

STRATEGIES FOR POSTGRADUATES TO WRITE AND PUBLISH HIGH-QUALITY SCIENTIFIC RESEARCH AND ACADEMIC PAPERS

Wang Shufeng, Xu Subo and Li Xiuli

School of Economics and Management, Heilongjiang Bayi Agriculture University, Daqing City in China

Fund Project: postgraduate education and teaching reform project of Heilongjiang Bayi Agricultural Reclamation University "Research on strategies to promote postgraduates to publish high-level scientific research papers" (No.: yjg201913)

DOI: 10.46609/IJSSER.2021.v06i12.014 URL: <https://doi.org/10.46609/IJSSER.2021.v06i12.014>

Received: 19 Nov. 2021 / Accepted: 15 Dec. 2021 / Published: 31 Dec. 2021

ABSTRACT

In response to the objective reality of the difficulty and pressure of writing and publishing high-quality scientific research academic papers for masters and doctoral students in order to meet the needs of applying for degrees and employment, focusing on the qualifications of the training unit to award degrees and the requirements of high-level journal publishing, combined with individuals Guiding graduate students' experience and experience in writing papers, using investigation and research methods, judgment analysis methods, and reasoning logic methods, etc, to elaborated the meaning and measurement standards of high-level scientific research academic papers, and summarize the difficulties in paper writing and Submission and publication confusion, emphatically analyzed the problems of discusses the topic selection and naming design, structure arrangement and content writing, data collection and processing and analysis tool selection, preface and conclusion writing skills encountered in the writing of graduate thesis, It also puts forward relevant important propositions based on basic assumptions to establish a creative structure, write content according to the structure, find data and select tools based on the content refining conclusions from the full text of the overview, are expected to provide guidance for graduate students to write and publish high-level scientific research papers.

Key-words: Postgraduate; Writing and publishing high-level papers; Title naming skills; Degree-granting conditions.

Introduction

In recent years, the "thesis only" degree awarding system in graduate training units has been

criticized frequently, so that Tsinghua University and other universities have cancelled the requirement that doctoral students must publish high-level papers [1]. However, many colleges and universities have not abolished this provision for Discipline ranking on the grounds of testing students' research ability. Some universities have decentralized the control of degree awarding conditions, but the tutors also require graduate students to publish high-level papers [2]. This is contrary to the policy style of encouraging students to publish high-level papers through reward policies in foreign countries [3]. Therefore, the idea of recruiting talents in domestic training units and society forces graduate students to publish high-level papers. However, how to write and publish high-level papers has always been a great confusion and problem for graduate students, which is the starting point of this study.

1. The meaning and standards of high-level scientific research papers

High level papers are scientific research or academic papers written by graduate students based on scientific experiments or social surveys, which are recognized by tutors and academic theorists as high-quality and widely cited after being published in international and domestic authoritative journals. It can be seen that high-level papers should meet certain objective standards:

(1) Creation comes from scientific experiment or investigation practice. High level papers should be based on scientific practice discovery and personal experience, feeling and cognition, establish innovative goals or object propositions, and be formed through extensive and in-depth research and demonstration.

(2) Recognized by academic and theoretical circles. Firstly, the thesis should be recognized and approved by the tutor; Secondly, it should be appreciated by high-level journal editors and further appreciated by review experts and scholars.

(3) Published in international and domestic well-known journals. Journals with high impact factors that are internationally famous top journals in the field of natural science and included in SCI high division, such as nature and science of NSC; Domestic CSSCI included journals and papers of top journals in the research field reprinted by Xinhua digest and China Social Science Digest.

(4) Papers are cited frequently. The number of citations (excluding self citation) after the publication of the paper shall meet the standards specified by the training unit.

2. Difficulties for graduate students to publish high-level scientific research papers

The thesis is the achievement test of participating in scientific research and learning and thinking

during the degree study stage of postgraduates, and it is also an important "baton" for training units to evaluate the training quality and scientific research level of Postgraduates [4]. Most graduate students lack solid professional knowledge, immature scientific research ideas, weak research foundation, and many difficulties in writing and publishing high-level papers. It is mainly reflected in the relationship between data acquisition and topic selection, content discussion, structure arrangement, language and logic application, writing at the beginning and end, etc.

2.1 Difficulties for graduate students to write high-quality papers

2.1.1 The order of data and topic selection is reversed

In the survey, many students reported that it was too difficult to obtain data, which resulted in the delay in determining the research topic. This is a very obvious problem of wrong ideological orientation, and the reason for the instructor's default cannot be ruled out. If the topic is undecided, the research objective is unknown. Without the target and scope of the target, the data can only be a fictitious concept, and there is no way to talk about it, even the experiment of natural science can't do it. Those deliberately pursuing the application of mathematical models and attempting to carry out empirical research to highlight the grades of articles have seriously violated the laws of scientific research and the creation of papers, and are driven by wrong ideas that put the cart before the horse. As a result, it will only be ascetic and fruitless, and will eventually become self-defeating and even humiliate itself. In the field of social sciences, there are indeed narrow, scattered and incomplete data acquisition channels. It is difficult, difficult, and time-consuming for students to collect a complete set of data. There are also phenomena that no matter how hard they work, they cannot capture certain internal indicators of the research object. The real data problem. As a result, the research is blocked or interrupted.

2.1.2 Not good at designing the paper structure

In view of the objective reality that it is increasingly difficult for postgraduates to write and publish high-level scientific research academic papers in recent years, combined with the experience and experience of guiding Postgraduates' papers, this paper explains the meaning and measurement standards of high-level papers by using investigation and research methods, judgment and analysis methods and reasoning logic methods, and analyzes the data and topic selection order faced by postgraduates in writing papers. The title design is far fetched, the language ability is weak and the logical relationship is lost. It is proposed to first determine the fascinating research proposition as the logical starting point, so as to establish a close organizational structure, select appropriate analysis tools and methods and obtain data according to the content discussion needs.

2.1.3 Poor language organization and logical thinking

Affected by the thought of "examination education", contemporary graduate students' language skills are generally not solid enough. Although the vocabulary, vocabulary richness and grammar skills of humanities and social sciences students are slightly stronger than those of science and engineering students, they are not what they used to be. Language organization And the state of logical thinking has generally declined ^[5]. Impetuous phenomena in scientific research papers are mostly caused by language organization barriers. Throughout the article, grammar and terminology rules are ignored, and "colloquial" expressions can be seen everywhere; textbook-like listings, expressing primary and secondary, inverted, and logically confused; incident descriptions and problem introductions are too many, but comment sentences are less narrated, and even some. Regardless of the narrative, it does not meet the basic meaning requirements of the "discussion" article, and it is difficult to clearly infer the author's clear propositions and personal unique views; the establishment of a paper that explores the truth cannot carry out logical deductive reasoning and rigorous argumentation; refutation of realistic claims Articles cannot be effectively contrasted and analyzed by case empirical analysis to refute the original argument; typos and indiscriminate use of punctuation can be seen everywhere, causing tutors, journal editors and reviewing experts to mistakenly believe that the author's writing attitude is incorrect, which is actually the student's professional knowledge, Caused by deficiencies in cultural literacy and philosophical thinking. In this regard, some scholars advocate the adoption of the "graduate + editor" training method [8]. Although there is a certain creativity, it is difficult to realize the contradictory influence on the relationship between resource supply and demand. Graduate students will encounter all kinds of difficulties, pressures and confusions when writing a thesis for the first time. They need to participate in tutor work and academic activities to strengthen their training, and remember to write frequently and repeatedly.

2.2 Confusion of paper submission

After the hard work of writing the paper, many graduate students are confused about which journal to submit. Either they don't know what journal to submit to, or can't find a suitable journal; there are also students who do not master or read carefully the rules of high-level journals, such as the number of characters in the paper, the amount of figures, references and annotations, layout settings and layout styles, etc. If they do not meet the requirements of the magazine, they blindly submit articles. As a result, the manuscript was rejected for months in vain.

3. Strategies to overcome difficulties and puzzles

3.1 Full preparation for preliminary work

3.1.1 Correctly understand and handle the relationship between topic selection and data

To do anything, you must first set the goal and direction, and then you need to consider the journey, path, and tools that should be used. To engage in scientific theoretical research, you must first establish basic assumptions and a logical starting point. As for the data, it is often the supporting basis that is generated during the argumentation process, that is, the argument, and even needs to be provided according to the "window period" required by the rules after the analysis tool is selected. Therefore, a paper should always be based on some wonderful idea to establish a topic that can clearly express the idea, even if it is not yet mature, and may even continue to adjust and process; after the scientific research proposition is established, the paper structure needs to be further designed; then, conceive and write Each part of the article. At this time, it is necessary to infer various element indicators of various logical hypotheses, and under the condition that it is necessary to analyze, evaluate, or verify the law of movement of certain indicators or the relevant numerical conditions, they begin to pass scientific experiments, statistical databases, and Annual accounting report and related information system platform, etc., to collect data and related materials. In other words, data should serve the needs of content argumentation and obey the goal of the proposition. This is especially true for scientific research papers in the field of humanities and social sciences. Of course, there are also situations where a complete set of sufficient data is obtained in advance through various channels, which students consider to be very precious and of great research value. At this time, it is still necessary to first consider how to make propositions around the professional fields in which the data can be applied, and then the application design problem.

3.1.2 Proposition selection establishment

(1) Skills must be mastered when selecting topics

The choice of the proposition depends on the author's long-term study or experiment accumulation, flexible thinking, clever observation and capture of ideas, and the ability to summarize and summarize, as well as the habit of being good at recording to achieve the goal of "question finding". First of all, try to establish a research field that you are good at or interested in from the research direction of your supervisor. After long-term thinking and polishing, and inspired by reading a lot of excellent research documents of predecessors, I am convinced of the academic space I intend to study, and I am Research in this field enhances confidence; then, centering on personal thoughts and cognitions, combined with the core goals or objects of the required research, referring to the proposition methods and techniques of similar problems in the previous literature, the topic selection is named, and the instructor is asked to guide and determine Research topic.

(2) Title naming method

Scientific research papers must reflect the seriousness, rigor and strictness of scientific research, but they are also inseparable from rich cultural colors. The title of the paper should be highly condensed, concise and concise, in line with the relevant principles of the compilation of bibliography, indexing and retrieval, and help to select keywords; Real and precise"; the name should be unique and unique, giving readers, especially editors and reviewers, a bright feeling; at the same time, pay attention to the control of the number of title names (the Chinese title should not exceed 20 characters, and subtitles can be added if necessary), Avoid the use of non-publicly recognized abbreviations, characters, codes, structural formulas, and mathematical formulas. Generally, there are three naming methods for the topic: straightforward, rhetorical, and conclusion. The author should choose the name correctly according to the main idea and the needs of the argument.

(3) Title naming skills

Scientific research papers must reflect the seriousness, rigor and strictness of scientific research, but they are also inseparable from rich cultural background. Therefore, the topic selection direction is surprising and the resort reflects "new, strange and special", and the perspective highlights "precision, practicality, and precision" in a unique style; the naming should be unique and unique, which will give readers, especially editors and review experts, a bright spot. Feel; at the same time, pay attention to the control of the number of title names (the Chinese title does not exceed 20 characters, and subtitles can be added if necessary), and avoid the use of non-known and recognized abbreviations, characters, codes, structural formulas, and mathematical formulas.

3.1.3 Data acquisition and processing

Paper data is obtained through scientific research practice surveys, statistical reports, and company annual reports. When individual data is not available, it can be obtained through extrapolation or conversion of the obtained relevant indicators. If the value of A in 2020 cannot be found, as long as the value of A in 2021 is 1000, a year-on-year increase of 34.9%, it can be calculated that the value of A in 2020 is about 7.4129 million ($1000 \div 1.349$); at the same time, it is emphasized that where The source data involving commercial secrets, the paper cannot be used directly, and the same set of data must be processed by means of year-on-year or equal amount to avoid liability risks. In this way, the data authenticity of the analysis and evaluation results of the element indicators is not affected, and commercial secrets are effectively protected.

3.1.4 Appropriate selection and application of research methods

Whether a scientific research paper adopts analysis or quantitative argumentation should obey and serve the objective needs of the subject content. The propositions in the natural sciences must be based on quantitative research, and the propositions in the social sciences need to be determined by different research directions. Quantitative propositions based on economic thoughts should be based on quantitative argumentation. For example, the proposition "Research on Output, Quality and Benefit Linked Wage Accounting and Execution Effect" should be based on the quantitative analysis and evaluation based on the difference of various technical indicators; if the proposition is analyzed based on management philosophy or philosophical thinking, such as "Production, Quality and Benefit Linked Wage "Research on the Stabilization Effects of Talents" should focus on qualitative analysis. Therefore, the analysis method of the paper should be different from the topic, and the application should be selected and applied according to the discussion goal and content.

3.2 Drafting and writing of the first draft of the paper

3.2.1 Precisely conceived paper content layout outline

The scientific research paper is composed of three parts: the preamble, the main body, and the ending. Among them, the main content integrates multiple elements such as thesis thought, technology, data, method tools, language logic, etc. to Dacheng. Therefore, it is necessary to carefully conceive a solid beginning and ending, and make every effort to plan the main structure, rationally lay out the key content and central ideas, and ensure that it is done in one go. Based on the basic assumptions, judge the overall framework of the paper (preface, main body, conclusion) and the structure of the main content, figure out how many parts the main content should be divided into and what to write in each part, and use the second and third level heading serial numbers to list them out respectively , To form a three-level catalog style writing outline. In this way, writing specific content is like "filling the bones" with a strong structure, rigorous logic, and consistent text and topic.

3.2.2 The preamble is concise and clear

All beginnings are hard. The preface is the beginning of the thesis. It focuses on answering why you choose this proposition research, including the objective situation you are facing, the misunderstanding of the research object, the insufficiency, the defect or problem, the serious impact or harm, etc., or the disclosure of major gaps or gaps in the technical field. Important propositions ignored at the theoretical and ideological level, etc. In fact, language mainly describes the "research background" of the topic of the paper; secondly, it highlights the goal, significance, necessity or urgency of the paper's creation, in order to arouse readers' interest and attention.

3.3.3 Main content writing

(1) Q&A skills and continuous thinking

Writing a paper is to answer the "questions" of titles at all levels step by step. Therefore, the whole writing process has always been calm, carefully read and understand the "what to ask" of the title at each level, and you will answer your true thoughts without reservation, or express them clearly, completely and concisely in words, figures, charts and formulas as much as possible. The paper focuses on "theory". Therefore, the statement of facts and problems should be concise and comprehensive, the discussion should be systematic and in-depth, and logically take full account of the structural integrity of foundation, center or key point, result or outcome, etc. If the writing or modification of the paper is interrupted due to the delay in the release of experimental or experimental data and financial year report data, but your thinking and Thinking on the paper always continues, so as to "have the paper in mind". In this way, it is possible to stimulate better creativity or innovation and add color to the continued completion of the paper.

(2) Strictly grasp the rules of language use

Language, including vocabulary and grammar, is a "soft tissue" attached to and firmly "tied" the shelf structure of scientific research papers. Generally, students majoring in Humanities and Social Sciences often have stronger vocabulary, vocabulary richness and grammar skills than students majoring in science and engineering [6]. Graduate students need to pay attention to the seemingly "insignificant" details. There should be necessary interpretation and analysis after the chart. Analyze and comment comprehensively, pay attention to the primary and secondary arrangement order, core and key points, highlight the essentials, data collection, processing and application, selection and examples of analysis tools and methods, derivation of important results or conclusions, etc; you must carefully consider and repeatedly process the norms and skills of controlling Chinese language expression, from wording and sentence making, rhetorical grammar, punctuation and general logic. When depicting and describing a thing or concept, be sure to use professional terms or refine academic terms, and avoid vulgarization and colloquialism.

(3) Comprehensive modification and improvement

The first draft is only the "blank" or "semi-finished product" of the paper, which needs repeated modification and processing to gradually become "finished product". The first is "finished product" processing. We should focus on the relationship between elements and variables, the application and test process of model formulas, the index results reflected by each group of data values, constantly adjust and deduce, and the correctness and tightness of relevant relationships,

so as to verify the firmness and accuracy of its scientific proposition; When there is no reprocessing space and room for structural logic, arguments, demonstration methods and scientific principles, you should sincerely request and strictly follow the guidance of your tutor, and carefully adjust, modify and improve the title, content and even references for several times; Finally, start reviewing and proofreading word by word and sentence by sentence. We should be very patient and careful to consider every word, and do not miss any number, text, punctuation, word and sentence, title name and format, reference and annotation style, chart standardization and beauty, as well as the continuity of header and icon. In practice, graduate students should mobilize students to help "review the manuscript" to avoid mistakes in revision due to the limitations of personal thinking patterns and cultural differences.

3.4 Selection of contributing journals

We should study journals in advance, and determine the design of article genre and content, so as to make the articles comply with the design rules of relevant journals. Carefully read the "instructions for submission" before submission. The submission magazine has specific requirements for length and structure, and academic and non academic columns are set, such as word limit of the full text, tables and figures, references, etc. ^[7]; In addition, graduate students should grasp whether their papers are scientific research papers or academic papers, so as to select journals for submission. It should be noted that many journals have overlapping columns of scientific and technological articles and academic articles. Most high-level academic journals tend to add scientific research columns or non academic articles, and so do scientific research journals ^[8]. In this regard, graduate students should combine the characteristics of writing papers, carefully study and judge, and then carefully submit papers.

4. Conclusion

The research and publication of high-level scientific research papers are influenced by various subjective and objective factors, but the "internal cause" of the author plays a decisive role after all. First of all, the author should correct his thesis writing attitude, consciously realize his personal professional shortcomings, cultural deficiencies and ability defects, subjectively vow to "make up for it", make unremitting efforts to break through all kinds of troubles and obstacles, and persistently and actively overcome all kinds of technical difficulties and pressures, so as to write a good thesis, be employed by authoritative journals and achieve a good citation effect. Graduate students should avoid interrupting the process due to laziness in doing experiments, distorting the results due to speculation in scientific research, and doing papers by all means due to seeking names. High quality papers come from countless repeated precision scientific experiments and hard work. Those who are arrogant are more ambitious than those who are low

handed. Those who are mercenary will be eager for quick success and instant benefit, while those who are lucky will be opportunistic. Only by using traditional culture to create a solid style of study and good moral fashion, using diligent thought to shape the character of hard struggle and selfless selflessness, sincerely discussing and communicating with tutors, modestly learning practical professional knowledge, making practical use of school experimental conditions and modern scientific tools, seriously studying and understanding creative rules, laws and skills, can we write good articles with high quality.

About the author

Wang Shufeng (1963.8 -), male, Professor, born in Zhaozhou County, Heilongjiang Province, teacher and master director of the school of economics and management of Heilongjiang Bayi Agricultural Reclamation University, senior member of China Accounting Society, International Certified Public Accountant (ICPA). Main research interests: audit theory and practice; Tax accounting and tax planning. Xu Subo (1971.6 -) female, Professor, native of Heilongjiang, native of Laizhou, Shandong, teacher, doctor and master's director of the school of economics and management of Heilongjiang Bayi Agricultural Reclamation University. Main research direction: environmental resources accounting. Li Xiuli (1973.5 -), female, Professor, from Qinggang County, Heilongjiang Province, teacher, doctor and master's director of the school of economics and management of Heilongjiang Bayi Agricultural Reclamation University. Main research direction: intellectual property evaluation.

Reference

- [1] Wan Yuan. How to ensure the quality of doctoral students' training after canceling the requirements for issuing papers [n]. China Science Daily, August 10, 2021 (005)
- [2] Sun Tianci, Ma Yinqi. Investigation and Reflection on giving tutors the right to decide graduate graduation [J]. Graduate education research, 2021, No. 64 (04): 85-90. Doi: 10.19834/j.cnki.yjsjy2011.2021.04.13
- [3] Kniest P . Federal budget: Contradictions, confusions and concessions in Pyne's higher ed policies[J]. Advocate Newsletter of the National Tertiary Education Union, 2014. 21(3).
- [4] Dong Qingmei. Exploration on strengthening the cultivation of Postgraduates' scientific research and innovation ability under the pre defense system [J]. Educational observation, 2021, v.10; No.315(41):88-90+113.
- [5] Research on vocabulary richness of graduate thesis based on Inre model [J]. Comparative study of cultural innovation, 2021, v.5; No.158(14):143-146+163.

- [6] Wang Xiuhong. Analysis on improving the writing quality of graduate scientific and technological papers by "graduate + editor" mode [J]. News research guide, 2021, v.12; No.221(17):39-42.
- [7] Zhai Wanyin. Non academic articles in international high-level Sci-tech Journals: length, structure and publicity of academic papers [J]. Research on Chinese sci-tech journals, 2020,31 (12): 1467-1485
- [8] Zhai Wanyin. Characteristic analysis of non academic columns in international high-level scientific and technological journals [J]. Research on Chinese scientific and technological journals, 2020,31 (08): 859-866