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COMMON DISCOURSE PATTERNS OF EDUCATIONAL RESEARCH ARTICLE ABSTRACTS

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Abstract

The previous study already conducted a similar study in several fields, except education, thus, this study was conducted to complete it. This study aimed at investigating discourse patterns of research article abstracts in the education discipline. The data were a set of research article abstracts of five sub-disciplines in education, *i.e.*, language education, mathematics and natural science education, social education, technological education, and elementary education. The data were collected from journals of education study. This research was conducted by implementing a four-move abstract structure. The results found that Moves 1 (research space), 2 (research procedure), and 3 (result summary) were obligatory, while Move 4 (result evaluation) was considered an optional move. The most common pattern discovered was 1-2-3. The pattern of 1-2-3-4 is another common pattern obtained, except for social education. These results provide the discourse patterns of educational research article abstracts and are regarded as new findings in the previous and related studies.

Keyword: *abstract, discourse pattern, move, research article, education*

Abstrak

Penelitian sebelumnya telah melaksanakan penelitian sejenis dalam beberapa bidang, kecuali bidang pendidikan, sehingga penelitian ini dilaksanakan untuk melengkapinya. Penelitian ini bertujuan untuk menginvestigasi pola wacana dari abstrak artikel dalam disiplin pendidikan. Data yang dipergunakan adalah kumpulan abstrak artikel

penelitian dari lima subdisiplin pendidikan yaitu pendidikan bahasa, pendidikan matematika dan sains, pendidikan sosial, teknologi pendidikan, dan pendidikan dasar. Data diperoleh dari jurnal berkaitan dengan pendidikan. Penelitian ini dilaksanakan dengan menerapkan empat langkah struktur abstrak. Hasil menunjukkan bahwa Langkah 1 (gambaran penelitian), 2 (prosedur penelitian), dan 3 (pemaparan hasil) wajib ada, sedangkan Langkah 4 (evaluasi hasil) bersifat manasuka. Pola paling utama yang ditemukan adalah 1-2-3. Pola 1-2-3-4 merupakan pola umum lainnya yang ditemukan, kecuali dalam subdisiplin pendidikan sosial. Hasil ini menyediakan pola wacana abstrak artikel dalam penelitian pendidikan dan dipertimbangkan sebagai temuan baru dalam studi sebelumnya dan yang berkaitan.

Kata kunci: *abstrak, pola wacana, langkah, artikel penelitian, pendidikan*

Introduction

Abstract has important roles as a part of the content in writing research reports, *e.g*., thesis, paper, research article, and etc. The abstract determines the quality of the whole writing. Accordingly, it is a must to provide well-written abstract. The efficiency of content and language in the use of the abstract must be taken into account and I personally take a note of the statement of abstract as follows.

> *When writing the abstract, remember that it will be published by itself, and should be self-contained. That is, it should contain no bibliographic, figure, or table references... The language should be familiar to the potential reader. Omit obscure abbreviations and acronyms. Write the paper before you write the abstracts, if at all possible. (McGirr, 1973:65)*

In general, the structure of the abstract consists of the introduction, research methodology, research findings and discussions, and sometimes a conclusion. An abstract is the short version of the study. Houghton (1975) stated that the abstract provided a short summary of the introduction, methods, research results, and discussion. More detailed information about the abstract mentioned by Katz.

> *The abstract presents the essence of your Materials and Methods, your Results, and your Conclusions. The blueprint for an Abstract is, 'We did'. We saw. We concluded,' and your Abstract should include the background of or the reason for your study, the methods you used, a list of your main findings, and your conclusion. (Katz, 2009:149)*

The general structure can be seen clearly from the previous statement. On the other hand, the abstract has to be focused on its main purpose for presenting the short summary of the research. In order to provide informative,

short, and efficient content, the abstract is supposed to be less than 250 words and covered important contents of the article. Lindsay (2011) suggests that the length of abstracts should be between 150 and 250 words or 5% based on the proportion of a paper. There are certain aspects of the abstract that should be emphasized other than such guidance. According to Stapleton (1987), the conclusion is the general priority that usually appears at the end of the abstract, introduction, and discussion. However, not all of the abstracts may contain such structure. Some of each structure may be combined implicitly, therefore it is hard to separate each part. Hence the clear-cut boundary of the abstract should be informative, clear, and short.

Those findings might be difficult problems to overcome in order to separate which units (introduction, method, results, or even conclusion) do certain parts, as clause or sentence belongs to. To figure it out requires deep analysis. It might be kind of "unique" to analyze part of research (abstract) through research. However, this phenomenon has already attracted researchers for years. The study of abstracts is getting increased due to its simplicity, yet paramount. Interests rose among researchers not only to study the linguistic characteristics, however its discourse structures as well. This research mainly focused on the aspect of discourse analysis perspective, and genre analysis is one of the aspects. Genre analysis by means of a framework known as the move-step approach developed by Swales (1981; 1990) in order to uncover the communicative process in a certain genre, especially research article abstract in this case. Furthermore, that approach proved that the importance of conducting research on abstract deeply regarding its structure. Furthermore, the abstract has its own organizational structures with certain terminological names. Abstract has an important feature known as moves which is an organizational structure that represents each section. According to Swales (2004), a move is a "discourse or rhetorical unit that performs a coherent communicative function in a written or spoken discourse". There are a number of move pattern models that had been developed so far. For example, Weissberg and Buker (1990) developed five-move abstract consist of background, purpose, method, results, and conclusion. Abstract of five-moves also proposed by a number of researchers (*e.g.*, Hyland, 2000; Pho, 2013; Santos, 1996; Swales & Feak, 2004). Santos however, proposed a five-move abstract but the function of each move is slightly altered. His model consists of situating the research, presenting the research, describing the methodology, summarizing the methodology, and discussing the research. On the other hand, Bhatia (1997) proposed a four-move abstract structure consists of purpose, method, results, and conclusion. Similar to Bhatia, Hardjanto (1997) also proposed a four-move abstract structure with quite similar moves. However, Hardjanto's model is different regarding the function of each move. Hardjanto developed a model which consists of creating a research space, describing research procedure, summarizing principal results, and evaluating results. Each

move covers several units known as steps that guide the procedures of analyzing the structure of the research article abstract in detail.

The most sophisticated research regarding the implementation of four-move Hardjanto's model was a study conducted by Hardjanto (2017). He studied the common discourse patterns of cross-disciplinary research article abstracts. The subjects were 50 abstracts biology, engineering, linguistics, medicine, and physics discipline. The results retrieved that the common abstract pattern of those disciplines is a 1-2-3-4 move pattern with a frequency result of 50%. It was mostly discovered in four disciplines, especially the field of medicine and linguistics. Another move pattern found was a 1-3-4 pattern within 32% of those abstracts, and mostly obtained in biology and physics. Based on that study, I created a boundary in which this research investigated the discourse abstract pattern of the education field. It is expected that the result of this study can be beneficial for the advancement of genre analysis study, especially move pattern of research article abstract.

This research attempted to extend the study of move patterns in abstracts of Hardjanto (2017) by analyzing abstracts of education discipline. Thus, the purpose of this study is to find out the following research problems: (a) what type of discourse pattern exists in the education discipline? (b) What are the similarities and differences of the discourse pattern among education-related sub-disciplines? Hence based on the research questions, this study attempt to uncover discourse patterns of education discipline in general based on the research article abstract of its five sub-disciplines: language education, mathematics and natural science education, social education, technological education, and elementary education. Furthermore, the contrasts among those sub-disciplines were analyzed as well.

Research Methods

The data were in the form of research article abstracts on education journals. The main reason for selecting this discipline was caused by a few attempts of research on discourse patterns conducted in such discipline. There were twenty-five (25) research article abstracts selected based on the following criteria: 150-250 words range; research article categorized as experimental (quasi-experimental) research, classroom action research (CAR), and research and development (R & D); and abstract written in English (English only for bilingual abstract). Each five of the abstracts represented five sub-disciplines of education.

The sources of data were from random open access journals of the educational field. The journals were bilingual (Bahasa Indonesia and English) and published online that contain various sub-disciplines of educational area. The journal should publish research articles twice a year regularly. Another reason for the selection of online journals is because they are easily accessed and the articles can be downloaded for free.

In the data collection step, I implemented the observation method through the note-taking technique. As stated by Sudaryanto (2015) such a data collection method is conducted by observing the structure. The method was continued by applying the note-taking technique in which taking a note on the discourse pattern was the main objective of this study. In short, the preliminary step was downloading research article abstracts based on the criteria, sorting, and taking notes on data for analysis purposes. The main analysis was the moves of each abstract as well as the steps of every move.

As stated previously, the data collected from the web were sorted into several categories of education sub-disciplines. Despite education have numerous sub-disciplines, however, only five sub-disciplines were selected. It is because those five are the main sub-disciplines in the education field. For the sake of efficiency in abstracts and analysis, each abstract was codified 1-5 and written after the abbreviations of the following five sub-disciplines: language education (LE), mathematics and natural science education (MNSE), social education (SE), technological education (TE), and elementary education (EE), (*e.g*., LE1 until LE5).

Data analysis was conducted by relating part of research problems, objectives, and theoretical framework. The data were analyzed by finding out the common discourse pattern that came up within the educational research article abstracts. In the beginning, the analysis was to find the frequency of each move in five sub-disciplines. The result was based on the corpus data analysis. In classifying the move, clauses were the main unit to determine which move does certain part belongs to (Hardjanto, 1997). In determining the explanation of the frequency found, according to Hardjanto (2017), the cut-off points for an obligatory move or step are 90% above, prototypical move or step is ranged 60% until 90%, while optional move or step is less than 60%. Each move was provided by an example from five sub-disciplines. It was followed by the comparative analysis of their similarities and differences.

The data of moves frequency eased the classification of common discourse patterns. The patterns that existed were added as the findings of patterns. To find the common pattern, each pattern was checked on each of the sub-disciplines. The findings were in the form of frequency, hence the most frequent pattern obtained was regarded as the common pattern of education discipline. Comparing each pattern found was obligatory since such a process was determined by any special cases discovered on the sub-disciplines.

Each move consists of several steps, except for Move 3 (see Figure 1). The distribution of each step was required to provide deep analysis on the moves, especially to find the common pattern. The analysis included the reasons behind the number of its distribution. Individual sub-disciplines might possess distinct occurrences of each move and step. Based on the objectives, it was required to explain their independent distribution.

Move 1	**Creating a Research Space**
Step 1	Establishing the field
Step 2	Preparing for present research
Step 3	Introducing present research
Move 2	**Describing Research Procedure**
Step 1	Presenting the data
Step 2	Describing the method
Move 3	**Summarizing Principal Results**
Move 4	**Evaluating Results**
Step 1	Drawing conclusion
Step 2	Comparing results
Step 3	Indicating discussion

Figure 1 A four-move model for research article abstracts

Based on the objectives, the main purpose is to uncover the general discourse pattern. As previously mentioned in the introduction, the application of the four-move model is to find possible moves in abstracts. Move 1 focused on creating a research space that covers (a) establishing the field, (b) preparing for present research, and (c) introducing present research. Move 2 focused on describing research procedure that covers (a) presenting the data and (b) describing the method. Move 3 focused on summarizing principal results. Move 4 focused on evaluating results that covers (a) drawing conclusion, (b) comparing results, and (c) indicating discussion. To explain the boundary of each move, the following example provides four-move model abstract.

THE EFFECT OF ICT-BASED INTERACTIVE GAME ON ENGLISH ACHIEVEMENT IN THE PRIMARY SCHOOL IN BULELENG

Move 1 Creating a Research Space
The aim of this study was to justify whether ICT-based interactive game gave the significant effect on fourth grade students' English achievement in cluster four in Sukasada district. It was a quasi-experimental research which used post-test only control group design.

Move 2 Describing Research Procedure
The population of this study was 174 students from eight elementary schools in cluster four in Sukasada district. The samples of this study were 23 students from SDN 3 Sukasada and 23 students from SDN 4 Sukasada which were selected by using cluster random sampling technique. The data were analyzed quantitatively by using descriptive and

inferential statistics analysis.

Move 3 Summarizing Principal Results
The result of hypothesis testing (independent t-test) shows that to=2.838>tcv = 2.015 and the significance value of the data was 0.007 lower than α = 0.05.

Move 4 Evaluating Results
It can be proved that ICT-based interactive game gives a significant effect towards students' English achievement. In conclusion, ICT-based interactive game is an effective teaching media.

Figure 2 An example of four-move pattern abstract

Results and Discussion

Based on the analysis, these are the distribution of each move in educational research article abstracts. The categorization is based on the five sub-disciplines abstracts.

Table 1 The frequency distribution moves of education discipline

Sub-disciplines	Move 1 (%)	Move 2 (%)	Move 3 (%)	Move 4 (%)
Language Education	100	100	100	40
Mathematics and Natural Science Education	100	100	100	40
Social Education	100	100	80	40
Technological Education	100	100	100	40
Elementary Education	100	100	100	60
Average	100	100	96	52

The data on the table display that Move 1 has a frequency of 100%. Such distribution makes Move 1 in education to be categorized as obligatory. Similar frequency was also established in Move 2 which automatically regarded it as an obligatory move. Quite similar frequency was also found in Move 3 which had a 96% distribution. Since those three moves are more than 90%, thus they are considered obligatory overall. However, special consideration addressed social education in which Move 3 seemed to be a prototypical move since the frequency was ranged within 60% until 80%. The most interesting finding was the average frequency of Move 4 in all sub-disciplines which presents 52%. Five sub-disciplines also show frequency distribution in Move 4 no more than 60%. Thus, it suggests that Move 4 in education and its sub-disciplines is an optional move.

The obligatory status of Moves 1, 2, and 3 in the field of education are presumed based on the characteristics of the field. Field of education required Move 1 as the background and introduction of the research overview. There is a tendency that Move 1 takes an important role as the part in order to describe the purpose of the study. Seemingly, the majority of data confirm such structure

is the whole content of Move 1. For readers, this type of move provided them the whole research content due to its directness to reveal the objectives of the study at the very beginning. The utilization of lexeme "aim" as in example (LE3), (MNSE4), (SE3), and (TE2) below are the major linguistic mark to indicate the purpose of the study. Slightly different from other sub-disciplines, elementary education (E2) provided its field of study information before jumped into the research purpose. Interesting findings found that no abstracts (despite the five examples) discussed relation with the previous research. It might be presumed that educational research can be deliberated on as a snowballing research type. It might be because the research which is mostly conducted in educational areas (*e.g*., school, university, learning center, etc.) are never been conducted (there) before. These examples (1)-(5) illustrate the implementation of Move 1.

(1) *The aim of this study was to justify whether ICT-based interactive game gave the significant effect on fourth grade students' English achievement in cluster four in Sukasada district.* (LE3)

(2) *This research aimed at (1) describing the learning strategy of physics teacher, (2) describing the students' meta-cognitive skills on physics learning, (3) describing students' motivation physics learning, and (4) describing the relevancy of a physics teacher's learning strategy in fostering the meta-cognitive skills and motivation of the students.* (MNSE4)

(3) *The aims of the research were to find out: The effect of self-regulated learning toward the student achievement in economics subject matter and to comparison of control class used cooperative learning with STAD methods.* (SE3)

(4) *The Development of an Adobe flash based interactive media in subjects Workshops and entrepreneurship material about Electrical electro. This research aimed to (1) describe the design of instructional Adobe flash based interactive media in subjects Workshops and entrepreneurship material about Electrical electro, (2) examine the result's validity instructional Adobe flash based interactive media in subjects Workshops and entrepreneurship material about Electrical electro.* (TE2)

(5) *The objective of this study was describing the application of CTL model assisted by origami media for increasing learning result of plane circumference in the fifth grade of primary school.* (EE2)

Once the readers finished reading the whole part of Move 1, they continued to read Move 2. It is obligatory for the educational researcher to be familiar with the research procedures. It is regarded as the way of conducting the research, hence such structure is considered important. In experimental and CAR research, the procedures are similar to the teaching process. Therefore, while reading the structure of Move 2, they may learn from research procedures. It can be proved by the following five examples of Move 2 which show research

procedures as well as teaching procedures implicitly. Meanwhile, the structures that provide the research data were found in (LE5), (MNSE3), and (EE3). As in many social science fields, the educational research procedures tend to be informative abstract. The following examples (6)-(10) illustrate the use of this move within the abstract.

(6) *To conduct this research, 92 students were selected as the sample. The design of this research was 2 x 2 factorial designs. Data of writing competency were collected by an instrument called post-test which is essay type test, meanwhile learning style data were collected by questionnaire. The acquired data were analyzed statistically by two-way ANOVA and Tukey test.* (LE5)

(7) *This research is a classroom action research which involves the subject of as many as 16 students. The object of this study is science student learning outcomes through the implementation of cooperative learning model type STAD. Student learning outcomes data obtained through observation using observation sheet data and student learning outcomes obtained using the written test. Collected data were analyzed descriptively.* (MNSE3)

(8) *The method used in the development of learning models in this study is a model of ADDIE that includes: Analyze a learner's needs, and so on. Design of formulation of competence, strategies. Develop teaching materials, assessment and so on. Implement a face-to-face assessment, and so on. Evaluate the learning program improvements. The sample used in this study is some of the High School in Bandar Lampung.* (SE2)

(9) *This type of research is a quasi-experiment with Post-test Only Control Group Design. Data collection is doing by multiple choice test method to regulate the cognitive domain. Data of learning outcomes in analysis through prerequisite test that is normality and homogeneity test with result of both group of normal and homogenous distribution, followed by hypothesis test using t-test.* (TE3)

(10) *The data that collected in this study is the cognitive process data of IV grade students which is taken by using the essay test which amounted to 17 items. According to the basic competencies on the theme of my residence sub-theme 2 and subtheme 3. The hypothesis was tested by using inferential statistics t-test.* (EE3)

In Move 3, the readers may find the research results that determine whether the results are significant or not for its further implementation. The structure of this move can be found in almost half part of the abstract. This structure is the longest part of the abstract since it is required to be detailed described. To illustrate how this move is being implemented, examples of (11)-(15) are provided below.

(11) *From the study, it was found that 1) the characteristics of character-based interactive multimedia are a) integrating skills, b) supporting 3 kinds of learning style, c) following steps in 2013 Curriculum, d) containing character values, e) using Descriptive as main topic, and f) integrating game, picture, audio, animation, and an additional program for enriching vocabulary, 2) the process of designing character-based interactive multimedia are conducted by selecting appropriate media and format, inserting picture and audio, designing layout, and publishing, 3) the product of character-based interactive multimedia is in a form of Flash application which covers 5 learning themes and consists of 10 parts, and 4) the character-based interactive multimedia has high quality.* (LE3)

(12) *The results showed that giving the task of making inquiries at home can increase students' activity in the classroom. This student activity can be seen from the number of students who ask questions in the class. The number of students who asked at the time of observation before the action was about 16.67%. After the action, the number of students who ask in cycle I are 41.67% while in cycle II is 53.13%. Thus, the method of providing home duties in the form of making the questionable to increase the activity of learning in the classroom.* (MNSE1)

(13) *The result of the investigation shown that students' activity and the student' mastery in cycle II was improved if comparing with cycle I. the results of the data analysis of the reflection scores for cycle I was 61.89 and 72.33 for cycle II, with the 82.22% students' progress degree in cycle I and 95.56% students' progress degree in cycle II. While the improving students' activity who really not active 24.44% became 0%, students' lack active from 31.11% became 15.56%, students' active enough from 15.56% became 33.33%, active students from 15.56% became 22.22% and super active students from 13.33% became 28,89%.* (SE5)

(14) *The expert media of validation test results obtained a score of 0.75 in the high category. Test content validation with a value of 0.81 in very high category. While the results of individual trials with a value of 0.93, small group testing with a value of 0.71, and field trials with a value of 0.82. In field trials also conducted by analyzing the value of practical activities, the value obtained 87.4 is categorized with high learning outcomes. From the results of the pre-test and post-test value as a whole has increased.* (TE1)

(15) *Based on Independent Sample T-Test which was conducted in post-test score of control group and experimental group, it resulted significance/probability of 0.038<0.05, so that H0 was ignored and Ha was accepted it meant that there was different average between experimental and control group. The different which were significance were in two research samples, which the average score in implementing*

inquiry learning model was 79.75, whereas the score of discovery learning model is 75.00. It meant that there were significance differences from the learning outcome of the students who used inquiry learning model and the students who used discovery learning model with the 8 themes of Ecosystem. (EE1)

Based on the data, Move 4 which is considered an optional move in education is tends to be ignored. It was obtained that those fourteen (14) articles did not include results evaluation. It might be based on the truth that the core of the abstract is already established in research results (Move 3). The implementation of lexeme "increase" found in Move 3 in numbers of abstracts such as (MNSE1) and (TE1) indicated the research significant for implementation. Linguistically, the usage of some statistics and numerical data which shows improvements have also signaled effectiveness, such as from (MNSE1), (SE5), (TE1), and (EE1). Thus, it supports that the conclusion part can be omitted in the educational research article abstracts.

Table 2 Common discourse patterns of educational research article abstracts

Sub-disciplines	1-2-3 pattern (%)	1-2-3-4 pattern (%)	Other patterns (%)
Language Education	60	40	-
Mathematics and Natural Science Education	60	40	-
Social Education	60	20	20
Technological Education	60	40	-
Elementary Education	40	60	-
Average	56	40	4

On the table above, there is no sub-discipline rated as structured abstracts which contemplate all four moves as obligatory (*i.e.*, 1-2-3-4 move pattern). From the data, four moves structure are presumed possessed by elementary education with an average frequency of 90% followed by language education, mathematics and natural science education, and technological education (85%), and social education (80%). However, the most general pattern discovered in education was the 1-2-3 move pattern (56%). It can be seen that this pattern is commonly found in language education, mathematics and natural science education, as well as technological education (60%). Meanwhile, elementary education (60%) owned a greater tendency of being regarded as a 1-2-3-4 move pattern in the educational sub-discipline. However, since this research objective is to find the general pattern of the education field, consequently 1-2-3 move pattern is considered as the general pattern of this field, it includes elementary education.

The following table shows the results of the frequency in each step (S) of the moves in research article abstracts across five sub-disciplines in education.

Table 3 The distribution of steps of each move

Sub-disciplines	Move 1 %			Move 2 %		Move 3 %	Move 4 %		
	S1	S2	S3	S1	S2		S1	S2	S3
Language Education	0	0	100	60	100	100	20	0	20
Mathematics and Natural Science Education	20	0	100	80	100	100	40	0	40
Social Education	0	0	100	40	100	80	20	0	20
Technological Education	40	0	100	40	100	100	20	0	20
Elementary Education	20	0	100	60	100	100	60	0	0
Average	16	0	100	56	100	96	32	0	20

The table illustrates the distribution of each step in Move 1, such as *Step 3 Introducing present research* was implemented in all sub-disciplines. Hence, it suggests that this step is obligatory in the education field. In addition, *Step 1 Establishing the field* was rarely implemented and frequently obtained only 16%. The highest sub-discipline that employs this step was technological education which points out 40%. However, all of the results in Step 1 are still believed to be optional. On the other hand, *Step 2 Preparing for present research* was not discovered in the whole abstract data.

Move 2 is closely related to the application of *Step 2 Describing the method*. The result showed the frequency of 100%, it is greatly supported that this step is obligatory in this structure. *Step 2 Presenting the data* fairly found in this move with the result of 56%. The highest sub-disciplines which use this step were mathematics and natural science education (80%). That frequency suggests this step is a prototypical step in such sub-disciplines. It is followed by language education and elementary education (60%) which presumed this step might belong to prototypical or optional step, while social education and technological education is clearly rated as an optional step. Such findings are somewhat confused on the extent of the education field regarding which step status does this discipline belongs to. However, to a certain extent, I considered the result from a frequent average of 56% which belongs to the optional step.

In Move 4, both *Step 1 Drawing conclusion* and *Step 3 Indicating discussion* have a small frequency. Both data demonstrate less than 60% in which can be categorized as an optional step. Even though the fair frequency of Step 1 was encountered in elementary education (60%), yet it still counted as an optional step. On the other hand, no data of *Step 2 Comparing* the results found in the abstracts. Those findings on Move 4 indicate a small frequency caused by the clear boundary of the research already obtained in the structure of objectives, procedures, and results, hence the conclusion part is not necessarily needed.

Conclusion

The investigation of common discourse patterns of educational research article abstracts from its five sub-disciplines can be divided into several structures called moves. This result suggests that the education field has a pattern of Move 1 Creating a research space, Move 2 Describing research procedure, and Move 3 Summarizing principal results. The results discovered an average frequency of 56% in 1-2-3 move patterns in the abstracts. Furthermore, another pattern is the 1-2-3-4 move pattern. The average result is 40%.

The findings in Move display similarities with the statement of Hardjanto (1997) and Santos (1996). All of the abstracts in data possessed Move 1 Creating a research space in Hardjanto's model, and move on presenting the research in Santos' model. Move 2 Describing research procedures in the education field is considered obligatory since all of the data possessed this move. This new finding suggests that research procedure in the abstract of the education field is compulsory because the abstract is the type of informative abstract. Therefore, it supports both Pho (2008; 2013) and Santos (1996) who regarded this move as obligatory. Move 3 which is marked as obligatory in the education field attests to an agreement with Hardjanto (2017) who rated this move as obligatory. It demonstrates the importance of the study result which tends to be the main purpose of readers read the research article abstract. The finding of Move 4 Evaluating results in the education field suggests that this move is viewed as optional. These results slightly *vis a vis* Santos (1996), Hardjanto (1997), and Pho (2013) who claimed that Move 3 is prototypical type. Furthermore, this result also greatly contrasts with Hardjanto (2017) who obtained that the frequency of Move 4 is 90%, and such finding considered it as obligatory.

Although the move pattern of 1-2-3 can be found in almost all education abstracts, yet it cannot be against the previous research because this research only analyzes one field along with its sub-disciplines. As can be seen, this study was conducted to complete the common discourse pattern across disciplinary. However, the finding of move pattern of 1-2-3-4 in almost half of the abstracts strongly suggests that the education field has a quite similar pattern against the fields of linguistics and medicine based on the result of Hardjanto (2017).

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