

EFL Algerian Doctoral Candidates' Perceptions and Attitudes Towards Research Articles Writing

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Abstract

Academic community members share the findings of their research projects through research articles publication. Likewise, the Algerian doctorate students find it mandatory to publish their research findings that are most pertinent to the topic of their doctorate thesis. However, most candidates find this task challenging because of inadequate understanding of academic genre norms and writing skills. This study explores EFL Algerian doctoral candidates' perceptions and attitudes of writing research articles in order to determine the most common encountered difficulties, and suggests adequate strategies to solve their academic writing problems. Data collection was carried out through the use of a questionnaire administered to a sample of doctoral candidates and an interview of two academic writing teachers at Biskra University. The qualitative and quantitative data analysis determined that doctorate candidates face some academic writing problems because of inappropriate and scarce practice opportunities of this academic genre.

Keywords: Research articles; Academic writing; Academic genres; Perceptions; Attitudes

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Résumé

La communauté académique partage les résultats des projets de recherche par la publication d'articles de recherche. De même, les doctorants algériens doivent publier les résultats de leurs travaux de thèses de doctorat. Cependant, la plupart des candidats font face à des difficultés dues aux normes et compétences requises pour la rédaction académique. Cette étude explore la manière dont les doctorants algériens d'EFL perçoivent et adoptent la rédaction d'articles de recherche afin de déterminer les difficultés les plus fréquemment rencontrées et de proposer des stratégies adéquates pour résoudre leurs problèmes de rédaction académique. La collecte des données a été réalisée à l'aide d'un questionnaire administré à un échantillon de doctorants et d'entretien avec deux professeurs d'écrit académique à l'Université de Biskra. L'analyse des données a déterminé que les doctorants sont confrontés à des problèmes d'écriture académique à cause du manque d'opportunités et de pratique appropriée à ce genre d'écrit.

Mots clés: articles de recherche; l'écrit académique; genres académiques; perceptions; attitudes.

ملخص

يتشارك أعضاء المجتمع الأكاديمي نتائج مشاريعهم البحثية من خلال نشر مقالات. وبالمثل، يجد طلبة الدكتوراه الجزائريون أنه من الضروري نشر نتائج أبحاثهم المتصلة بموضوع أطروحات الدكتوراه الخاصة بهم. ولكن يجد معظم المترشحين هذه المهمة صعبة بسبب عدم فهم المعايير الأكاديمية للنوع ومهارات الكتابة. تستكشف هذه الدراسة الطريقة التي يتبعها المترشحون الجزائريون لنيل درجة الدكتوراه في تصورات ونزعات كتابة المقالات البحثية، من أجل تحديد الصعوبات الأكثر شيوعاً، واقتراح الاستراتيجيات المناسبة لحل مشاكل كتاباتهم الأكاديمية. وتم جمع البيانات من خلال استخدام استبيان أجري على عينة من مترشحي الدكتوراه، وإجراء مقابلة مع اثنين من أساتذة الكتابة الأكاديمية بجامعة بسكرة. وقد حدد تحليل البيانات النوعي والكمي أن المترشحين للحصول على درجة الدكتوراه يواجهون مشاكل في الكتابة الأكاديمية بسبب فرص الممارسة غير الملائمة والنادرة لهذا النوع الأكاديمي.

الكلمات المفتاحية: مقالات بحثية؛ الكتابة الأكاديمية؛ أنواع أكاديمية؛ التصورات؛ المواقف

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I- Introduction:

Academic writing is a key factor for successful doctoral degree completion. It does not assist solely to produce academic written forms like dissertations and research articles, but also motivates PhD candidates to promote their thinking, knowledge, and identity as researchers (Paré, 2017). In this respect, it enables those candidates to interact with and participate in the research community.

Research article (RA) has become the dominant form of writing in modern academia, and the genre which is frequently used to disseminate scientific knowledge. Studies about RA features illustrate that this genre necessitates highly sophisticated linguistic skills and a careful balance of factual information and social interaction (Swales, 2004; Shaw et al., 2016).

Studies demonstrate that some PhD candidates have a negative feeling and attitude towards writing RA (Abas & Abd Aziz, 2016). Nowadays, postgraduate students think that scientific papers' writing is a daunting task. This is due to, as Hanauer and Englander (2011) postulate, challenging factors, such as the unfamiliarity with the differences between scientific journal articles and other scientific papers; problems with linguistic elements like cohesion and coherence; and insufficient knowledge concerning the ethics of scientific publications in writing journal articles. In the same vein, young researchers claim that scarce resources and problems with accessing relevant current literature are major obstacles to producing such papers (Uzuner, 2008; Lillis & Curry, 2010). These hindering factors made the students demotivated, less interested in writing RAs, and, accordingly, their own talents begin to wither.

The heightened focus on dilemmas related to RAs writing paved the way for the emergence of the specific field of English for Research Publication Purposes (ERPP), a subfield within EAP. Cargill and Burgess (2008) define this recent subfield as “a branch of EAP addressing the concerns of professional researchers and post-graduate students who need to publish in peer-reviewed international journals” (p.75).

One of the concerns of ERPP is the schemas of writing an academic and scientific article in order to be published. An example of schema could comprise the title, author(s), abstract, introduction, results and discussion, and conclusion (Whitesides, 2004). Another schema instance would be the title, author(s), abstract, introduction, literature review, statement of the problem, method, results, discussion, and conclusion (White, 2005). Moreover, ERPP searches for problems and difficulties encountered when those researchers are committed to writing and suggests solutions and strategies to be implemented so that academic writers can overcome this thought-provoking task.

The aim of this study is twofold. First, to explore the way EFL Algerian doctoral candidates perceive the demanding task of writing RAs and to uncover the most common encountered difficulties candidates experience at the time of writing RAs. Second, to investigate the strategies mostly employed to successfully meet the requirements for national and international publication.

II– Theoretical Framework

II.1. Writing research articles for publication

Writing RAs to be published in prestigious national or international journals is a challenging task for PhD candidates. According to Mirovic and Knežević (2019), they need to achieve the dual requirements of adequate writing skills in English in relation to specialized terminology combined with the best use of grammar and other highly advanced language features. Writing RAs requires higher communicative competence which implies a careful balance between the presentation of facts and the interaction with the reader in a way that ensures the acceptance of the writer's position (Hyland, 2019).

Doctoral students ought to be knowledgeable of the macro- structure (that is, the order of sections) and meso-structure (that is, the order of information within each

section) of RAs. In addition, they require practical knowledge that involves an effective display of facts, an appropriate argumentation construction, a good provision of well-chosen support for one's claim, and a correct citation practice (Hanauner & Englander, 2011).

Successful RAs writing originates from a well-defined structure and careful wording that reflect objectivity, responsibility, and explicitness in expressing oneself. Essentially, it sustains flexible interaction between the text and readers. The employment of these features would bring about RAs worthy of national or international publication. In contrast, their absence in doctoral students' writing results in texts that look inefficient or even ambiguous (Hanauner & Englander, 2011).

II.2. Defining the macro- and meso-structure of the article

The top-down approach to writing starts with defining the macro-structure of the article. In other words, it is the division of the article into sections. This structure is the skeleton of the article and contains six common indispensable sections: abstract, introduction, methodology, results, discussion, and conclusion. Each of these sections has an intra-structure which is referred to as the meso-structure of the article (Docherty & Smith, 1999).

II.2.1. Abstract

The abstract is the starting section of the article through which readers can understand the concise summary of the study (Mahrer, 1993). The decision on when to write the abstract goes always to the authors. Often, researchers write the abstract after the completion of the whole study. However, others firstly draft an abstract as a useful guide to write the subsequent sections (Thoires, 2016). A good and informative abstract, as Alexandrov (2004) demonstrates, should have the following components:

- An introductory sentence comprehensible to a wide audience,
- A more detailed background information sentence comprehensible to specialists within the field,
- A sentence clearly defines the research question(s) addressed by the article,
- A sentence indicates the aim of the study,
- A sentence explicates the adopted methodology,
- A sentence summarizes the main findings,
- A concluding sentence, and
- Keywords.

The abstract is unquestionably the most crucial part of the article and often the first and only section read by a wide audience. Thus, it had better be a dedicated piece of work that captures the interest of the readers. This concise summary should be self-explanatory. In that, it should not contain an outline of the research; instead, it must summarize the essential elements of the article. Any abstract has to be free of equations and references, and to extent possible, abbreviations. The journal usually specifies the maximum length of an abstract although it should not exceed 300 words in any case (Lin, 2010).

II.2.2. Introduction

The introduction gives a familiarity to readers with the research. It explains the content of the first three sentences of the abstract in greater detail. The first part of the introduction should engage readers by establishing the scientific context of the study. This requires referring to seminal work in the field. Authors need to guide the readers from general to more specific aspects of their paper. They elucidate knowledge gaps and linking these to clear definition of their research questions. The introduction might subsequently mention and justify the methods as well as the scope and assumptions of the study. Further, it might conclude with a brief outline of all subsequent sections and the aim of the study. A good introduction, however, should be limited to a maximum of 600-700 words (Foote, 2006).

II.2.3. Methodology

The methodology section specifies in a logical order the approaches (quantitative, qualitative, or mixed methods approach) used to address the research question(s). According to Creswell (2018), this requires mentioning a short explanation, the research design (e.g. descriptive), samples and participants, and tools of data collection.

II.2.4. Results

The result section presents the relevant findings to answer the research questions either qualitatively, quantitatively, or both ways. The bulk of empirical findings should be exhibited in diagrams, figures, and tables. Besides, any result had better be accompanied by quantitative information about their uncertainty. If it is applicable, authors can elaborate more on that uncertainty in the discussion section. Comparison with findings from other studies may be within the result section. In this case, authors should refer to the outcome of such comparisons briefly in the discussion section (Creswell, 2018). What to avoid in the result section is the following:

- Tables, figures, and text including redundant results,
- Methodology which in fact belongs to the methodology section, and
- Extensive discussion and interpretation of results that is normally related to the discussion section.

II.2.5. Discussion

The interpretation of results is presented in the discussion section which is the most struggling one for both authors and readers owing to the lack of clear meso-structure. However, the order of the elements proposed on behalf of this section is as follows (Thyer, 2008):

- A repetition of the principal results in one or two sentences,
- An explanation of the strengths and weaknesses of the methodology, input, and results in several sentences,
- A discussion of the results concerning other studies in a number of sentences,
- A description of the significance of the research in relation to established knowledge in few sentences, and
- Raising awareness of the unanswered questions and future research requirements in one or two sentences.

The discussion section must exclude the biased account of the research and the unnecessary expectation. Attention should be paid to the discussion of the uncertainties and then the demonstration of their justifiability and limitedness. Additionally, if results refer to a specific area or field (i.e., specific generation, time period, geographic location, etc.), writers should illustrate to what extent their findings have broader validity. In essence, results ought to be discussed clearly, precisely, and concisely. That is, this section indicates what the empirical evidence supports per se (Thyer, 2008).

II.2.6. Conclusion

According to Thyer (2008), the conclusion section should not simply replicate the abstract but:

- answer the research question(s) and/or specify to what extent knowledge gaps could be addressed,
- provide readers with the central idea of the article, and
- make recommendations and outline future research based on the results and discussions presented earlier.

The conclusion section had better be limited to fewer than 250 words. After drawing conclusions, an article usually ends with:

- acknowledgements are given to, for example, those who provided information, funding, or review;
- a list of references which must be formatted consistently according to the journal's style guide;
- if necessary, appendices that give detailed information regarding methodology and/or results.

II.3. Problems of writing in English publication for EFL doctoral candidates

The potential problems of EFL doctoral candidates are not merely concerned with grammar and vocabulary. Candidates also need to have the appropriate rhetorical and argumentative skills. In addition, they should be familiar with the conventions of academic writing in a given discipline (Mirovic & Knežević, 2019). Among the important problems, mention may be made of the following (Jaroongkhongdach et al., 2012):

- Lack of time
- Lack of resources or funds
- Lack of connections with the academic community in core countries
- Bias against scholars from peripheral countries
- Parochialism
- Problems with language
- Problems with the literature review and discussion sections of research articles
- Problems with research methodology

The problems stated above offer insights into the complexity that EFL doctoral candidates encounter in their attempts to get their RAs published nationally or internationally. International publication could be considered as an immense challenge to EFL PhD students. It is also noteworthy that the problems identified by Jaroongkhongdach et al. (2012) should not be regarded as problems specific to EFL learners in response to the demands of writing for scholarly publication. Some of these problems may also be experienced by researchers from English-speaking countries, especially among those who are at the early stage of their research careers.

III- Aims of the Study and Research Questions:

The study aims to investigate whether Algerian PhD students' perceptions of academic discourse reflect the norms of internationally accepted writing practice regarding rhetorical and interactive features of RAs. At the same time, the investigation is directed towards identifying the usual problems these researchers face while writing RAs as well as the strategies they use to deal with those problems. Accordingly, two research questions were addressed:

- 1-How well do EFL Algerian doctoral candidates perceive the standard elements of RAs writing?
- 2-What strategies are employed to overcome the difficulties when writing RA?

IV- Method:

Creswell (2018) assumes that descriptive designs help identify problems in a current practice to improve outcomes. The purpose of a descriptive study is to describe and explore real-life situations and provide information about the elements as they occur. Therefore, the study in hand opted for the descriptive method to provide a clear vision on EFL Algerian doctoral candidates' perceptions and attitudes towards RAs writing. Data collection was carried out through the use of two research instruments: a questionnaire was administered to a sample of doctoral candidates, and a structured interview addressed to two scientific and academic writing teachers at Biskra

University (See Appendices 1 and 2). Data has been, then, analysed both quantitatively and qualitatively.

V- Results and Discussion:

Results of the study are presented below in two sections devoted to students' questionnaire and teachers' interview. A discussion section is devoted to the analysis and interpretation of the results.

V.1. Results:

V.1.1. Students' questionnaire:

The informants are 24 doctoral students at the Department of Letters and English Language University of Biskra distributed as 3 males and 19 females. Few have registered for the second year, some for the third year, and the rest for the fourth year. They differ in terms of specialty, namely Teaching English as a Foreign Language (TEFL); Language Sciences; English Literature/Civilization; Cultural Studies; EFL/ Teaching, Learning, and Assessment; Applied Linguistics; and Language and Literature. Concerning writing the research article, some students have completed writing their articles that have been published in academic journals while a few of them have written and submitted the articles that have not been published yet. However, some students started writing their articles, but have not finished yet, while other students did not start writing at all.

When asked about their perception and attitudes towards RAs writing, the majority (20 students) expressed their negative attitude towards RAs writing because it was a challenging task. They all perceived that good quality of RAs lies in carefully-selected syntactic elements that are put in an orderly structure, allowing the writer to express him/herself objectively and explicitly. They also realized that through RAs, they could academically communicate their research findings to the academic community. The following figure displays PhD candidates' attitudes towards RAs writing.

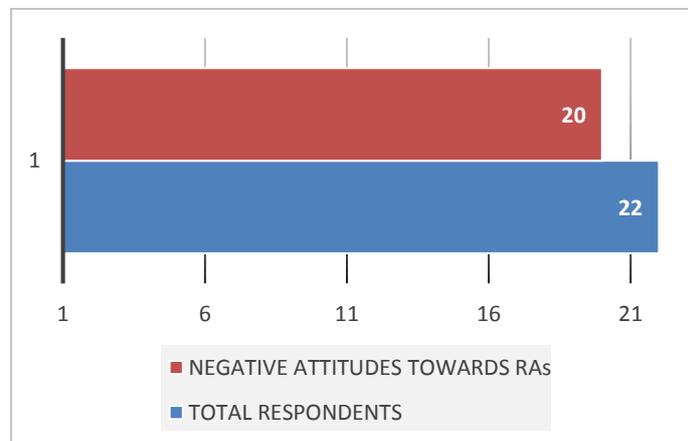


Figure 1 PhD Candidates' Attitudes Towards RAs writing

Regarding the problems and difficulties that PhD students encounter when writing RAs, 20 % of the students had problems with disorganized schedule and procrastination. 18.08 % had difficulties in finding ideas while 16.04% had problems with linguistic aspects like cohesion and coherence. Few (16.12%) suffer from the lack of practice to write RAs. Regarding academic writing techniques, namely summarizing, paraphrasing, quoting, and citation, 15.22% of the respondents faced this type of difficulty. Lack of knowledge about the structural setup of RAs and shortage of resources and funds were a percentage (8.19%) and (6.35%) respectively. The figure

below shows the problems and difficulties mostly encountered by PhD students when writing RAs.

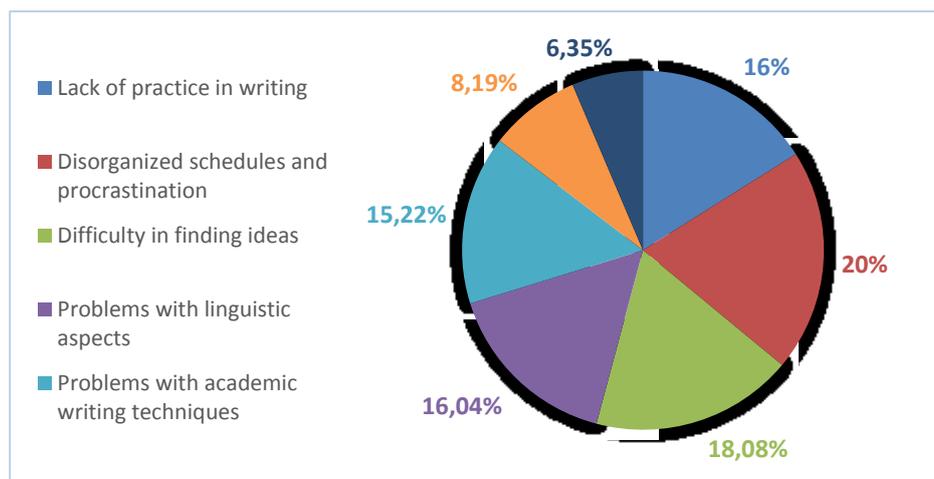


Figure 2 Problems and Difficulties Encountered by PhD Candidates in Writing RAs

When the participants were questioned about the compensation strategies, they used to overcome the difficulties of writing RAs, their responses varied according to the difficulty itself and to their personal use of intrinsic and / or social strategies. The results of this section are stated here and represented in figure 3 below:

- Reviewing and revising the manuscript (32.05%),
- Extensive reading of academic genres (46.64%),
- And proofreading by peers and best use of their comments and feedback (21.31%).

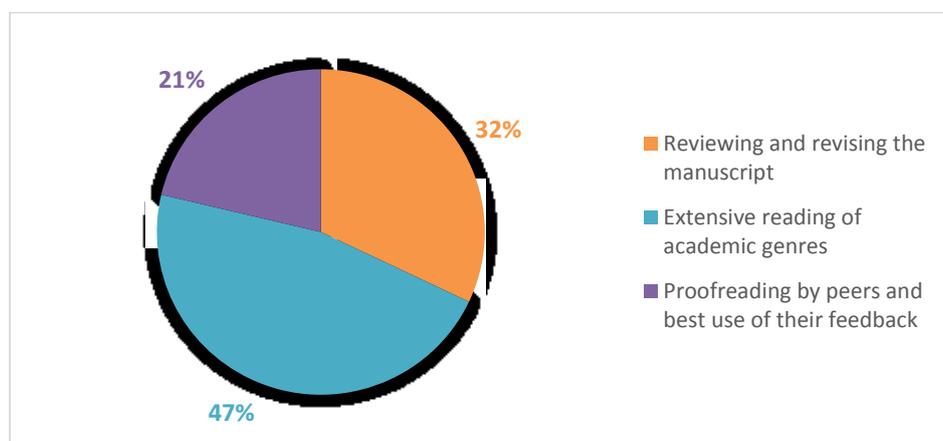


Figure 3 Strategies Used by PhD Candidates to overcome the Difficulties of Writing RAs

V.1.2. Teachers' interview:

The two teachers who have been interviewed are tenured at the Department of Letters and English Language University of Biskra. One is a holder of a Magister degree in Language and Civilization while the other holds a Doctorate degree in English language and Education. The first teacher's experience is about ten years at the Department of Letters and English Language University of Biskra whereas the second teacher's is about five. Concerning teaching scientific and academic writing, one teacher reported that she has taught this subject for six years while the other teacher has taught it for only one year.

They declared that they had no experience or training in teaching scientific and academic writing before their current position. They stated that they had acquired knowledge on the subject through needs assessment and literature review, whether from books, articles, or other downloaded documents like teaching slides and online lectures provided at various University platforms. Concerning RA writing as a specific type of academic genre, they felt that they were not very confident and expressed their felt need for training as they claimed that it would be helpful for both teachers and students.

When discussing the use of materials, the teachers announced that the institution did not provide materials. Instead, they selected and adapted lessons as they thought they were appropriate for an academic writing course. They viewed the content as appropriate to meet their students' needs. During the course, they stated that they did not teach RA writing, nor was it given a significant priority. Rather, they prioritized theses, essays, and research proposals writing.

The teachers held that scientific and academic writing class was not practical to prepare students for writing RAs in the future because it needs practice from the part of learners and a valid syllabus that can be the result of collaborative work and research. This deficiency was also due to insufficient training and time constraints. The teachers viewed this lack of training and time limitations as a shortcoming that hindered the students' RAs writing enhancement.

The teachers expressed their concern about the importance of enhancing the teaching of RAs writing in Algerian universities as this skill is highly required among all the academic community. They explained that publishing RAs is crucial to survive in the realm of scientific and academic communication. They recommended that students, as young researchers, had better spend much more time practicing their reading skills, and then focus on academic writing skills of RAs. In addition, they related students' future professional success to careful reading and effective academic writing production and publication. As a solution, they insisted on training novice scientific and academic writing teachers before inviting them for that big task of teaching. They also recommended that experienced professors in the field of Academic Writing should collaborate to design an appropriate course and relevant workshops specifically devoted to writing RAs targeting the needs of young researchers.

V.2. Discussion:

The discussion of results is set in two sections that are devoted respectively to students' perception of writing RAs on one hand and the problems and strategies related to writing RAs on the other hand

V.2.1. Perception of writing RAs:

The findings show how the participants perceive the act of writing RAs, to varying degrees, as a process that is governed by an established structure and a number of writing conventions, which all together target the achievement of explicitness, responsibility, objectivity, and interaction with the reader(s).

One general tendency reported by all participants in this study is that they write RAs almost exclusively in English and that they feel highly satisfied (90.91%) with this task which would significantly facilitate their writing. This positive attitude towards writing RAs in English is the result of the perception that English is nowadays the vehicle for accessing all relevant information relevant to their research topic. Furthermore, they all state that English terminology defines all the key concepts in their domain.

Although none of the participants has been taught writing RAs, during their higher education curricula for national and international publication, their responses illustrate that they perceive RAs as a specific genre with its own characteristics. For instance, the presentation of results in a journal article differs from that of a conference. Moreover, they indicate that the features of RAs in their specialty differ from those of

other specialties, reflecting the view that RAs have their own genre-specific characteristics; they are discipline-specific too (Flowerdew, 2006). Some informants declare that they have learned those traits with the help of their thesis supervisors while some others demonstrate that they have acquired those items by reading other papers in their research field.

Regarding the structure of RA, the participants' responses claim that they have a comprehensive understanding of the macro-structure (that is, the order of sections) of RAs. They have acquired this knowledge by virtue of extensive reading of other RAs in the field. Those macro-structures differ in the order of the sections from one RA to another depending on the journals' conventions, but each section is indispensable.

Their answers also mention that they are knowledgeable of the meso-structure (that is, the order of information within each section) of RAs. Most of them (97%) are aware that their writing does not solely necessitate specialized terminology, best use of grammar rules, certain elements of metadiscourse like hedges and boosters, and other highly advanced language features, but they also require being communicatively competent. In other words, they can display claims and facts, build argumentation, and provide support and correct citation in a way that ensures flexible interaction between the text and readers. However, little writing practice has made them less competent in this challenging task. This is why these candidates have problems and difficulties when they are committed to writing.

Remarkably, some of the participants' responses clarify that their writing generally reflects the conventions of academic writing or the standard practice in their field of study. Others suggest that authors do not always adhere to those conventions; instead, they have some freedom in their writing, especially when it comes to language. Hence, at an advanced level of language proficiency, authors feel free to shape the scientific lingua franca and bear on the norms of academic communication.

According to the participants' experience and to what they have learned and acquired in their studies, it is concluded that they perceive that successful RAs writing stems from a well-defined structure and careful wording that reflect objectivity, responsibility, and explicitness in expressing oneself.

V.2.2. Problems and difficulties in writing RAs:

The most common problems that have been reported by the respondents are related to the difficulties they faced when trying to write RAs. One of the obstacles most often experienced by doctoral candidates is that of chaotic timeline and procrastination. The informants do not follow a plan that gives a list of events or tasks and the times at which each one should happen or be done. Additionally, when they decide to make an orderly plan for the day or a time period, they procrastinate the work, especially paper writing. The delay and disorderly schedule get the students to feel lazy to start writing, look for ideas, and read others' works. Passivity and lack of self-confidence are among the hindering factors that respondents face whenever they carry out a writing activity. Therefore, passivity and lack of self-confidence have made PhD students demotivated and less interested in writing RAs.

According to the participants, the feeling of passivity in reading and lack of motivation made it difficult for them to find ideas when they put their pens down. Only few students (sometimes 40%) read books or references, which deprives them from getting their ideas easily developed into a line of thought. Controversially, some participants suffer from the fact that they may have many ideas on their mind but cannot express them with precision and concision. In addition, they think the writing activities seem uninteresting. They tend to prefer activities that are entertaining in nature rather than sitting still and thinking about something to find writing ideas. These difficulties are a big package in hindering efforts to create scientific papers.

Another internal difficulty raised by the students is a lack of training and insight into writing RAs; as a consequence, they become constrained in writing journal articles. This is confirmed by the questionnaire's data distributed to the respondents. According to the question 4 in section one and question 2 (row 9 in the table) in section three, it has been found that most of the doctoral candidates (76.22%) neither have RAs

published in journals, nor do they have a comprehensive understanding of the ethics of scientific publication in writing RAs. This is due to the fact that, on the basis of the question 1 and question 2 in the questionnaire (row 10 in the table, Appendix 1) in section three, other participants (43%) have little experience about the submission of articles to national and international journal institutions as well as the shortage of information they get.

A journal article is said to be complete and acceptable if it contains unified and integrated components written sophisticatedly. The aspects that develop a well-written RA are cohesion and coherence. Cohesion is the ties and connections that exist within texts while coherence is a logical or meaningful relationship between one sentence and another (Yule, 2020). However, based on the findings of the study, some respondents (6.12%) face problems related to cohesion and coherence aspects.

As for the problems they encounter concerning language aspects, the participants mention stylistic problems, which prevent them from achieving the desired precision, flexibility, and sophistication in their writing. They struggle to retrieve the required specific academic lexis such as conjunctions, synonyms, antonyms, hyponymy, collocation, equivalence, etc. as means to avoid repetition and monotony of having the same sentence structure.

On the other hand, students report other types of problems that they get conscious of, usually through comments made by their supervisors or reviewers. Problems with summarizing, paraphrasing, quoting, and citation have become a challenge that gets in the way of the students' writing. These problems having related to academic writing techniques concern the achievement of clarity, concision, and effectiveness in the presentation of arguments that enhance the persuasive force of the study under investigation. Developing a line of thought has also a puzzling impact on the respondents' writing. For example, based on question 2 in the questionnaire (row 18 in the table, Appendix 1) in section three, they (sometimes 40%) feel confused about how to connect the results with the introduction and discussion sections. Moreover, students' unfamiliarity with the journal's structural setup and lack of resources and funds discourage the students from engaging in the writing task.

Regarding the lack of insightful experience in writing RAs, as expressed by the respondents, the academic community should support the organization of regular training sessions of seminars and workshops for young researchers and novice university teachers.

V.2.3. Strategies of writing RAs:

Doctoral candidates seem to be aware of some problems that are inherent to RAs writing process. Thereby, they reported that they rely on some strategies to meet local and international publication requirements. These strategies include reviewing and revising the manuscript, reading more papers and academic writing reference books, and proofreading by peers (colleagues, teachers, supervisors, reviewers, language specialists, etc.) or native speakers.

When the focus is on the RA's linguistic or rhetorical aspects, the respondents usually reread their RAs to improve their writing style after writing. They, as an illustration, use various vocabulary or sentence structure in order to make the RA look like a sophisticated piece of academic discourse.

Extensive reading of academic papers and books is another strategy that most of the candidates assert its usefulness. Once they read others' works, they accustom themselves to the methodological aspect of RAs and the way this type of genre is structured. Additionally, they improve the ability to reuse language segments from the published RAs in their field. The candidates view this ability as a legitimate strategy since it involves borrowing lexical and syntactic components, not a copy-paste process.

In addition to extensive reading of academic texts within their field, PhD students direct their attention to peer comments and feedback. They assume this strategy could help develop RAs writing skills and increases a researcher's outputs, especially if the peer is familiar with the nuanced publication culture of the given

academic field, such as supervisors and reviewers. However, this point becomes even more pertinent when considering that peers in academics could offer more comprehensive, constructive, and professional feedback than native English speakers who mainly concentrate on language use in general.

V.2.3. PhD Students' recommendations:

The participants referred to a sort of advice that would be given to younger researchers based on their experience in learning how to write RAs. First, the majority (66.24%) recommend that reading several articles in their field is the necessary prerequisite to writing. Second, they acknowledge the usefulness of a potential course that teaches scientific RAs methodology. Besides, they think it would be best to offer it at a time when novice researchers make their attempts at publishing RAs.

VI- Conclusion:

The present paper provided some useful insights into the process of writing RAs by EFL Algerian doctoral candidates concerning the way they approach this burdensome task, the most common encountered difficulties, and the strategies mostly utilised to solve the problems of writing RAs. As for the first study question related to how well EFL Algerian doctoral candidates perceive the standard elements of this academic genre, it was concluded that the participants are generally aware of the standards and conventions of RAs writing. They are conscious of the necessity to be explicit, responsible, and objective in their writing. They have learned and adopted these standard features of academic writing through self-teaching process. That was due to the extensive reading of the authentic material in the field. The candidates also had clear understanding that applying certain linguistic features assists to write strong arguments. The feature that doctoral students were less familiar with is making the distinction between scientific journal articles and other scientific papers as well as insufficient knowledge concerning the ethics of scientific publications in writing journal articles.

The findings, with respect to the second study question, illustrated that the frequently encountered problems are related to untidy timeline and procrastination, difficulty in finding ideas and academic lexis, insufficient training, lack of knowledge about the structural setup of RAs, shortage of resources and funds, and problems with linguistic elements like cohesion and coherence. The strategies frequently employed to successfully meet the requirements for national and international publication are extensive reading of academic genres, proofreading, and the best use of literacy brokers' feedback like colleagues, teachers, supervisors, reviewers, and language specialists.

Doctoral candidates would benefit from supervisor support in developing their RAs writing, yet the need to rethink and strengthen the role of implementing an academic course about RAs writing in Master studies to help future researchers overcome this inescapable process is also recommended.

- Appendices:

Appendix 1: PhD Students' Questionnaire

Dear PhD students,

We will be very thankful if you answer this questionnaire which is a part of a research that is conducted for the sake of investigating **EFL Algerian doctoral candidates' perceptions and attitudes towards research articles writing**. Thus, it would be a great pleasure for us to provide succinct and sincere responses as this will lead to the success of this investigation. Please, respond as objectively as possible by ticking the appropriate answer that accords with your opinion, and thank you in advance for your cooperation!

N.B.

RA: research article

Section One: Personal Information

1- Gender

Male Female

2- You are a PhD candidate registering for the:

-second year -third year -fourth year

3- You major in:

- Applied Linguistics -Language Assessment
- Teaching English as a Foreign Language (TEFL) -Sociolinguistics
- American Civilization -Cultural Studies
- Others

4- Concerning writing the thesis research article,

- a- You have completed writing the article, and it has been published in a journal.
- b- You have written and submitted the article, but it has not been published yet.
- c- You did not start write at all.
- d- You have started writing the article, yet you did not finish it.

Section Two: PhD Candidates' Perceptions and Attitudes Towards RAs Writing

1- Are you satisfied writing your research article in English?

- Dissatisfied
- Less satisfied
- Satisfied
- Highly satisfied

Why? (Please, elaborate!)

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2- You find writing research articles

- An easy task
- A challenging task
- Neither easy nor challenging

3- During scientific and academic writing course, have you ever been taught writing RAs for national and international publication?

Yes No

4- Do you think that RAs have their own genre-specific characteristics?

Yes No

5- If 'yes', how have you learned those specific characteristics of RAs?

- By the help of your supervisor(s)

- By extensive reading of other RAs in the field
- By both supervisors and extensive reading
- You can add other options

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6- Regarding the macro-structure of RA (that is, the order of sections), a RA should have

- a- Title, author(s), abstract, introduction, method, results and discussion, and conclusion.
- b- Title, author(s), abstract, introduction, literature review, problem statement, method, results, discussion, and conclusion.
- c- A particular structure depending on the journals' conventions.

7- Concerning the meso-structure of RA (that is, the order of information within each section), when you are writing your RA, you need

- a- Specialized terminology
- b- Best use of grammar rules
- c- Certain elements of metadiscourse like hedges and booster
- d- Other highly advanced language features such as coherence and cohesion
- e- All the aforementioned option

8- Being communicatively competent while writing your RA requires

- a- The ability to display claims and facts
- b- The ability to build strong argumentation
- c- The ability to provide support and correct citation
- d- The ability to ensure flexible interaction between the text and reader(s)
- e- All the aforementioned options

9- Does your RA writing generally reflect the conventions of academic writing or the standard practice in your field?

Yes No

10- Some authors do not adhere to those conventions. (Elaborate, please!)

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11- Do you agree with this statement: "successful RAs writing stems from a well-defined structure and careful wording that reflect objectivity, responsibility, and explicitness in expressing oneself."?

-Strongly agree -Agree -Neutral -Disagree -Highly disagree

Section Three: Problems and Difficulties Encountered by PhD Students in Writing RAs

1- What are the problems and difficulties you have faced when writing your RA?

- a- Disorganized schedule and procrastination
- b- difficulty in finding ideas easily developed into a line of thought

- c- Problems with linguistic aspects like cohesion and coherence
- d- Lack of practice to write RA
- e- Problems with academic writing techniques like summarizing, paraphrasing, quoting, and citation
- f- Lack of knowledge about the structural setup of RA
- g- Shortage of resources and fund
- h- You can add other options

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**2- How often do these statements apply to you when writing your RA?
 Put a tick (✓) in the suitable column.**

Items	Always (100%)	Usually (80%)	Often (60%)	Sometimes (40%)	Rarely (20%)	Never (0%)
1. I follow a plan that gives me a list of events or tasks and the times at which each one should happen or be done.						
2. When I decide to make an orderly plan for the day or a time period, I procrastinate the work.						
3. The delay and disorderly schedule get me feel less motivated and lazy to start writing, look for ideas, and read others' works.						
4. I do not read other RAs, books, or references before I start writing.						
5. The lack of reading deprives me from getting ideas easily developed into a line of thought.						
6. I have many ideas on my mind but cannot express them with precision and concision.						
7. I consider writing an uninteresting activity .						
8. I prefer entertaining activities.						
9. I try to understand the ethics of scientific publication in writing RAs.						
10. I try to learn instructions about the submission of articles to national and international journal institutions.						
11. I pay attention to linguistic aspects						

(e.g. cohesion, coherence)						
12. I have difficulties with paraphrasing						
13. I have difficulties with summarizing						
14. I have difficulties with quoting						
15. I have difficulties with citation						
16. I struggle to retrieve the wanted academic lexes such as conjunctions, synonyms, antonyms, hyponymy, collocation, equivalence, etc.						
17. I consider developing a line of thought (connecting ideas) a hindering factor when I write.						
18. For example, I feel confused about how to connect the results with the introduction and discussion sections.						

Section Four: Strategies Employed by PhD Students in Writing RAs

1- **What are the strategies you employ in writing your RA to overcome the difficulties of writing RAs so that you can meet national and international publication needs?**

- a- Reviewing and revising the manuscript
 - b- Extensive reading of academic genres (e.g. research articles, books)
 - c- Proofreading by peers or native speakers and best use of their feedback
 - d- You can add other options
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2- **How often do these statements apply to you when writing your RA? Put a tick (✓) in the suitable column.**

Items	Always (100%)	Usually (80%)	Often (60%)	Sometimes (40%)	Rarely (20%)	Never (0%)
1. I write my RA because it is mandatory.						
2. I go back to check carefully the RA's requirements and instructions.						
3. I read other RAs and books to accustom myself to the methodological aspect						

and structure of RAs.						
4. I read other RAs and books to borrow some lexical and syntactic components						
5. I brainstorm and write down ideas about the topic.						
6. I make an outline including the main points of my RA.						
7. I ask my supervisor about the points I am not sure about, or I need help with						
8. I discuss what I am going to write with other PhD students, a supervisor, teachers, or a native speaker.						
9. I go back to my writing to revise the content and make my ideas clearer.						
10. I go back to my writing to edit the grammar, vocabulary, spelling, and punctuation.						
11. In my RA, I pay more attention to the language (e.g. spelling, grammar, vocabulary) than to the content (e.g. ideas, organization).						
12. In my RA, I pay more attention to the content (e.g. ideas, organization) Than the language (e.g. spelling, grammar, vocabulary).						
13. In my RA, I give almost equal attention to both the language (e.g. spelling, grammar, vocabulary) and the content (e.g. ideas, organization).						
14. After writing, I discuss my work with my supervisor or others in the field to get feedback on how I can improve it.						

Section Five: PhD Students' Recommendations

On the basis of your experience in learning how to write RAs, what do you recommend for younger researchers?

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Appendix 2: Teachers' Interview Questions

- 1- Are you a part-time teacher or full-time teacher?
- 2- What academic qualifications do you hold (i.e., Magister, doctorate, etc.)?
- 3- In what do you major (e.g. Applied Linguistics, TEFL, etc.)?
- 4- How many years have you been teaching at the Department of Letters and English Language?
- 5- How many years have you been teaching scientific and academic writing?
- 6- Have you taken any training course on how to teach scientific and academic writing?
- 7- If no, on what strategies do you rely to teach this subject?
- 8- What materials or tools do you often use in teaching scientific and academic writing?
- 9- Regarding research articles (RAs) writing as a specific type of academic genre, do you think training students on how to write RAs is helpful for the teacher, the students, or both?
- 10- During the course, do you pay a considerable attention to RA writing or other types of academic genre writing?
- 11- Do you believe that scientific and academic writing class is practical to prepare students for writing RAs in the future? (Please, elaborate!)
- 12- If you assume that the students' future professional success is related to effective academic writing (e.g. RAs writing) production and publication, what do you recommend that it would be best to deal with this matter?

References:

- [1]. Abas, I. H., & Abd Aziz, N. H. (2016). Indonesian EFL students' perspective on writing process: A pilot study. *Advances in Language and Literary Studies*, 7(3). <https://doi.org/10.7575/aiac.all.v.7n.3p.21>
- [2]. Alexandrov, A. V. (2004). How to write a research paper. *Cerebrovascular Diseases*, 18(2), 135–138. <https://doi.org/10.1159/000079266>
- [3]. Cargill, M., & Burgess, S. (2008). Introduction to the special issue: English for research publication purposes. *Journal of English for Academic Purposes*, 7(2), 75–76. <https://doi.org/10.1016/j.jeap.2008.02.006>
- [4]. Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)*. SAGE Publications.
- [5]. Docherty, M., & Smith, R. (1999). The case for structuring the discussion of scientific papers. *BMJ*, 318(7193), 1224–1225. <https://doi.org/10.1136/bmj.318.7193.1224>
- [6]. Flowerdew, J. (2006). *Academic discourse*. Longman.
- [7]. Foote, M. (2006). How to make a good first impression. *Chest*, 130(6), 1935–1937. <https://doi.org/10.1378/chest.130.6.1935>
- [8]. Hanauer, D. I., & Englander, K. (2011). Quantifying the burden of writing research articles in a second language. *Written Communication*, 28(4), 403–416. <https://doi.org/10.1177/0741088311420056>
- [9]. Hyland, K. (2019). *Metadiscourse: Exploring interaction in writing*. Bloomsbury.
- [10]. Jaroongkhongdach, W., Watson Todd, R., Keyuravong, S., & Hall, D. (2012). Differences in quality between Thai and international research articles in ELT.

- Journal of English for Academic Purposes*, 11(3), 194–209.
<https://doi.org/10.1016/j.jeap.2012.04.006>
- [11]. Lillis, T. M., & Curry M. J. (2010). *Academic writing in a global context : The politics and practices of publishing in English*. Routledge.
- [12]. Lin, J. C. (2010). Writing manuscripts for publication in scientific journals. *Bioelectromagnetics*, 32(1), 1–3. <https://doi.org/10.1002/bem.20603>
- [13]. Mahrer, K. D. (1993). Some considerations when abstracting. *Geophysics*, 58(1), 10–11. <https://doi.org/10.1190/1.58010001.1>
- [14]. Mirovic, I., & Knežević, L. (2019). Writing research articles in English: perception and practice of Serbian writers. *Scripta Manent*, 13, 84–96. <https://www.researchgate.net/publication/330534889>
- [15]. Murray, N., & Hughes, G. (2008). *Writing up your university assignments and research projects : A practical handbook*. Open University Press.
- [16]. Paré, A. (2017). Re-thinking the dissertation and doctoral supervision / Reflexiones sobre la tesis doctoral y su supervisión. *Infancia Y Aprendizaje*, 40(3), 407–428. <https://doi.org/10.1080/02103702.2017.1341>
- [17]. Shaw, P., Hyl, & Hyland, K. (2016). *The Routledge handbook of English for academic purposes*. Routledge.
- [18]. Swales, J. (2004). *Research genres: Explorations and applications*. Cambridge University Press.
- [19]. Thoirs, K. (2016). How to write a paper. *Sonography*, 3(2), 68–69. <https://doi.org/10.1002/sono.12047>
- [20]. Thyer, B. A. (2008). *Preparing research articles*. Oxford University Press.
- [21]. Uzuner, S. (2008). Multilingual scholars' participation in core/global academic communities: A literature review. *Journal of English for Academic Purposes*, 7(4), 250–263. <https://doi.org/10.1016/j.jeap.2008.10.00>
- [22]. White, L. (2005). Writes of Passage: Writing an empirical journal article. *Journal of Marriage and Family*, 67(4), 791–798. <https://doi.org/10.1111/j.1741-3737.2005.00175.x>
- [23]. Whitesides, G. M. (2004). Whitesides' group: Writing a Paper. *Advanced Materials*, 16(15), 1375–1377. <https://doi.org/10.1002/adma.200400767>
- [24]. Yule, G. (2020). *The study of language (6th ed.)*. Cambridge University Press.