Demystifying Research Article Writing: Addressing the Needs of Novice Authors

Prof. Gilman Jackson Nyamubi, PhD
ORCID: https://orcid.org/0000-0003-1740-3853
Department of Education, University of Iringa
Email: gilman.nyamubi@uoi.ac.tz

Abstract: Writing a research article to any audience entails sharing findings the researcher has found while focusing on evidence-based results. It brings about new insights of research outcomes to add up-to-the-minute knowledge, making the article outstanding rather than becoming a collection of experts’ conveyed ideas. This paper reflected the way apprentice writers could learn how to communicate research findings to a wider audience, explaining their desire to focus on the work’s theme and structure to support the author’s knowledge claim in demonstrating personal views. The Literature Review section demonstrates the author’s ability to present ideas on what is written through positioning these ideas in the context of the study. It is organized in the context of the author’s central focus of the study. The Methodology segment of the article explains the research process regarding how data were collected and analysed, to form the basis of argumentation regarding new knowledge. The results section is organized in a clear and logical order. Key results are a central focus upon which the article is built. They are emphasized using visual elements and respondents’ direct quotes. The discussion section of an article depends on the nature of research findings. The writer embeds the data, methods and the literature to argue and strengthen the article’s claims using evaluative descriptions, considering the significance of earlier research findings in the context of new findings. The way results are presented and discussed in the article, gives the writer the basis to provide concluding remarks and recommendations in relation to research objectives.

Keywords: Article writing; novice writers; doctoral students; authors’ writing needs.


Introduction

Writing a research report for a journal article to any audience entails giving the audience findings the researcher has found. The focus is on evidence-based results. In this way, the author strives to bring new insights about research output to add up-to-the-minute knowledge, making the article outstanding, rather than becoming a collection of experts’ transmitted ideas. Indeed, writing is one of the most important communication means that connects an individual writer to the world (Chen, 2022). General writing difficulties experienced by student writers, particularly at the postgraduate level, have been the subject of ongoing research. A great deal of consideration has been given to identifying difficulties at the sentence and paragraph levels (Peak & Swales, 2011), the postgraduate writing intervention (Vivian and Fourie, 2016), structure of the methodology section (Peacock, 2011), results section of research report (Lim, 2010) as well as the discussion of the article as an argument (Parkinson, 2011) but less research has investigated writing a research-based article, particularly among novice writers.

Writing a research article for the first time poses a challenge to novice writers. Most universities
concentrate on teaching graduate students research methods courses to help them acquire skills to write theses and dissertations. However, according to Vivian and Fourie (2016), post graduate students in universities often encounter problems comprehending the forms and functions of various sections of the research report. Experience in writing academic journal papers, especially among novice writers has received little attention.

It is within this background that this article reflects on how apprentice writers could position themselves to learn how to communicate research-based findings to an unknown audience in a way that addresses their writing needs. This article has one objective: to describe the writer’s know-how to inscribe major sections of a research-based journal article namely: Introduction, Literature Review, Methodology, Results, Discussion, Conclusions, References and the Abstract. It is the author’s expression of thoughts that this study adds.

Findings reported in this article may enlighten novice writers, especially master and doctoral students as well as English as a Foreign Language writers on how to address their writing needs when preparing research articles for publication. Findings could also be useful in the preparation of important sections of articles as well as on appropriate use of tenses when writing different sections of the article, to meet publishers’ expectations.

Furthermore, this paper explains to neophyte writers that with their strategic personal skills and positive attitudes, they may achieve their goals in writing academic research articles, not only to meet graduate requirements for passing their studies but also to enjoy the journey in knowledge generation, in a way that might bring new insights and inspirations.

**Literature Review**

In this section, a review of literature regarding rubrics of research article writing is made. A discussion of main issues of the study is provided. Although a range of studies has identified ways authors can go about writing for specified audience (Feak & Swales, 2009, Bullock & Goggin, 2010, Swales & Feak, 2012 and Vivian & Fourie, 2016), there appears to be a gap in the literature when it comes to addressing novice writers’ needs when preparing or writing research-based articles for publication. This section surveys the literature regarding issues to be considered when writing various sections of a research-based article.

To begin with, studies tend to agree that research-based article writing starts with an Introduction section. Jalilifar and Kabezadeh (2012) establish that the section introduces the work to readers in a way that reveals what the writer knows and thinks regarding the studied issue. Thus, in establishing a research territory and stance in the work, the writer demonstrates that the written work is relevant to the academic community in the field. According to Feak and Swales (2011), the writer’s stance is provided at the beginning of the article through giving a clear statement of intended focus to narrow properly the research issue.

This narrowing process, according to Bullock and Goggin (2010), starts with a clear brief background regarding the subject under study, thus helping the writer to clarify his or her knowledge of an issue. In this way, it is suggested that in writing the Introduction section, the writer needs to establish that there is a problem, that is, an issue in the field of study that requires a solution (Swales and Najjar 1987). To achieve this, the writer presents an argument to convince readers. The writer does this in a reasonable and respective tone in the presentation, to show an existence of a knowledge gap to be addressed in the article (Bullock and Goggin, 2010). Furthermore, the Introduction section needs to appropriately situate the work within the existing body of related studies in a way that helps the writer to create a space for the new work (Vivian & Fourie, 2016).

Another aspect that is considered in the Introduction section is the information the writer decides to include in the text. According to Feak and Swales (2011), this depends much on the message the writer wants to communicate to readers. In this way, the idea or claim put forward by the writer demonstrates that the written work is relevant to the academic community in the field. According to Lester and Lester (2005), in the way the writer announces the existence of the used or quoted source of the information or ideas, giving evidence of the writers’ investigation of an issue.

The Literature Review section is the second item to be considered in writing a research-based article. It is in this section that the writer shares what he or she has found existing in the field of study, by discussing the topic or issue under study (Feak &
Swales, 2009). According to Lester and Lester (2005), the review of literature presents a summary of existing knowledge in the topic under study to help the reader to understand the topic. This is achieved by describing how each source addresses the problem.

Writing the Literature Review section shows the author’s critical thinking and ability to collect and present ideas. The presentation of the source reflects the writer’s interest in what is written through positioning the ideas in the context of the study (Bullock & Goggin, 2010). Thus, to determine a line between plagiarism and acceptable use of a written work of others, Swales and Feak (2012) suggest that the writer needs to choose the best way to present these ideas by utilizing appropriate reporting verbs as well as to appropriately acknowledge the source. The Literature Review is organized in relation to study objectives to help the readers perceive it in the context of the author’s central focus of the study.

The Methodology section of the article explains the research process in terms of how the data used in the article was collected and analysed to answer the research questions of the study in an empirical way. It describes the research set up and methods regarding how the research was done in a way that justifies the results of the study. As the Methodology section is written, the writer convinces readers that the study is very significant through providing a clear description of the data collection and analysis procedures (Mozaheb, Saeidi & Ahangari, 2015).

The Results section of the paper consists of statements about the data. As argued by Yang and Allison (2003), this section follows a framework of research objectives of the study in its organization. In general, results are presented accordingly in relation to the writing style prescribed in the journal the author is intending to publish in. In addition, the research methodology orientation, that is, qualitative, quantitative or mixed methods, is of optimal importance to indicate whether or not authors are to present results in numbers, that is, in the form of tables or figures on one hand, or in words through the use of dense descriptions of results in the form of direct quotes from respondents.

According to Lim (2010), the results section is always difficult to handle when writing an article. Thus, it is considered important to novice writers to be very careful when handling this section in the writing process. Novice writers are cautioned regarding the appropriate way of reporting results. Parkinson (2011) advises that novice writers need to use salient linguistic mechanisms while reporting and commenting on results.

There are different opinions regarding whether or not writers should comment in the Results section. This all depends on the research approach one takes as well as the field of study. Basturkmen (2009) opines that the necessity to include comments on the results of the study lies basically on the targeted audience. Arguably, limited comment on results could be achieved through less engagement in interpreting the results.

The discussion of the findings follows after the presentation of the results. According to Parkinson (2011), the discussion section of an article depends much on the exact nature of the research findings. Simply put, the section is written to show whether or not the results were expected (Lim, 2010) as well as to indicate whether they confirm or disconfirm what was expected in the set objectives of the study (Yang & Allison, 2003).

In general, in the discussion section, the author strives to relate the findings of the study with other works in the field and show the implication of the new findings in the real world situation in the field of study (Swales & Feak 2012). As argued by Parkinson (2011), in discussing the findings, the writer presents his or her claims appropriately using evaluative descriptions. Arguably, if the interpretation is closely related to the data, the writer could make key observations of what was found. In this way, a high-level interpretation related to theories is dealt with in the Discussion section of the article (Yang & Allison, 2003). On the whole, the writer’s voice needs to be heard through interpreting results to enhance the discussion with the author’s words and using the literature to support the findings. The writer needs to consider the significance of earlier research findings in the context of his or her own findings (Lim, 2010), based on the author’s own understanding of the key linkage between past and current results. It is suggested that, in the field where results and the discussion of the findings are combined within the same section, the presentation, interpretation and discussion of the findings are done simultaneously (Parkinson, 2011).
The research-based article has a Conclusion section. According to Yang and Allison (2003), the way results are presented and discussed in the article, gives the writer the basis to provide concluding remarks in relation to research objectives.

This review of literature section has shown ingredients of the research-based article, as discussed in previous studies. Despite substantial literature on how different segments of articles are written, there is paucity of knowledge regarding how novice writers’ needs regarding writing a research-based article could be met, the research gap this study filled.

**Methodology**

Information concerning sharing experience to novice writers about writing a research-based journal article was obtained through the documentary research method. In the documentary method, a researcher focuses on analysing documents that contain information or data on the issue one wishes to study (Posssi, 2019). In this way, documents from a variety of sources in education, writing skills, English for Specific Purpose as well as research methods were critically analysed in the scope of the article.

In addition, the interpretive systematic review was used to bring together available studies on a researched topic. This helped in synthesizing the content from documents to develop one coherent narrative regarding writing a research-based journal article. As advocated by Nyamubi (2021), a systematic review of existing sources helps in advancing knowledge along a particular line of inquiry. All research ethical issues were observed, particularly guarantying the quality of evidence from the reviewed documents as well as acknowledging the sources of information.

**Findings and Discussion**

This section presents the findings of the study and also discusses the findings in the light of literature.

**Introduction Section**

This section forms the most important element of the article because it justifies the significance of the subject matter of the manuscript as it connects the current study with previous findings. In order to introduce the topic clearly, the author needs to discuss what is known about the topic in a way that the gap in the literature becomes clear and then describe how the article closes the gap to form the new contribution of the said study.

The author is expected to read critically previous works in order to establish a purpose internal to the text (Vivian & Fourie, 2016), thus, keep it in mind that new or technical terminologies are clearly explained and consistently used (Parkinson, 2011). In fact, writing a journal article requires the authors to bring outside sources into their works. The authors’ first task is to read and evaluate sources and to present new ideas to readers as validated and authentic sources. The synthesized ideas in the form of new knowledge should be adequately communicated in the context of the paper.

It is very essential that the Introduction is written in a form of a logical funnel, that is, to begin with a more general matter and proceed to a specific one. In this, the author starts with the general information presented in a simple way to be understood by readers. According to Feak and Swales (2011), this writing style motivates readers to grasp the importance of the paper at an early stage of the paper.

The author is required to provide the background of the study and significance of the study in a brief but precise way. In developing these, the author is obliged to discuss relevant literature in a way that does not include an exhaustive historical review of the subject matter, but assume that readers know the issue so they do not require a complete digest. According to Lillis and Curry (2010), a scholarly review provides an appropriate history of the author’s current study and it recognizes priorities of work done by other authors.

In the writing process, authors are required to be authoritative as they control the background information of the article in that appropriate knowledge is drawn from the author’s memory and then used to contextualize or strengthen points being discussed.

The purpose of the article is expressed as the last element in the Introduction section by describing what the author adds in the researched area. At this stage, the research problem as well as the purpose and objectives of the study are addressed. Research questions or hypotheses are used to describe more the focus of the article. They help readers to perceive the content of the article. To the author, research questions or hypotheses narrow the scope of the article in a way that the author’s thinking and writing are structured. Swales and Feak (2012) report that, as writing progresses, research
objectives form the basis of presenting results in the article.

**Literature Review Section**

An article has a Literature Review section in which the author critically reports the read existing knowledge in the area. Literature review means locating and summarizing the studies about the topic (Swales & Feak, 2012). It starts by looking for articles, books or any source relevant to the researched area. The author needs to be selective in reading by citing carefully selected materials that are pertinent to the argument. In the process, the author is required to avoid essential details when summarizing earlier works but emphasize on findings and conclusions (Swales & Najjar, 1987). This demonstrates the author’s maintenance of the article’s logical continuation of previous works by focusing on explaining the research problem.

The literature review helps the writer in investigating the topic and to examine or describe how each source addresses the problem in question. A summary is written to obtain a relevant understanding of the researched topic in a way that forms the theoretical part of the article (Feak & Swales, 2009).

In general, when writing a research article, the author needs to focus on the theme and structure of the work. Lester and Lester (2005) caution that writers should not let sources speak for them but use the sources to form a base to support their position regarding the issue under discussion. In other words, as authors write, they need to demonstrate their personal views of the issue through recording discoveries in relation to a reflection on the findings. This is achieved when the author makes connections between various points of view in previous works as patterns of thoughts are established.

The author deals with the obtained materials to develop a line of thinking instead of just putting together irrelevant and unrelated knowledge made up of other author’s ideas. Always, the idea being shared should be the author’s although he or she may have it summarized from previous works (Swales & Feak, 2012) to develop a line of thinking related to the researched topic. This is done in a logical progression by taking steps forward and back to get an orderly text. To achieve this, authors are required to support points they advance with evidence, while acknowledging sources from which they get information, using an appropriate writing style.

It is legally and morally important to acknowledge other authors’ ideas used in one’s work in order to avoid plagiarism and infringement of copyright. In a sense, acknowledging source demonstrates that the author has undertaken research and has located relevant information for the topic. According to Swales and Feak (2012), referencing correctly enables the author and their readers to locate the source of information used in the article to verify it or read further on the topic. The author’s centre of attention is on balancing the emphasis in argument, that is, more important points are fully developed to help narrow the focal point of the study to a manageable topic. This process guides writers to analyse, evaluate and interpret materials they have read to develop a sense of purpose, clarity and accuracy in writing the article.

The literature review is organized in a way that classifies various sources in a reasonable way to benefit the reader (Lester & Lester, 2005). In achieving this, the writer relates each source in the subject by grouping the sources according to how they relate or support the argument. The review needs to position the current research in relation to previous findings; thus, results of the current study need to be reflected against previous literature in the discussion section.

Feak and Swales (2009) emphasize that it is very important that the works of gurus in the research area are consulted to show that the current study has its base on a strong foundation of knowledge in the area. It is also important to refer to new journal articles to ensure timeliness of the article. It is advised that the author should minimize self-citation (Bullock and Goggin, 2010) thus, he or she needs to cite own previous work if it is absolutely necessary.

When preparing information in this section, the author needs to take notes on the content of the readings and critically react and develop new thoughts, inspired by the readings that are related to the researched topic. The focus is to look for themes and an overall structure in the notes and expand them more and more in one’s own thinking and writing (Feak & Swales, 2011). Information from previous studies should be described densely to show its relevance in the present study. Reviewed information should be properly cited.
It is recommended that the literature review section should be finalized when the results of the article are written (Lester & Lester, 2005). This helps the author in advancing the theory related to the findings, hence making the section more focused. It also helps the author to search for related studies that match to the results. The review of literature ends with a summary of major themes and suggestions on how and what the study adds to the body of knowledge.

**Methodology Section**

The Methodology section of the paper indicates the design the author has used to gather and analyse the data or information used in the article. According to Musa, Khamis and Zanariah (2015), this section constitutes a key element in the research paper because it serves to convince readers that procedures employed in the study are valid. To Kellet (2004), the primary aim of the Methodology section in the article is to give the reader the work plan used in the research process.

In general, the methodology section describes procedures taken to obtain the findings of the study, such as selection and justification of the location where the research was conducted, individuals or subjects that provided information (and how they were selected), tools used to gather the data or information (and the way they were trustful) as well as how and why the data was analysed.

Musa, Khamis and Zanariah (2015) demonstrate that the way data was collected and analysed, prepares the process of its presentation, analysis and interpretation in the subsequent sections of the article. In this way, academic writers tend to describe comprehensively the research process in the Methodology section (Lim, 2010) to form the basis of argumentation regarding new-added-knowledge in the field.

In the article, the author needs to only cite the methods without describing them in detail. In some fields however, it is customary to discuss and justify the reliability and validity of the research in this section (Jalilifar & Kabezadeh, 2012). It is recommended that the methods used be chosen from established ones in the field (Peacock, 2011).

**Results and Discussion Section**

Regarding results and discussion of the findings, various fields of study require different styles of dealing with these issues. They may be handled separately or simultaneously. This choice of style can be determined by the author or the target journal. In any case, results of the study are reported in the article after completion of data collection and analysis. The author is required to concentrate on the analysis and interpretation of what was obtained in the field rather than merely documenting the data (Basturkmen, 2009). The focus needs to be on key results so as to give the article a direction.

Key results are a central focus upon which the article is built, thus, they need to be clearly presented. Their presentation calls for a clear and logical order for the reader to grasp easily. The funnel principle, that is, presentation of the findings from general to specific can be applied (Parkinson, 2011). Normally, the results are organized in sub-themes or in an order that follows or matches with the research objectives and research questions or hypotheses.

Key results are emphasized using visual elements such as lists, illustrations, tables or figures as well as direct quotes from respondents. All these need to be named and described adequately to help readers understand them by reading the caption (Basturkmen, 2009). They need to be referred to in the main text.

Discussion of key findings is included in the article after presenting and analysing the results. In the discussion area, the author explains and contemplates the results. The writer comments on results as reflected the data. Le and Pham (2021) argue that writers interpret, compare and account for results in the process of discussing new findings and making new knowledge claims, based on results of the study.

In the Discussion section, the writer strives to embed the data, methods and the literature to argue a point to establish and strengthen the article’s claims (Peacock, 2011). As advocated by Parkinson (2011), prominent features to achieve the author’s purpose include: an expression of the meaning, ways of asserting proof as well as mental and verbal processes that allow readers’ insight into the thought processes of the writer. The study findings are compared to existing knowledge in previous studies in one’s field. In this process, the writer provides explanations of particular findings in his or her study by offering comments on the strength, limitations or generalizability of the results (Le and Pham, 2021).
Conclusions and Recommendations

As regards conclusions, the author is required to make winding ups (for each research objective or research question/hypothesis) based on the study findings as well as their interpretation and discussion. Significance of the research and its practical implications are also elements of the conclusions (Yang & Allison, 2003). The conclusions should be in line with what was actually found in the field. In this case, they should not present totally new results. The article ends with recommendations that address the conclusions of the study as well as on topics for further study.

References used in the text are listed at the end of the article, written consistently using the appropriate writing style as it may be required by the target journal. As part of the academic writing process, the author is obliged to show the source of the original idea or information that are used in any way, quoted or paraphrased (Bullock & Goggin, 2010). Authors of any source need to be referred to impartially by their surnames, omitting titles, degrees, institutional connections, and the like. In the references, sources are listed alphabetically, and, depending on referencing style, detailing the Author’s Surname with initials of other names in capital letters, year of publication, the title, publisher and place of publication.

The abstract is a summary of the paper’s content. It is the last element to be written but it is placed at the beginning of the work, before the introduction. It is a very important element in the article because it informs readers about the article (Feak & Swales, 2011). It describes the purpose of the article, how the research was realized and it provides key findings, conclusions and any practical implications. The words in an abstract need to be carefully selected and edited to meet the word limit of the target journal. Key words follow the abstract. They inform readers about important areas that are covered or addressed by the paper.

Use of tenses in various areas or sections of the article is an important element that the author needs to be aware of. Thus, the abstract, literature review, methodology and results are reported using the past tense because they refer to work which is already done while the introduction, discussion and conclusions are written in the present tense because they refer to the problem and it is in these areas that the author establishes knowledge.

Conclusions and Recommendations

It is concluded that the Introduction section introduces the work to readers, connecting it to previous studies and explains the objectives of the study. In a convincing way, the writer establishes the issue to be studied, showing the research gap the article will address. The literature review discusses in a summary way the studied topic, basing on existing knowledge. The author’s interest in the topic positions his or her ideas in the context of the study.

In the Methodology section, the author indicates the work plan of the study in the form of the way the data used in the article was collected and analysed. The process of analysing, presenting and interpreting the findings, forms the basis of its discussion and conclusion. The author aligns with the writing style that is consistent and suitable to convey the message of the article to the target audience.

It is recommended that: First, the article needs to be written in a simple language. The author needs to be careful about spelling and grammar, making simplicity the guiding rule in writing. The article should reveal a unit of structure, in that the author deals with the subject matter in a coherent and organized way. The author needs to concentrate on purpose and theme of the article.

There is a need for a balance of emphasis in the writer’s argumentation in that, most important ideas of the article are fully developed. The author should remember, at all time, to support any claim with evidence, while acknowledging sources from which information and data are obtained.

This study used information obtained from various studies to discuss the academic article writing for publication. Further empirical research is called for to study, among others, mistakes found in English as a Foreign Language in novice writers’ works. Additional research is needed to record novice authors’ voices regarding their know-how on article writing for academic identity.

The writing conventions reported in this study should not be taken as fixed writing principles and universal patterns that novice writers need to conform to; rather, they are basic writing practices in writing research-based articles that could be acceptable across fields of study and disciplines. Arguably, they are requisite writing needs for novice writers.
References


