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Comparing The Anatomy and Physiology of Different Journals Using Meo's Fish Bone Model

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Article Info

ABSTRACT

Purpose of the study: To dissect and compare the structural makeup of articles from SCOPUS, ACI, and a non-indexed journal and to assess the adherence of these articles to MEO's Fish Bone Model.

Methodology: Descriptive Research Design, Combination of Quantitative and Qualitative, Survey Method

Main Findings: Scopus articles exhibit a higher degree of compliance with the model, indicating robust structural integrity and content depth. ACI and non-indexed journals show varied levels of adherence, suggesting room for improvement in meeting established scientific writing standards. Moreover, the analysis revealed that the articles share the basic structural framework. However, the Scopus and ACI articles include additional sections indicating a more comprehensive structure. Scopus articles excel in title clarity, abstract quality, and introduction, surpassing those from ACI and non-indexed journals.

Novelty/Originality of this study: Comparing the structures of different articles from different journals using MEO's fish bone model to guide those who are publishing their research papers.

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1. INTRODUCTION

Scientific journals are pivotal for spreading scientific knowledge and advancing science, catering to various fields and disciplines across different countries. It is a platform for sharing ideas globally, communicating experiences, contributing to the knowledge of science, and enhancing academic careers [1]. Disseminating ideas in the scientific community is a landmark of progress [2] as it benefits the people [3]. Researchers rely on these platforms, often supported by academic entities, societies, and publishers, to share and discuss their work [4]. While transitioning to digital formats to increase accessibility, journals maintain rigorous standards that can pose challenges for those new to the domain [5]. The standardized yet complex structure of scientific papers—encompassing the title, abstract, introduction, methods, results, discussion, conclusion, acknowledgments, and references—aims to ensure clarity and reproducibility but can be daunting due to its specialized language and format [6], [7]. The inflexible anatomy and physiology of the format of scientific papers are perplexing for novice science writers [1]. The standard paper structure is not only enough to keep track, but even with those sections, a writer can get stuck [8].

Novice writers are struggling specifically with structure and context, building arguments [9], presenting a cohesive argument [10], and meeting publication standards, such as format and appropriateness [11]. The question of clarity, style, structure, precision, and accuracy of each section, along with the greater responsibility to the scientific community, makes it a more daunting task [9].

Iskander et al. [12] recommends a straightforward writing style that conveys the study's value, targets the intended audience, and avoids unnecessary jargon to enhance engagement and comprehension. There are also known models for authors to format their journals, allowing them to structure their work effectively. Some have proven their usefulness however, there were criticisms, and some research does not adhere to the structures [13]. Despite these strategies and models, challenges persist among novice writers and in the consistency and accessibility of research findings across various publication platforms. This inspires this study to use Meo's fish bone model, which has specific guidelines in each section guiding the writer through the process. This model was published in 2018 and has already gained 37 citations, but there are no published articles yet showing it has been used for evaluating journal articles.

Meo's Fish Bone Model is utilized in this study in a comparative analysis to simplify the intricacies of scientific writing, aiming to facilitate the transition from novice to skilled scientific authorship. Specifically, it aims to meet the following objectives:

1. Determine the level of compliance of selected articles based on Meo's Fishbone Model
2. Compare and contrast the overall structure of the different articles from SCOPUS, ACI, and non-indexed.

Furthermore, it is essential to know the overall structure of the journal one has chosen to publish. It is not only to guide the writers in structuring their papers, but more of the significance and impact of the paper after publication. The indexation of a journal reflects its quality [14]. Articles published in a journal regarded as high quality are viewed as impactful [15]. Scopus offers a comprehensive overview of global scientific information [16]. Scopus-indexed journals would mean high quality and credibility [17]. Moreover, the ASEAN Citation Index indexes bibliographic records and citations of all quality outputs in ASEAN journals [18]. Articles in ACI journals are also of high quality as they go through rigorous peer review. On the other hand, non-indexed journals have not been evaluated and included in the academic and scientific literature; thus, not visible to researchers and scholars and may not contribute significantly to the field [19].

With the reform of the new curriculum of the Commission on Higher Education (CHED), the number of specialized subjects for students has been reduced, and the corresponding curriculum requires advanced studies graduates to publish in international journals before graduation. In 2024, the first batch of students of the new curriculum graduated, and many students faced related problems, such as the choice of international journals and article formats. Looking back, publication in the Philippines in an indexed journal is rarely targeted because of the same challenges mentioned previously including difficulty formatting based on the author's guide of the targeted journal [20], inadequate training on research resulting in difficulty constructing scholarly articles [21], and not trained on how to conduct research and write for publication [22]. Also, difficulty finding an appropriate journal, fear of rejection, and lack of publication fees are other challenges mentioned. This inability of researchers to publish their papers in an indexed journal has resulted in publishing in a non-indexed journal or one with low impact [20]. [23] noted that out of 241 published Scopus-indexed outputs in the past decades, only 7 are in the top 150 philosophy journals. He posited that this is too low compared to philosophers in other Southeast Asian countries.

This study compares and evaluates selected articles from Scopus, ACI, and non-indexed journals. The framework characteristics and the different composition structures of the selected journal are compared through an evaluation form based on Meo's Fishbone Model. The researcher hopes that the results will be useful to novice science writers, such as advanced studies candidates facing international journal selection and difficulties with the structure of publishing articles. In addition, it is hoped that the results of this study can provide a reference for future researchers to conduct similar studies.

Framework of the Study

Writing and publishing academic papers is a complex and important part of scientific research. Researchers must have a solid understanding of the structure and purpose of scientific papers. This study utilizes Meo's Fish Bone Model [1] as a conceptual framework to analyze and critique the structure and content of scientific papers, enabling a more profound understanding of effective scientific writing.
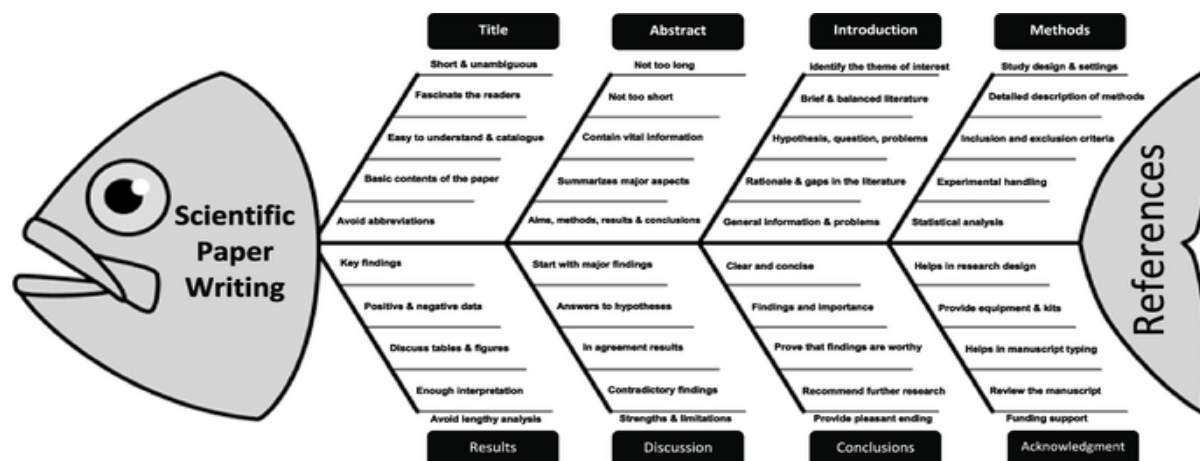
Figure 1. MEO's Fish Bone Model: Basic components of a scientific paper

Meo's fish bone model places the different parts of research on a specific section of a fish. The "scientific paper writing" is at the head with eight main bones in the body which are the title, abstract, introduction, methods, results, discussions, conclusion, and acknowledgment. The cited references make up the tail. This model helps researchers who are overwhelmed by writing. The model breaks the process into eight main parts and then breaks it down into even smaller tasks guiding writers.

Meo and Saadi [24] emphasized that the title must be easy to understand and has a good taste that attracts the readers. It should be clear, simple, direct, concise, specific, interesting, and not misleading [25]. It should convey the main idea with maximum information [26]. In the same way, the abstract needs to be specific, clear, simple, complete, scholarly, honest, and consistent with the content [25]. This is the most important part of the manuscript [27]. A brief and meaningful abstract serves as a resume for the manuscript [28]. The title and the abstract are the ones most readers read first [25].

Meo's model also sets guidelines for crafting the other parts of the manuscript [1]. He explained that the anatomy of introduction is an inverted triangle, from a general overview of the subject to a specific one. Moreover, the methodology section should contain detailed information about how the study was done including other details such as where was it done. This is the blueprint of the study or research [29]. It is not only all about describing the data gathering and analysis but also the overall approaches and perspective of the research process [30]. The result section is highly essential too for it contains details about the findings of the study and thus, nothing should compromise its range and quality [1]. This is presented in a logical sequence in context with the research problem without any bias [31]. She further mentioned that this section should be no attempt to analyze or interpret. This provides organized information about what was discovered, answering the research problems, and supporting or rejecting the hypothesis [32]. Findings are presented through graphs and tables. The discussion section is also considered the most important as this interprets the findings and describes the meaning of the results to readers [1]. This is also an inverted pyramid in anatomy. This tells the reader what the findings mean [31]. This explains the findings and convinces the readers of the importance of the study [32]. The conclusion section gives the take-home message. This provides a scientific justification for the study [1]. This is where ideas are wrapped up, showing the summary of the overall arguments and findings, and also the suggested takeaways of the paper [33]. This is followed by the acknowledgment section where the researcher acknowledges the support he has for the study. This is brief and should not be flowery. Lastly, the reference of the scientific paper where the researcher acknowledges the sources and provides credit and validity to the arguments [1]. MEO's model further explains the importance of each part and then identifies the essentials that have to be written.

2. RESEARCH METHOD
2.1. Research Design

This study adopted a Descriptive Research Design, deploying a survey method to delineate, assess, and draw connections among current conditions, as suggested by Nikolopoulou [34]. The gathering of data was standardized to ensure unbiased, equitable responses. A quantitative approach was used for objective one as the data gathered to understand the articles' level of compliance with the model is numerical. This data is from the questionnaires crafted around Meo's Fish Bone Model. Moreover, a qualitative approach is employed for objective two as this is a document analysis, examining the differences in structure and content of the selected articles from Scopus, the ASEAN Citation Index, and a non-indexed journal. The aim was to identify distinctions

in the various components of the articles, including the title, abstract, introduction, methodology, results, discussion, conclusions, and acknowledgments.

2.2. Locale and Population

The PhD students enrolled in the Research Presentation and Publication subject at the College of Teacher Education, Benguet State University are the respondents of the study. Participation was voluntary because the document analysis required extra time and effort. The researcher needs respondents who are willing to spend time analyzing the articles despite their busy schedules. A total of 15 respondents took part in the study.

2.3. Data Gathering Procedure and Treatment

Six articles were downloaded from three different educational journals. These journals were selected using purposive sampling based on a set of criteria such as indexing, impact factor, aim and scope, and years of publication accessible online. These journals were Scopus-indexed, ACI-indexed, and non-indexed. The chosen articles were all focused on instruction and pedagogical approaches, published between 2020 to 2023.

The researcher crafted a survey questionnaire comprising 60 items that correspond to specific aspects of research as delineated by Meo's fish bone model. Numerical values were utilized in the questionnaire, with "Observed" assigned 1 point and "Not Observed" assigned 0 points. This has gone through a content validity test by five research experts [35] before it was used to gather data. The content validity index (CVI) is 0.993, which means a high content validity; it can accurately measure what it intends to measure. The data gathered from the questionnaire were collated and interpreted using mean scores.

Moreover, all respondents individually read the selected articles and then noted the differences observed in each specific section of the articles using the provided comparison table. The data collected were collated and used to analyze the differences among the chosen research articles from SCOPUS, ACI, and a non-indexed journal.

3. RESULTS AND DISCUSSION

3.1. Level of Compliance of the Articles in MEO's Fish Bone Model

Selected articles from Scopus, ASEAN Citation Indexed (ACI), and Non-indexed were evaluated. Considering the different parts of the articles, it is notable that four of the seven parts had a mean of 90-100, which is Excellent. This means that these parts are written well, exceeding the expectations of the model. It shows that the components of Scopus articles already have the basic characteristics of an academic journal. Moreover, it has the desirable anatomical and physiological features as outlined by Meo's model. Although the acknowledgment part is poor, which is also the same as the other articles, as this cannot be found.

These findings support the general perception of Scopus. This indexing journal is one of the largest databases worldwide [36], known for its quality and caliber [37], leading in quality and quantity [38], and chosen due to its quality [39]. All papers submitted to it undergo a rigorous evaluation and selection process, ensuring they meet the high-quality selection criteria [40]. This has the Content Selection and Advisory Board (CSAB) carrying out the selection process, ensuring that only high-quality content is indexed [41]. This quality standard of Scopus is exhibited in its high level of adherence to Meo's fish bone model. In addition, this shows that Meo's Fish Bone model is also aligned with the standard of one of the titans of bibliographic information in the academic world nowadays. Because of the set and maintained high standards, publishing in journals listed in Scopus is considered a measure of research productivity [42] and research impact [43].

Table 1. Level of Compliance of the Selected Articles

Scores (60/60 points)	PEER		ACI		SCOPUS	
	PM	DI	Percentage Mean	DI	Percentage Mean	DI
Title (8/8 points)	78.13	F	75	F	93.75	E
Abstract (5/5 points)	95	E	85	G	100	E
Introduction (8/8 points)	62.5	P	78.13	F	93.75	E
Methodology (8/8 points)	59.38	P	71.88	F	81.25	G
Results (8/8 points)	84.38	G	93.75	E	87.5	G
Discussion (8/8 points)	18.75	P	59.38	P	93.75	E
Conclusions (8/8 points)	46.88	P	59.38	P	78.13	F
Acknowledgments to (7/7 points)	0	P	0	P	7.14	P
Overall Mean	54.58	P	65.42	P	79.58	F

Legend: PM - Percentage Mean,   E- Excellent,   G - Good,   F - Fair,   P - Poor,   DI - Descriptive Interpretation

On the other hand, the ACI and the Non-indexed articles have an overall mean of 65.42 and 54.58, respectively, which means these articles are poor according to the set rating scale. They have a 50 to 60 % level of quality through the lens of the Meo's Fish Bone model. For the ACI articles, the discussion parts are excellent, the abstract and methodology of the articles are rated good, the title and introduction are fair, and the others are poor. Furthermore, for the non-indexed articles, the abstracts are rated excellent, the results are good, and the titles are fair, but the other parts are all poor. The overall mean of ACI and non-indexed articles shows that they have a low level of compliance using Meo's fish bone model. The varied ratings of each part imply that some of the parts are written well, complying with Meo's Fish Bone model. However, other parts are insufficient or lacking content and do not meet the set criteria. This shows that the ACI and non-indexed articles lack the desirable anatomical and physiological features of an academic journal. Some of their sections lack some components outlined by Meo's model. Such can pose several challenges, including questions about quality, credibility, and the peer review process, resulting in limited impact within the scientific community.

The ASEAN Citation Index has a selection criterion [43] like Scopus. It generally follows a standardized structure and article format, and adheres to specific criteria of indexing to ensure a level of quality and to adhere to international standards. They specifically enumerated that articles will be examined in the aspects of clarity of abstracts, quality, conformity to the scope and aim of the journal, readability, and originality of the knowledge. However, not all maintain and uphold high-quality standards; thus, the need to go through re-evaluation and deselect those that have not performed well [44]. Germenis et al. [45] noted, the information presented in the most freely accessible local journals in the ASEAN region calls for the need for reliability and accuracy.

The ACI is designed to be a regional database for the high-quality research outputs of ASEAN [45], consolidating bibliographic information about ASEAN journals to achieve accreditation in international databases and increase the visibility of ASEAN outputs. However, the result of this study shows room for improvement in the anatomical and physiological features of ACI articles. It shows the further need for ACI to assess the quality of submitted articles and level up as needed. It implies the need for an explicit publishing policy specifically on the quality of the anatomy and physiology of articles, because the quality of content is a criterion of scholarly publishing. Although it is also noted that one of the limitations of ACI is the scarcity of information and comprehensive data on its performance, especially in the area of identifying the quality of its articles, making it challenging to assess.

Non-indexed articles have not been included in the databases or repositories commonly used by researchers, scholars, and institutions to search for and access academic and scientific literature [19]. He further elaborated that papers that are not indexed are often overlooked by researchers and may not contribute significantly to the academic discourse in a particular field. IGI Global Scientific Publishing [46] also mentioned that non-indexed journals were not criticized by the international scientific community and therefore remain far from gaining scientific quality. There are various reasons why a paper might not be indexed. This could be due to issues with the quality of the paper, the publication venue is not in the list of publishing journals with an index, or not submitted for indexing service at all [47]. As a result, such papers may have limited visibility and impact within the academic and scientific community. The study of Signh [48] revealed that non-indexed journals have limited visibility and were notably used fewer times than their indexed counterparts. This further explains the low level of compliance of non-index articles with Meo's Fish Bone model.

3.2. Differences and Similarities of Scopus, ACI, and Non-indexed Articles

Along with identifying the level of compliance, a comparative document analysis was done to further identify the differences and similarities of the different articles in structure. The analysis revealed that the articles share a basic structural framework including the title, abstract, introduction, methodology, results, conclusions, and references. However, the ACI articles include additional sections such as study limitations and future research directions, while the Scopus articles feature a separate discussion section, declarations of interest, and ethical clearance, indicating a more comprehensive structure. Scopus articles excel in title clarity, abstract quality, and introduction, surpassing those from ACI and non-indexed journals.

Through comparative document analysis, it is noted that Scopus and ACI articles are more complete in their overall structure. Scopus articles have the most complete and comprehensive article structure, followed by the ACI articles. The non-indexed articles are relatively poor. Concerning the specific structure of the different articles, there are some differences noted. The structure of the titles of the non-indexed and ACI articles is similar, while Scopus articles differ. It was noted that the Scopus title is much better than the other two, especially in terms of title length, freshness, and ease of description. In the abstract, the Scopus articles are almost perfect and meet all the requirements of Meo's model and IMRaD format for the abstract. The other articles have some missing content. Moreover, Scopus articles have the best introduction part, followed by ACI articles. The non-indexed articles lack a clear presentation and content of the introduction part. These observations are also noted in the methodology and discussion parts of the different articles.

This analysis shows that Scopus articles have quality and standard. Their stringent selection process to maintain a high academic standard is manifested. Articles published in Scopus undergo a rigorous evaluation and selection process to ensure they meet the high-quality selection criteria required for acceptance [40]. The ACI journals also have a selection process and criteria. It has a steering committee that re-evaluates, provides reliable sources of information, and integrates research at the international level. However, there is a need for a clearer and more comprehensive presentation and discussion in some parts of their articles. For the non-indexed articles, the quality may be an issue [19], which is seen in this evaluation's result. These journals were not authentically peer-reviewed and may cause more harm to the scientific society [49].

These findings underscore the significant impact of publication standards on the quality and credibility of scholarly research. The selection criteria and rigorous process reflect the journal's commitment to maintaining high academic standards, ensuring that it meets the established benchmark for quality. In contrast, the evident need for improvement of the articles affects their integrity and reliability. Moreover, the non-indexed articles reveal critical concerns, as they can mislead scholars and potentially undermine the advancement of science as a whole. These highlight the importance of prioritizing quality over quantity in research publications. These also call for a more discerning approach to assessing the scholarly contribution of various journals. While this study offers valuable insights, its limitations are noted. The generalizability of the result to other publishing platforms is limited since the analysis was focused only on a few articles published in Scopus, ACI, and non-indexed journals. Also, the selected metric for evaluation had not yet been used for evaluating articles, and the sample size was small. These points highlight the need for broader investigations to validate and extend these findings.

Publishing is a pivotal milestone in the professional trajectory of educators and researchers alike nowadays. It serves not only as a conduit for the dissemination of scientific knowledge but also as a mechanism for driving global advancements. This is an essential platform for researchers to articulate and communicate their discoveries. Researchers are encouraged to publish in journals indexed by reputable databases such as Scopus and ACI. This significantly enhances the visibility of their works and fosters their integration into the broader academic community. In addition, it would be a great ease for a publisher, especially for novice writers, to have comprehensive guidelines in preparing their manuscript. Meo's model is one of the many models that can help.

4. CONCLUSION

This study, grounded in the comparative analysis of selected articles based on Meo's Fish Bone Model, illuminates the disparities in structural and content quality among scientific papers from various journals. The research findings demonstrate that while Scopus articles exhibit a higher degree of compliance with the model, indicating robust structural integrity and content depth, ACI and non-indexed journals show varied levels of adherence, suggesting room for improvement in meeting established scientific writing standards.

The study's insights are particularly valuable for advanced studies candidates grappling with the demands of international publication, offering guidance in journal selection and article structuring to meet the rigorous requirements of academic discourse. The application of Meo's Fish Bone Model has proven to be an effective analytical tool in discerning the quality of scientific writing across different publication platforms.

This research also serves as a springboard for future studies aimed at enhancing the understanding and practice of scientific writing, especially in the context of new curriculum requirements. Future studies may consider a broader investigation of the use of Meo's fish bone model as a tool for evaluating research articles and a guide for novice writers. Also, a further study of the physiology and anatomy of the articles published by ACI-indexed journals.

REFERENCES

[1] S. A. Meo, "Anatomy and physiology of a scientific paper," *Saudi Journal of Biological Sciences*, vol. 25, no. 7, pp. 1278–1283, 2018. doi: 10.1016/j.sjbs.2018.01.004.
[2] N. Picardi, "Rules to be adopted for publishing a scientific paper," *Ann. Ital. Chir.*, vol. 87, pp. 1–3, 2016.
[3] D. Normando, "The Scientific paper on clinician's perspective," *Dental Press J. Orthod.*, vol. 21, no. 5, pp. 15–16, 2016.
[4] K. Okamura, "Interdisciplinarity revisited: evidence for research impact and dynamism," *Palgrave Commun.*, vol. 5, art. no. 141, 2019. doi: 10.1057/s41599-019-0352-4.

[5]   R. A. Day and B. Gastel, *How to Write and Publish a Scientific Paper*, 7th ed. Cambridge, U.K.: Cambridge University Press, 2011.

[6]   B. Gustavi, *How to Write and Illustrate a Scientific Paper*, 2nd ed. Cambridge, U.K.: Cambridge University Press, 2011.

[7]   G. Bordage, "Reasons reviewers reject and accept manuscripts: The strengths and weaknesses in medical education report," *Academic Medicine*, vol. 76, no. 9, pp. 889–896, 2001.

[8]   J. J. Mc Donnell, "Paper Writing Gone Hollywood," *Science*, vol. 355, no. 6320, p. 102, 2017.

[9]   S. Jatin, S. Anand, and P. Ricardo, "Scientific Writing of Novice Researchers: What Difficulties and Encouragements Do They Encounter?" *Acad. Med.*, vol. 84, no. 4, pp. 511–516, Apr. 2018. doi: 10.1097/ACM.0b013e31819a8c3c.

[10]   K. Moodley, A. James, and M. Stears, "Reflection of a Novice Writer," *Educational Research for Social Change*, vol. 4, no. 2, pp. 75–88, 2015.

[11]   B. Catama *et al.*, "Publishing a Research: Shared Experiences of Preservice Teachers as Novice Researchers in Research Journals," *Eur. J. Educ. Res.*, vol. 13, no. 2, pp. 679–690, 2024. doi: 10.12973/eu-jer.13.2.679.

[12]   J. K. Iskander, S. B. Wolicki, R. T. Leeb, and P. Z. Siegel, "Successful Scientific Writing and Publishing: A Step-by-Step Approach," *Preventing Chronic Disease*, vol. 15, art. no. E79, 2018. doi: 10.5888/pcd15.180085.

[13]   E. Heseltine, "Why authors have to use a rigid format for their journal article," *Natl. Library Med.*, 2015. doi: 10.1308/003588415X14181254789808.

[14]   Y. P. S. Balhara, "Indexed Journal: What does it mean?" *Natl. Library Med.*, vol. 29, no. 2, pp. 193, Apr.–Jun. 2012. doi: 10.4103/0970-2113.95345.

[15]   B. Nayak, "How to assess the quality of journals and research (Part 1)," *J. Clin. Ophthalmol. Res.*, vol. 7, no. 2, p. 35, 2019. doi: 10.4103/jcor.jcor5919.

[16]   *Mitochondrion*, "Scopus - an overview," *ScienceDirect Topics*, ScienceDirect, 2019.

[17]   *R Discovery*, "What are Scopus-indexed Journals?" *Researchers Life*, 2024, https://researcher.life

[18]   N. Sombatsompop, N. Premkamolnetr, T. Markpin, S. Ittiritmeechai, C. Wongkaew, C. Yochai, and L. Beng, "Viewpoints on synergizing ASEAN academic visibilities through research collaboration and the establishment of an ASEAN Citation Index Database," *Asia Pacific Viewpoints*, vol. 52, no. 2, pp. 207–218, 2011.

[19]   G. Tandon, "Re: What does it mean when a paper is not indexed?" *ResearchGate*, https://www.researchgate.net/post/

[20]   C. Cocal and I. DE Vera, "Challenges and strategies on paper publication to international indexed journals by Filipino academic researchers," *ResearchGate*, 2018, https://www.researchgate.net/publication/331272729

[21]   D. Tayaban and R. O'Leary, "Striving to publish in international journals: A case study of a small university in rural Philippines," *J. Public Affairs Educ.*, vol. 28, no. 4, pp. 407–421, 2022. doi: 10.1080/15236803.2022.2093602.

[22]   S. Wa-Mbaleka, "Focusing Research Publication on Global Issues: Evidence from the Philippines," *Int. J. Acad. Res. Bus. Soc. Sci.*, vol. 5, no. 5, 2015. doi: 10.6007/IJARBSS/v5-i5/1534.

[23]   J. J. Joaquin, "Are Filipino Philosophers Publishing in Top Philosophy Journals?" *Social Ethics Society Journal of Applied Philosophy*, Special Issue, pp. 172–147, 2022.

[24]   S. A. Meo and M. M. Saadi, "Right path of publishing a scientific paper to a right journal: Academic paper-based case study," *Pak. J. Med. Sci.*, vol. 23, no. 6, pp. 946–949.

[25]   M. S. Tullu, "Writing the title and abstract for research paper: Being concise, precise, and meticulous is the key," *Saudi J. Anesth.*, 2019. PMID: 30930712.

[26]   M. J. Grant, "What makes a good title?" *Health Inf. Libr. J.*, vol. 30, no. 4, pp. 259–260, 2013.

[27]   S. B. Bavdekar and N. J. Gogtay, "Writing an abstract for a research manuscript: Providing an honest, succinct and complete summary," *J. Assoc. Physicians India*, vol. 63, no. 12, pp. 64–67, 2015.

[28]   D. Goodman, G. Ogrinc, L. Davies, G. R. Baker, J. Barnsteiner, and T. C. Foster, "Explanation and elaboration of SQUIRE (Standard for Quality Improvement Reporting Excellence) Guidelines: Examples of SQUIRE elements in the healthcare improvement literature," *BMJ Qual. Saf.*, 2015. pii: bmjqs-2015-004480.

[29]   S. N. Murthy and U. Bhojanna, *Business Research Methods*, 2nd ed., New Delhi, India: Excel Books India, 2009.

[30]   I. Bouchrika, "How to Write Research Methodology in 2025: Overview, Tips, and Techniques," *Research.com*, Jan. 13, 2025.

[31]   C. Ammon, "Result Section for Research Papers," *San Jose State University Writing Center*, Summer 2022, www.sjsu.edu/writingcenter

[32]   J. Claufield, "Writing a research paper Conclusion Step by Step Guide," *Scribbr*, https://www.scribbr.com/

[33]   M. R. Leary, *Introduction to Behavioral Research Methods*, 4th ed., Boston: Pearson Education, Inc.

[34]   K. Nikolopoulou, "What is Content Validity? Definition and Examples," *Scribbr*, 2023.

[35]   A. A. Chadegani, H. Salehi, M. M. Yunus, H. Fahardi, M. Fooladi, M. Farhadi, and N. Ebrahim, "A Comparison between Two Main Academic Literature Collections: Web of Science and Scopus Databases," *Asian Social Science*, vol. 9, no. 5, 2013.

[36]   D. San Juan, "Why Filipinos Should Write Research in Filipino?: A Critique of Scopus-Centrism in Philippine Universities and Educational and/or Research Agencies," *Malay*, vol. 34, no. 1, pp. 47–64, Dec. 2021, https://www.dlsu.edu.ph

[37]   D. Duncombe, "Improving the quality of ASEAN journals with Scopus," *Elsevier Research Intelligence*, 2017.

[38]   F. Boyle and D. Sherman, "Scopus: The product and its development," *The Serial Librarian*, vol. 49, no. 3, pp. 147–153. doi: 10.1300/J123v49n03_12.

[39]   S. Beatty, "Scopus Checks & Balances: Maintaining Quality Content on Scopus," *Scopus Blog*, https://blog.scopus.com/posts/scopus-checks-balances-maintaining-quality-content-on-scopus

[40]   J. Baas, M. Schotten, A. Plume, G. Côté, and R. Karimi, "Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies," *Quant. Sci. Stud.*, vol. 1, no. 1, pp. 377–386, 2020. doi: 10.1162/qss_a_00019.

[41] C. Saloma, "Measuring the Performance of the Philippine Scientific Enterprise System," *Public Policy*, vol. XV, no. 2, pp. 122–161, 2016, https://cids.up.edu.ph

[42] C. Carpenter, "Using Publication Metrics to Highlight Academic Productivity and Research Impact," *Acad. Emerg. Med.*, vol. 21, pp. 1160–1172. doi: 10.1111/acem.12482.

[43] *Journal Selection Criteria*, "New Journal Selection Criteria for ACI," 2024, https://asean-cites.org/view?slug=Criteria

[44] J. I. Janairo and G. Janairo, "Assessing and Ranking ASEAN Academic Journals," *Asia Pacific Social Science Review*, vol. 18, no. 1, pp. 151–156, 2018.

[45] A. E. Germenis, P. A. Kokkinides, and C. Stavropoulos-Giokas, "Non-indexed medical journal in the Web: new perspectives in the medical literature," *Int. J. Med. Inform.*, vol. 47, no. 1–2, pp. 65–68, Nov. 1997.

[46] *IGI Global Scientific Publishing*, "What is Non-Indexed Journal", Hershey, Pennsylvania, New York.

[47] E. J. Allen and R. K. Weber, "An exploration of indexed and Non-indexed Open Access Journals: Identifying metadata coding variations," *J. Web Librariansh.*, vol. 9, no. 2–3, 2015.

[48] R. Singh, "Is there any value of research publication in non-indexed journals?" *ResearchGate*, 2021, https://www.researchgate.net/