first triad to the second triad. It implies that the Research Article author realize that they cannot force the argument to have complete components because they do not want the argument to go wrong.

The result also shows that the Research Article authors employ five types of data to ground their arguments in which the data in form of facts was dominantly used by the authors. In line with Toulmin's theory (1984) that facts are a common ground for arguments. It seems that the authors realize the importance of facts for their readers especially new fact that find from their research. As stated by Booth (2003) that providing a new factual knowledge is an important part to do as the author's role in order to get the readers trust, the other reason that facts are mostly employed by the authors it can be because of the needs of concrete reasons as the foundation for their research.

Besides that the authors also employ other kinds of data such as statistics, example, expert opinion and note on visual, it was reasonable for the authors employ five types of data, since the data are an important foundation for arguments. According to the finding from Pandey et al (2014), one possible reason for the readers to change their opinion was struck by evidence (data) provided in the persuasive message, thus the authors employ five types of data for their argument.

## **4. Conclusion and Suggestion**

### **4.1 Conclusion**

From the finding of this study, it can be concluded that :

- a) the common argument pattern employed for arguments in introduction section by the Research Article authors published in JOALL is Semi-complete pattern, it can be implied that the authors realize the important of argument for their introduction section in order to persuade the reader to reads the entire article.
- b) In discussion section the authors commonly employ Semi-complete pattern. It indicates that the authors rhetorically convince the reader logically in order to show the contribution of research finding to the current knowledge.
- c) There are five types of data used by the authors to ground their arguments they are, Facts, Statistics, Example, Expert Opinion, and A Note on Visual. It can be noticed that the authors aware on persuasive message contain in the argument. Since the data are important foundation for the argument.

### **4.2 Suggestion**

Based on the findings of this research, it is suggested that :

- a) The absence of a Complete pattern of Toulmin argument components in one argument shows that there is a need to introduce Toulmin argument model to the postgraduate students of English and Education Program of University Bengkulu in order that they can produce more persuasive and strength argument for their research article.
- b) For other researchers who are interested in arguments especially based on Toulmin argument model, it is suggested to conduct a comparative study of argument written in English between native and non- native English writers.

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