

Structuring Research Articles' Introduction: Awareness of International Conventions

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Abstract:

Discourse analysis focused on the genre of research articles as they represent a key of membership and recognition in scientific communities; it gave considerable attention to linguistic and structural aspects of this genre. Simultaneously, the present work explores the researchers' awareness about the international conventions of structuring research articles introductions, and it investigates the level of difficulty in realizing the different elements of this section. To this end, a questionnaire was conducted to 14 researchers at the department of English Language and Literature at Sétif2 University. The results disclosed a moderate level of the respondents' awareness about the research article introduction structural organization. Moreover, the participants do not have a high level of difficulty in achieving the different moves and steps. Thereupon, the results dictate strong indicators for designing courses of academic English for publication purposes

Keywords: Researchers' awareness, International conventions, Structuring, Research articles, Introductions

ملخص :

أعطت دراسة تحليل الخطاب اهتماما للمقال العلمي كمفتاح للعضوية في المجتمع الأكاديمي، وقد ركزت على بنيته التركيبية واللغوية. في نفس السياق تركزت الدراسة الحالية على استكشاف مقدار وعي الباحثين بالضوابط الدولية لبنية مقدمة المقال العلمي ومقدار صعوبة إنجاز مختلف أجزائها. لتحقيق هذه الغاية تم استجواب 14 باحثا من قسم اللغة والأدب الإنجليزي بجامعة سطيف2. وقد أظهرت النتائج مستوى متوسطا من الوعي حول بنية مقدمة المقال العلمي كما تبين أن

الباحثين لا يعانون من صعوبات معتبرة في كتابة هذا الجزء. وعليه تم اقتراح تصميم دورات خاصة بالكتابة العلمية الأكاديمية الموجهة للنشر.

كلمات دالة: وعي الباحثين، الضوابط الدولية، بناء، المقال العلمي، مقدمات

1. Introduction

Writing for research publication purposes has occupied a significant arena in research about academic writing. The need to write research articles for the purpose of academic promotion and graduation put native and Non native researchers in a challenge of well writing and structuring their manuscripts. Therefore, Discourse and genre analyzers worked on providing templates reflecting the rhetorical structure of research articles different sections. The abstract (Bhatia, 1994; Dos Santos, 1996; Hyland, 2000), Methods section(Swales and Feak, 1994; Nwogu, 1997; Lim, 2006; Peacock, 2011), Results section(Thomson, 1993; Kanoksilapatham, 2007), Discussion(Holmes, 1997; Dudley-Evans, 1994; Peacock, 2002), and comparatively the introduction section got the lions' share of the studies (Swales, 1990; 2004; Posteguillo,1999; Swales and Feak, 1994; Kanoksilapatham, 2005; Adnan, 2009; Samraj, 2002; Shehzad, 2010). It is believed that introduction writing is a battle hard won as it plays the role of selling the article and competing for the discourse community acceptance (Swales and Feak, 1994). Thereupon, researchers attempted to develop models that facilitate introduction structural organization. The pioneering work of Swales (1990) opened wide doors to the notion of moves analysis. He developed "Creating a Research Space" (CARS) model in which he proposed three moves for realizing the introduction section. The model resulted from analyzing 48 research articles in social sciences, medicine, and physics. It is composed of three moves namely: establishing a territory, establishing a niche, and occupying the niche. The first move is aimed at introducing the research topic; the second move indicates a gap in research or raises a research question; while the last move

introduces the topic purposively. Similarly, each move communicative purpose is achieved through steps. In the model, move one of establishing the research territory can be written through three steps: claiming the importance of the topic, claiming that the topic was object of previous research, and reviewing previous literature. The second move, on the other hand, is considered as a key move as it bridges the gap between the first and the last moves (Kanoksilapatham, 2007). Optionally, this move can be realised through four steps: opposing previous research, indicating a gap in previous research, raising a research question, or extending a previous research area. The last move plays the role of presenting the work through indicating the purpose, announcing results, and presenting the paper structure. Following swales tradition, researchers analysed articles in different fields with a larger corpus to assess the model applicability for pedagogical implications. Anthony (1999) analysed 12 research articles in software engineering. Samraj (2002) carried a study to compare between the structural organization of the abstract and the introduction sections in conservation biology and Wilde life behavior while Kanoksilapatham study (2007) was on 60 research articles in biochemistry. Similar to swales model (1990), Kanoksilapatham (2007) developed a framework in reference to the models of Anthony (1999), Samraj (2002), and Chu (1996 as cited in Kanoksilapatham, 2007). It is composed of three moves: establishing a topic to indicate the importance of the research, presenting a study through indicating a gap or raising a question, and introducing the present study through purpose statement, procedure description, and results presentation.

Move 1: Establishing a topic

Move 2: preparing for the present study: indicating a gap/ raising a question

Move 3: Introducing the present study

Step1: Stating purpose

Step2: Describing procedures**Step 3:** Presenting Findings (Kanoksilapatham, 2007, p.76)

From another perspective, scholars (Flowerdew, 1999; Li, 2002; Moreno, Rocha, Burgess, Lopez-Navarro, & Sachdev, 2012) attempted to explore the area of difficulty in writing for publication. Flowerdew (1999) summarised researchers problems in writing for research publication in: grammar, use of citation, making reference to the published literature, structure of argument; textual organization, relating text to audience, ways in which to make knowledge claims, ways in which to reveal or conceal point of view of an author, use of hedges to indicate caution expected by the academic community, and interference of different cultural views regarding the nature of academic process. (p. 127). Li (2002) measured Mainland Chinese doctoral researchers' confidence in writing research papers for international publication through conducting 154 questionnaires and in depth interviews with 15 doctoral students and five supervisors. The results showed that doctoral students have a high level of confidence in writing and publishing international research papers. Moreno, Rocha, Burgess, Lopez-Navarro, & SACHdev (2012) claimed that Spanish researchers have problems in criticizing earlier works in literature when writing in English. The previous studies were conducted adopting Swales model (1990) and aimed at designing frameworks that can facilitate the role on novice researchers in writing the introduction or exploring discoursal and non- discoursal difficulties in writing research. However, scant research focused on investigating researchers' awareness of the introduction rhetorical organization and the degree of difficulty in realizing different communicative purposes or moves inside this section. Accordingly, the present study addresses the following research questions

1. Are Sétif2 English Language and Literature researchers aware of the research article introduction rhetorical structure?
2. What is the difficulty level of realizing each move in the introduction?

The specific aims of the study are:

- Investigating Sétif2 English Language and Literature researchers' awareness about the rhetorical structure of the research article introduction
- Assessing the level of difficulty in realizing the introduction different moves.

2. Methodology

2.1. Participants

The participants for this study are 14 university teachers and researchers namely: 8 doctoral researchers, 3 permanent researchers, and 3 post-doctoral researchers at the department of English Language and Literature of at the faculty of letters and Languages, Sétif2 University. Their experience in research starts from six years and more, and their research articles were published in international and national journals from class A, B, and C. The reason behind choosing our participants is their need to publish research articles either for graduation in the case of doctoral researchers as the Algerian policy imposes on them to publish research articles at least in a journal from class "C" to be accepted for their PhD defense. In the same token, permanent researchers and post doctoral researchers need to write research articles for promotion or recognition in academia.

2.2 Data Collection and Research Materials

To investigate or describe a phenomenon in social sciences, scholars believe that a quantitative or a qualitative research paradigm is to be called. In the present exploratory study, quantitative research approach is adopted through using the questionnaire as a research tool. The motive behind using this tool is its effectiveness in collecting large data about a large number of participants to be analysed using soft wares (Dornyei, 2010). The main aim of conducting the questionnaire is investigating teachers' awareness about the rhetorical structure of

the research article introduction section and assessing the level of difficulty in realizing its different moves. After delivering the questionnaire via email many times, 14 answers were received. However, other teachers justified their refusal by the overburdening tasks they have to fulfill. The questionnaire is designed using Google documents application. The effectiveness in organizing the different sections and one click answer in multi -choice questions and closed - ended questions supported the choice of this application. The questions were intended to collect data about the participants' specialties and experience in research, to provide information about their research publication experience and their awareness of the structural and linguistic organization values in writing research articles, and finally to assess their awareness of the different moves they should include when writing the introduction section and the difficulty level of realizing them. The last section was divided into the different introduction parts derived from Kanoksilapatham model (2007) and Swales model (1990) namely:

- 1) **Establishing a topic or claiming centrality:** it is realised by indicating the research topic importance supported with reviewing literature
- 2) **Preparing the present study:** it is realized through raising research questions or indicating a gap in literature
- 3) **Introducing the present study:** it is realised through stating the purpose of the study, describing the procedure, presenting results, and possibly indicating paper structure.

The participants were requested to cross the moves they generally realize when writing research articles' introductions, and the test was managed by including the moves: :“ detailing source of the materials” and “ stating limitations” that should not be part of the section. After that, the respondents were provided with a second table of the model real moves to indicate the difficulty level that ranges between (none, a little, quite a lot, a lot). The last question aims at investigating the researchers perceptions towards including English for professional

academic purposes in doctoral curricular with providing explanation to their answers. Finally, data Analysis was carried using Excel Microsoft Office and the results were translated into a table to be compared with previous research.

3. Results and Discussion

The study at hand aims at exploring the awareness of Sétif 2 university researchers in the field of English Language and Literature about the international conventions ruling research articles' introduction structure. It also assesses the difficulty level in realizing each move in the introduction. To achieve this end, a questionnaire was administered to 14 researchers. Two research questions are leading this research. Through collecting information about the respondents' profile, we found that all our participants have experience in research articles' publication (100%), yet they differ in their academic degrees and their journals publication classes. Then, all the participants (100%) agreed that ideas organization is vital in research writing. They explained its importance in its role in presenting ideas and understanding them (50%); moreover, others (71%) justified its importance by its effectiveness in organizing the entire text of the research article, yet some respondents (28%) believe that ideas organization is important because it is the main interest of editors and reviewers. When asked about the main difficulties they face in writing their research articles, they explained that their problem lies in organizing ideas inside sections (50%) and providing logical and clear arguments (35%), while others (28%) referred to the difficulty of organizing the article into sections. Flowerdew (1999) in a similar study listed arguments, structure, and textual organization among the most problematic situations research writers meet. Actually, the participants in both studies share the problem of organizing ideas inside sections which is considered to be a vital pillar in building academic texts.

3.1 Research question 1

In testing their awareness about the moves and steps to be included in the introduction section, nine participants (64%) agreed on including the review of previous literature. Differently, Swales and Feak (1994) consider this part as obligatory in presenting the first move and providing solid background for article study. Similarly, focus on a gap in previous research is recommended by seven participants (50%) to oppose literature in considering this move obligatory for its role in bridging the gap between the first and the last moves of the introduction (Swales and Feak, 1994; Kanoksilapatham, 2007). Interestingly, statement of the study objective is selected by the majority (92%); it is considered as an obligatory step in the third move (Swales and Feak, 1994; Kanoksilapatham, 2007). Raising a research question gained more than half of the participants' recognition (57%). In the study conducted by Swales (1990); he considered the second move as obligatory in writing the introduction and can be achieved by indicating a gap in research, raising a question, or extending previous knowledge. Surprisingly, half of the respondents (50%) believe that the introduction includes the research procedure description and paper structure (50%). Again, Kanoksilapatham (2007) and Swales (1990) believe that presenting paper structure and procedure description are specific to some disciplines and are optional. In addition, few respondents (14%) included limitations statement, and materials source details in their introductions (21%) as they are not considered to be part of the introduction (Kanoksilapatham (2007); Anthony (1999); Samraj (2002); and Chu (1996). On the whole, the participants' awareness level of the introduction rhetorical structure is low or moderate as they tend to neglect the importance of vital moves in writing the introduction like the second move (50%) and the first move (64%). They are likely unable to raise a question about previous research or to find gaps in it. Likely, reviewing previous research through citation is indispensable in the introduction, yet the respondents did not agree on including it.

3.2 Research question 2

In expressing the degree of difficulty in writing the introduction sections, seven respondents (50%) have little difficulty in stating research topic, and 42% of the have no difficulty due to the importance of this section; it plays a vital role in contextualizing the study. Moreover, more than half of the participants (57%) have no difficulty in describing research procedure as they present in this part details about the way they conducted their research to facilitate replication for future researchers. Then, in presenting findings, the views are divided between 35% for no difficulty and 28% for little and quite a lot of difficulty. Actually, the research article is a research paper that should not be as long as a thesis which puts the writers at the challenge of selecting the relevant data to be presented and the way of presenting it. Nine respondents do not face any difficulty in indicating the paper structure (63%) as it is a description of the way they are going to organize their papers. A little difficulty is witnessed in reviewing previous research and indicating weakness in it (57%) due to the researchers' experience in reading and writing the review of literature in the MA dissertation and PhD thesis. Stating the purpose of the study is of no difficulty for (42%) of the researchers and written with little difficulty for the same percentage. Interestingly, quite a lot difficulty is highlighted when raising a question (35%) for the importance of research questions in guiding the whole research procedure, yet it seems that no one communicative purpose is gaining a high level of difficulty.

Table 1. The of Degree of Difficulty in Writing the introduction

	None	A little	Quite a lot	A lot
Stating research topic	42%	50%	7%	0%
Reviewing previous research	21%	57%	21%	0%
Indicating a weakness In previous research	14%	63%	21%	7%

Raising a question about previous research	28%	28%	35%	7%
Stating the purpose of the study	42%	42%	7%	7%
Describing research procedure	57%	7%	28%	7%
Presenting research questions or hypothesis	42%	50%	7%	0%
Presenting findings	35%	28%	28%	7%
Indicating Paper structure	63%	28%	7%	0%

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Similarly, Lim (2002) concluded after collecting 154 questionnaires and conducting in depth interviews with 15 doctoral students and five supervisors that doctoral students in different disciplines have a high level of confidence in writing and publishing research. However, Flowerdew (1999) found after conducting a survey with Chinese Hong Kong scholars that the introduction for them is a challenging section as they have problems in expressing their ideas because of the influence of their first language, so they tend to write with a simple careful style to consume more time in comparison to native speaker researchers. Likely, Swales and Feak (1994) believe that the introduction and the discussion are the hardest sections to write; the introduction is a battle hard won. It is a troublesome writing section for both native and non native speakers.

4. Conclusion

Due to the high importance research publication has occupied in the academic communities, studies from different perspectives approached research articles. Genre analysis scholars attempted to design templates that may raise the researchers' awareness about their manuscripts structural organization and facilitate the realization of the different moves inside the articles' sections. The present study using moves analysis models revealed that English Language and literature teachers' theoretical level of awareness is low or moderate and the degree of difficulty in realizing the introduction different moves is low. However, a practical analysis of their manuscripts is called to confirm the results. Moreover, the choice of the participants in the study was guided by conditions like their availability and willingness to take part. Thus, further research can be conducted with a larger population from other universities in the Algerian territory. In testing their awareness of the introduction, two steps were added to the third moves, yet the choice can cover other options from the articles different sections. As far as Pedagogical implications are concerned, the model used in designing the questionnaire to test the respondents' level of difficulty can be used by ESP instructors to train novice researchers for the aim of writing effective research articles' introductions or develop courses of English for research publication purposes.

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