The Common Move and Step in Research Article Abstracts

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INFO ARTIKEL	ABSTRAK
	Abstract: Move and step are components that can provide effective contribution to overall communicative purpose in research article. This study aims to investigate the moves and steps in 48 abstracts publication from cross-disciplinary study under UM journal website. The design of this study is qualitative research. Swales et.al (2014) and Hyland's (2000) models are used to identify moves and steps occurrence. The result shows that the majority of abstracts use M3 (46 abstracts), M4 (44 abstracts), M2 (40 abstracts). Authors mostly apply step 1 in M2 (40 times), step 1 in M4 (42 times), and step 3 in M3 (35 times). **Abstrak:** *Moves and Steps* adalah komponen yang dapat memberikan kontribusi efektif untuk keseluruhan tujuan komunikasi dalam artikel penelitian. Penelitian ini bertujuan untuk menyelidiki langkah-langkah dan langkah-langkah dalam 48 publikasi abstrak dari studi lintas disiplin di situs web jurnal UM. Desain penelitian ini adalah penelitian kualitatif. Model Swales et.al (2014) dan Hyland (2000) digunakan untuk mengidentifikasi keberadaan moves dan steps. Hasilnya menunjukkan bahwa mayoritas abstrak menggunakan M3 (46 abstrak), M4 (44 abstrak), M2 (40 abstrak). Penulis kebanyakan menerapkan step 1 di M2 (40 kali), step 1 di M4 (42 kali), dan step 3 di M3 (35 kali).
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In academic texts, abstract has an important role to depict the whole research into maximum two pages alongside with its key terms. Cross & Oppenheim (2004) note that the abstract has to portray the whole article into a simple structure, which resembles the function of the 'summary'. Abstracts cannot be more than two pages due to its requirement; moreover, at the end of the abstracts, keywords or key terms must be written in order to provide brief insight of what the writers intend in 3-5 words. English abstract in every research article acts out as standard practice with communicative purpose as the main accomplishment without neglecting its essence, it determines the reader continue reading the whole article or not (Arsyad, 2014; Martin, 2002; Zhang et al., 2012). Besides, the scholar shifted their attention to the analysis of research article abstracts due to its major role as a guideline to inform the readers about the scope and content of the articles (Doró, 2013). Beginning, a middle, and an end are common abstract structure used by researchers which highlight the key idea and/of result (Rathbone, 1985). Regarding to the aforementioned statements, it implies that writing an abstract means to extract and summarize the whole information of research articles.

Pedoman Penulisan Karya Ilmiah or PPKI UM (2017) notes that abstract contains the essence of the research report which includes the background, the problem, the method, the result, conclusions, and suggestions typed in single space. Moreover, Alexandrov & Hennerici (2007) point out several good criteria for writing good abstracts. The introduction needs to have AB (absolutely), STR (straightforward) and ACT (actual data presentation and interpretation) framework. Furthermore, the method should describe the design of the study and data collection in a short way possible. For the result, providing important data that answer the research question before is necessary to avoid speculation and opinions. Moreover, the conclusion in abstracts should be based on the findings.

Communicative purpose in abstract is necessary to form apprehensibility of information that can be delivered to the readers. However, implementing appropriate composition of structure in writing can contribute to overall communicative purposes. Canale (1983) categorizes three component of communicative competence, grammatical, sociolinguistic and strategic competence. Grammatical competence covers the language used in writing context. Besides, (Canale, M & Swain, 1980) carefully label cohesion (i.e. grammatical links) and coherence (i.e. communication functions appropriate combination) as the rules in discourse. Sociolinguistic competence highlights the use of utterances being understood appropriately depending on its contextual factors in different sociolinguistic context. Moreover, strategic competence is compilation of verbal and non-verbal communication strategies.

Understanding the knowledge of the grammatical system in language has to be accomplished by understanding its cultural competence or communicative (Byram, et al., 1994). As consideration, in order to be able to write decent English, non-English writers have to consider thinking like native speakers of English. Indonesians have to consider the cultural domain of the English language speaking country to enable them composing their research articles in English employs the required rhetoric (Basthomi, 2006a). However, each writer has different composition structures of writing, it is depending on the language and culture of the writers itself. In other words, composition of writing is a reflection of the writer's native language and culture. Furthermore, writing is classified into a product of social activities in which writers' cultural variation background characterized their structure of writing (Kaplan, 1966; Mauranen, 1993), writing a *perse* is a cultural object within social communities.

Discourse competence is mainly related to the ability of understanding and composing/producing some extra features, which can give assistance to connectedness and cohesion (Kaplan & Knutson, 1993). Furthermore, discourse competence and communicative competence are item that complete each other in learning a language context. The discourse competence concept occurs in all the type of communicative competence and its theory obtained (Januin & Stephen, 2015). Discourse analysis focuses on the language patterns and regularities within the text to show its linguistics elements as the main purpose, so that language users are able to communicate through context (Bavelas et al., 2002; Nunan, 1993). When talking about discourse communication, genre becomes an important aspect that cannot be overlooked from it. Swales (1990) defines genres as discourse communities properties in which categorized as communicative event consist of special features in term of communicative purposes.

Moreover, Genre study concerns more on the way the structure and meaning emerge within (Swales, 1990; Hyland, 2013; Arsyad, 2014; Al-Shujairi, et.al., 2016). In order to achieve the overall communicative purpose of the genre, moves provide a contribution of at least one clause or more (Connor & Mauranen, 1999), even though it can be varied in length and size from several paragraphs to only one sentence. From a social perspective in research context, the fundamental question is mainly related to the context and how text/writing composed (Artameva, 2014). Here, composing a text is seen as a social process along with constructing the knowledge, furthermore; rhetoric acts as a social instrument that concerns the audience/readers and what/how the writers write. Rhetoric is an art of persuasion that adjunct to logic in which its available means able to persuade people within the communities (Murphy, 1974; Gaines, 1986; Griffin, 2012)

In order to achieve overall communicative purpose of the genre, moves provide contribution of at least one clause or more (Connor & Mauranen, 1999), even though it can be varied in length and size from several paragraphs to only one sentence. Text is portrayed a sequence of moves, and each move delivers a particular communicative function of the genre (Santos, 1996). Pho (2009) points out that each move contains communicative purpose which has contribution to overall communicative purpose of the writing/text if all moves are being grouped together. Moreover, steps are part of moves but in lower level which has purpose to fulfil the communication function of moves (Swales, 1990). Steps represents the textual or rhetorical form of the abstracts (Arsyad, 2014). Some research related to rhetorical, tenses, and metadiscourse was conducted by Basthomi (2006b), Al-Shujairi, et.al., (2016), Hanidar (2016), and Lautayf (2017) that are used as previous study. Moreover, this study aimed to investigate the appearance of moves and steps in research article abstracts written by Indonesian academics.

METHOD

This research applied qualitative research, employing a content analysis in a descriptive way. Content analysis is a research method that applies a set of procedures to identify and document the attitudes, views, and interest of individuals, small or large groups, and diverse cultural groups in which making replicable and valid inferences within the text (Drisko et al., 2016; Krippendorff, 2004). The inferences address the sender(s) of the message, the message itself, or the recipients of the message (Weber, 1990). Content analysis was used to answer the questions mention in the previous chapter.

The corpus data were selected randomly from each faculty journal under *journal2.um.ac.id* website and collected 48 corpus data from 8 disciplinary backgrounds of study. They were selected in order to know moves-steps within the text. It is assumed that all the research articles abstracts published under UM-based journal had passed the standard editing and reviewing process from the board of journal editor team. It is also met the criteria of submission guidelines such as number of words, content, etc. Therefore, the analysis was conducted through Swales model. Swales model was used to reveal communicative units or moves and steps mentioned on the first research questions. Swales et.al model was adopted from Arsyad (2014) research article. The model is shown in table 1.

Table 1. Moves by Swales, e*t al*.

Move 1	background/introduction/situation which is written to answer the question of what the writer/s know about the research topic
Move 2	the aim/purpose of research which is meant written to explains what the research is about
Move 3	methods/materials/subjects/procedures which tell readers how the research is conducted;
Move 4	results/findings which address what the researcher/s discover from the research;
Move 5	discussion/conclusion/significance which are aimed at discussing what the research results mean.

Moreover, analyzing the steps in the abstracts CARS model proposed by Hyland (2000). Hyland was analyzing 800 research abstracts, and came up with five-move model. Hyland model of steps analysis is powerful enough to be applied. The analysis of steps in moves is shown in table 2.

Table 2. Hyland (2000) Steps Model

Introduction: Establishing context of the paper and motivates the research.
Step 1 : Arguing for topic prominence;
Step 2 : Making topic generalizations;
Step 3 : Defining terms, objects, or processes; and
Step 4 : Identifying a gap in current knowledge
Purpose: Indicating purpose, thesis or hypothesis, and outlines the intention behind the paper.
Step 1: Stating the purpose directly.
Method: Provides information on design, procedures, assumptions, approach, data, etc.
Step 1: Describing the participants;
Step 2 : Describing the instruments or equipment; and
Step 3 : Describing the procedure and conditions
Product: States main findings or result, the argument, or what was accomplished.
Step 1: Describing the main features or properties of the solutions or product.
Conclusion: Interprets or extends results beyond the scope of the paper, draws inferences, points to applications, or wider applications.
Step 1: Deducing conclusions from result,
Step 2: Evaluating value of the research, and
Step 3: Presenting recommendations.

RESULT

From the data obtained, Table 3 shows the moves availability in each abstract cross-disciplinary study. From Table 4, it can be concluded what moves are available and frequently used in the abstracts.

Table 3 Total of Moves Appearance

Moves	Reseach Article Abstracts								
	Edu	Lett	Math & Sci	Eco	Eng	Sport	Social	Psy	Total
M1	-	5	6	2	2	1	6	5	27
M2	6	4	3	6	6	6	3	6	40
M3	6	5	6	6	6	6	5	6	46
M4	6	5	6	6	6	5	4	6	44
M5	2	5	5	6	6	4	4	4	36

In table 3, it shows the majority of English abstracts in different disciplinary background of study is using M2, M3 and M4 *(purpose, methods, and results)*. However, M3 and M4 are leading with 46 and 44 abstracts. M2 applied in 40 abstracts, and only 27 abstracts applied M1 *(background/introduction/ situation)* and 36 abstracts applied M5 *(conclusion)*. Method or M3 is the most used move in English abstracts of Indonesian ESP academics. Moreover, Table 4 shows the total appearance of steps in each move.

Table 4. Total of Steps Appearance

Research Article Abstracts	M1				M2	M3			M4	M5		
	S1	S2	S3	S4	S1	S1	S2	S3	S1	S1	S2	S3
Edu	-	-	-	-	6	6	4	3	5	2	-	-
Lett	5	3	-	2	4	2	3	5	4	-	-	1
Math & Sci	6	5	-	1	3	2	3	5	6	4	1	-
Eco	2	2	2	1	6	5	4	3	6	5	-	1
Engg	2	1	-	1	6	1	4	4	6	5	-	1
Sport	1	1	-	-	6	3	2	6	5	3	-	1
Social	6	4	-	4	3	1	3	4	4	1	2	1
Psy	5	1	1	2	6	5	4	5	6	4	-	-
Total	27	17	3	11	40	25	27	35	42	24	3	5

Table 4 shows the steps appearance in the asbtracts. The majority of English abstracts in the cross-disciplinary study are mostly using step 1 then step 2 then step 4 in M1. The majority of authors are using step 1 in M2 as the only available option with the usage around 40 times. Moreover, step 3 is leading with 35 times of usage, then step 2 and 1 with 27 and 25 times of usage. Step 1 is the only step that occurred in M4. Then the last, step 1 is the main step that occurred in the majority of abstracts with the usage around 24 times.

DISCUSSION

This study aimed to identify the availability of moves and steps that exist in English abstracts written by Indonesian ESP academics. The findings show that moves availability highlights the specific characteristic appeared in each abstract. The findings mainly accomplished the three moves *2, 3, and 4* as mentioned by Swales adopted from Arsyad (2014). M*oves 1 and 5* also appeared in certain abstracts, however, the total occurrence of those moves is below moves *2, 3, and 4*. Moreover, the common moves that appeared in the abstracts are *move 2* related to the aim/ purpose of research, move 3 related to methods/ materials/ subjects/ procedures in conducting the research, while *move 4* analyzed the findings/results of the research.

The majority of the authors wrote the introduction of the abstracts in detail form, explaining the idea of the research article in two or three sentences especially in research articles that employ qualitative research. Moreover, method and data collection are written in short ways possible. For the result, the authors put the important data that answer the research question and the conclusion is based on the findings. Swales (adopted from Arsyad 2014) proclaims that the common moves employed by cross-disciplinary writers are moves 2, 3 and 4 and the findings of this study shows similarity which emphasizes in the majority of the writers tend to put aim/purpose, methods, and results of the research as the main issue that needs to be featured to depict their whole research articles. However, in certain abstract i.e., letters, math & science, social science, and psychology the total occurrence of move 1 is quite high and almost all the abstracts include move 1 (*background /introduction/ situation*) to display an image of the overall research articles itself.

Moves in writing are seen as a pivotal writing component that cannot be neglected in order to be able to deliver the main idea of the whole writing to the readers. Pho (2009) points out that each move contains communicative purpose that has contribution to overall communicative purpose of the writing/text if all moves are being grouped together. Besides, the notion of move portrayed as a functional unit in a writing/text employed to identify the textual regularities of certain genre in writing (Swales, 1990). The majority of abstracts that involve all steps in move 1 have an absolutely, actual data presentation and interpretation' criteria, however, for the straightforwardness somehow it is hard to identify.

Furthermore, beginning, a middle, and an end are common abstract structures used by researchers which highlight the key idea and/of the result (Rathbone, 1985). As discussed in the result, the three moves define the key idea, methods, and the result of the research, it also revealed similarity as to what Rathbone claims. The beginning of the findings was represented by the introduction which mainly focusing on the key idea and aim/purpose of the research. The middle section was linked to methods/materials/subjects/procedures of the research, and the end section was represented by the result of the research. The conclusion in the abstract acts as an optional section in the research article.

CONCLUSION

The common moves in research article abstracts are *move 2* (aim/purpose of research), *move 3* (methods/materials/subjects/procedures in conducting the research), and *move 4* (findings/results of the research). Furthermore, step 1 in M2 with the usage around 40 times used by the majority of the authors. Furthermore, in M3 step 3 occurred around 35 times, followed by step 2 and 1 with 27 and 25 times of usage. Step 1 is the only step that occurred in M4 with occurrence around 42 times. Then the last step in M5, step 1 is the main step that occurred in the majority of M5 with the usage around 24 times. Besides, in certain abstract i.e., letters, math & science, social science, and psychology the total occurrence of move 1 is quite high and almost all the abstracts include move 1 (*background /introduction/ situation*) to display an image of the overall research articles itself. Furthermore, according to Swales (adopted from Arsyad 2014), the common moves used fequently by cross-disciplinary authors are moves 2, 3 and 4, moreover, the findings of this study shows similarity. The authors emphasizes aim/purpose, methods, and results of the research as the main issue that needs to be featured in order to potrays their overall research articles.

Practically, this study also presents an example to other academics who want to publish their research article employes understandable, brief, and accurate abstract from different or similar studies employed certain language components in the form of moves and steps in abstract writing. Moreover, for further rhetoric/genre analysis/discourse researchers, this research can be used to see moves or steps emerged that complement the abstract writing among Indonesian academics from different disciplinary backgrounds of study. The findings of this study sets different viewpoints for Indonesian academics on how to write their abstracts especially those who need to accomplish article publication. Moreover, for further rhetoric/genre analysis/discourse researchers, this research can be used to see moves or steps emerged that complement the abstract writing among Indonesian academics from cross-disciplinary study.

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