

LEVEL OF COMPETENCE OF PRE-SERVICE TEACHERS IN RESEARCH WRITING

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ABSTRACT

This study assessed the level of competence of pre-service teachers in research writing. Using a descriptive research design, 81 pre-service teachers from President Ramon Magsaysay State University–Botolan Campus and Polytechnic College of Botolan served as respondents, selected through convenience sampling. Data was collected through a validated researcher-made questionnaire. Results showed that respondents had a very satisfactory level of competence in research writing, particularly in their commitment, understanding of research background, methodology, referencing, and data analysis. A significant difference was found in the level of commitment and understanding between male and female respondents, while age, civil status, and income showed no significant difference. Findings revealed that respondents possessed fundamental research writing skills and could advance to higher proficiency through continued mentoring and research engagement.

Keywords: Pre-service teachers, Research writing, Competence, Research skills

INTRODUCTION

Research writing is an essential academic skill for pre-service teachers, as it develops critical thinking, analytical, and communication abilities. Conducting research helps educators refine their teaching practices and contribute to educational development. However, students often encounter challenges such as limited research knowledge, lack of financial support, and inadequate motivation (Ulla, 2017; Fuentes, 2017). Several studies emphasized that research capability is a critical factor in teacher education, yet many students demonstrate difficulty in research problem formulation, citation, and methodology (Basu, 2020; Bell, 2016). This study aimed to determine the level of competence of pre-service teachers in research writing and to identify differences in competence when grouped by demographic factors.

RESEARCH PROBLEM

Pre-service teachers often face challenges in research writing due to limited training, inadequate guidance, and lack of confidence. These difficulties affect their ability to formulate problems, review literature, and analyze data effectively. Since research writing is essential in developing professional and academic competence, this study aims to assess the level of competence of pre-service teachers in research writing and determine whether demographic factors such as age, sex, civil status, and family income influence their performance.

OBJECTIVES

- To assess the level of competence of pre-service teachers in research writing across key areas such as commitment, understanding, methodology, referencing, and data analysis.
- To determine whether there are significant differences in their research writing competence when grouped according to age, sex, civil status, and family monthly income.
- To propose recommendations and strategies that will help enhance the research writing skills of pre-service teachers.

MATERIAL AND METHODS

A descriptive research design was employed to describe the level of competence of pre-service teachers in research writing. Respondents: 81 Bachelor of Elementary Education students from PRMSU-Botolan Campus and PCB were chosen through convenience sampling. Instrument: A self-made questionnaire validated by experts (mean validity score of 3.52, “acceptable”). The tool consisted of sections on respondents’ profiles and their competencies in research writing. Data Collection: Permission was

sought from the College of Education Chairpersons. The survey was administered personally, and responses were tabulated and analyzed. Statistical Tools: Percentage, Weighted Mean, and Analysis of Variance (ANOVA) were used to interpret data.

Part A: Demographic Profile consists of 4 items.

Part B: Pre-service Teacher competencies in research writing scale. The instrument consists of 20 items with 4-point Likert scale measurement related to their commitment, understanding in a background of the study, methodology, referencing and data analysis. The overall rating was very satisfactory.

RESULTS

Table I: Distribution of Respondents

SCHOOL	THIRD YEAR	FOURTH YEAR	TOTAL
PCB	<u>27</u>	<u>15</u>	<u>42</u>
PRMSU BC	30	14	44
TOTAL	<u>57</u>	<u>29</u>	<u>86</u>

As shown on the table, there were 42 and 44 pre-service teacher respondents from PCB and from PRMSU BC respectively with a total of 86 respondents of the study. The pre-service teachers are taking-up Bachelor of Elementary Education (BEEd) program.

Table II: Frequency and Percentage Distribution of Respondents' Profile

Age	Frequency	Percentage
18-20	18	22.2
21-23	53	65.4
24 and above	10	12.3
Total	81	100.0
Sex	Frequency	Percentage
Male	25	30.9
Female	56	69.1
Total	81	100.0
Marital Status	Frequency	Percentage
Single	74	91.4

Married	7	8.6
Total	81	100.0
Family Monthly Income	Frequency	Percentage
25,000 below	74	91.4
25,000-31,999	4	4.9
32,000-37,999	2	2.5
44,000 and above	1	1.2
Total	81	100.0

Table II shows the frequency and percentage distribution of respondents' profile. The study involved 81 pre-service teachers, mostly aged 21–23, female, single, and belonging to families earning ₱25,000 and below monthly. Findings revealed that they demonstrated a very satisfactory level of competence in research writing with an overall weighted mean of 2.91.

Table III: Level of Competence in Writing research in Terms of Commitment

Statement Indicator	Weighted Mean	Qualitative Interpretation	Rank
Research is important to my career.	2.96	Very Satisfactory	2
Creating research enhances my critical thinking.	2.75	Very Satisfactory	5
I have enough patience to follow the certain methods in conducting research.	2.81	Very Satisfactory	3
I have enough knowledge to formulate the parts of the research.	3.16	Very Satisfactory	1
Employing research approach in my profession is needed.	2.78	Very Satisfactory	4
Overall Weighted Mean	2.90	Very Satisfactory	

Pre-service teachers show strong commitment to research writing. They feel confident in formulating research components and recognize its importance for their careers. While they also value patience and professional approaches, they rate critical thinking benefits slightly lower. Overall, they possess the knowledge and motivation to engage in research. As Canisi and Lambenicio (2023) note, writing serves many purposes but must always be clear, organized, and well-structured.

Table IV :Level of Competence in Writing research in terms of Understanding in the Background of the Study.

Statement Indicator	Weighted Mean	Qualitative Interpretation	Rank
My literacy skill is enough for composing related literature.	3.14	Very Satisfactory	1
I can defend our research proposal through verbal explanation.	3.02	Very Satisfactory	3.5
Presenting written research methodology is easy.	3.12	Very Satisfactory	2
I can form logical conclusion.	3.02	Very Satisfactory	3.5
I can formulate clearly the statement in research problem.	2.96	Very Satisfactory	5
Overall Weighted Mean	3.05	Very Satisfactory	

Pre-service teachers from Polytechnic College of Botolan and President Ramon Magsaysay State University Botolan Campus demonstrated satisfactory competence in writing research, particularly in literacy and methodology. The highest-rated skill was composing related literature (mean = 3.14), followed by presenting research methodology (mean = 3.12). However, their ability to formulate clear research problems ranked lowest (mean = 2.96), indicating a need for improvement in this area. According to Enago Academy (2017), a well-developed background of the study enhances the clarity, relevance, and impact of research. Therefore, teacher education programs should focus on strengthening skills in problem formulation and verbal defense through targeted support like workshops and mentorship to improve overall research quality.

Table V: Level of Competence in Writing Research in terms of Determining Methodology and Concept of the Study

Statement Indicator	Weighted Mean	Qualitative Interpretation	RANK
Using technology in our research is helpful.	2.81	Very Satisfactory	2
My understanding in technology tols is enough to formulate in our research.	2.84	Very Satisfactory	1
I have enough	2.74	Very Satisfactory	3.5

background knowledge in using technology tools.			
I can find easily the review of literature through technology.	2.73	Very Satisfactory	5
Using technology, I can select cite and synthesize the parts of research.	2.74	Very Satisfactory	3.5
Overall Weighted Mean	2.77	Very Satisfactory	

Pre-service teachers showed a very satisfactory level of competence in using technology for research, especially in formulating ideas and recognizing its helpfulness. However, consistent lower ratings in areas like locating literature and synthesizing content suggest room for improvement. To strengthen digital literacy and critical thinking, schools should enhance technology-focused training in research education. As Williams and Beam (2019) noted, digital tools boost students’ writing skills and engagement in learning.

Table VI: Level of Competence in Writing research in terms of Use of Referencing and Framework of the Study

Statement Indicator	Weighted Mean	Qualitative Interpretation	RANK
I really understand the research subject.	2.75	Very Satisfactory	5
The guidance of our instructor is very helpful.	2.85	Very Satisfactory	4
Conducting seminars and workshops, by our instructor is helpful.	2.98	Very Satisfactory	2
Our instructor explains well and gives all knowledge in conducting research.	2.88	Very Satisfactory	3
Our instructor gives a reliable cites that can help to improve our research topic.	3.05	Very Satisfactory	1
Overall Weighted Mean	2.90	Very Satisfactory	

Pre-service teachers demonstrated a very satisfactory level of competence in referencing and framing their research, with the highest rating given to instructors providing reliable sources (mean = 3.05). While seminars, guidance, and explanations were also valued, understanding the research subject ranked lowest (mean = 2.75). These findings suggest that students are aware of the importance of

proper citation in supporting claims and respecting intellectual property. As emphasized by UNSW (2023), citations help students navigate their field and acknowledge scholarly contributions. To further enhance these skills, institutions should integrate scaffolded learning and citation-focused instruction into the research curriculum, promoting academic integrity and effective scholarly communication.

Table VII: Level of Competence in Writing research in terms of Data Analysis and Interpretation

Statement Indicator	Weighted Mean	Qualitative Interpretation	RANK
I gather and analyze data with intellectual honesty using suitable techniques.	2.74	Very Satisfactory	3.5
I have enough resources to conduct a research study.	2.80	Very Satisfactory	2
I can present written research methodology with reliable resources.	2.94	Very Satisfactory	1
Using my resources, I can find written research study that helps to improve our topic.	2.74	Very Satisfactory	3.5
I have reliable source to support our related literature.	2.51	Very Satisfactory	5
Overall Weighted Mean	2.75	Very Satisfactory	

Pre-service teachers demonstrated a very satisfactory level of competence in conducting research, particularly in presenting methodology and accessing reliable resources. The highest-rated indicator was their ability to present written methodology (mean = 2.94), while sourcing support for related literature ranked lowest (mean = 2.51). These findings suggest that while students are confident in data analysis and resource use, they may need more support in evaluating and citing literature effectively.

As Vaganova et al. (2017) emphasized, successful research depends not only on skills but also on personal qualities like honesty, independence, and critical thinking. To strengthen these traits, educational programs should incorporate activities that promote deeper inquiry, independent exploration, and guided practice in literature evaluation. This approach will help students become more ethically grounded and intellectually engaged in their research work.

DISCUSSION

The study found that pre-service teachers generally possess strong foundational research writing competencies. Female respondents tended to show higher commitment and understanding, possibly due to greater engagement and responsibility in academic tasks. These findings align with previous studies

emphasizing gender influence in academic performance (Garra-Alloush et al., 2021). The results highlight the importance of continuous training in research writing, especially in developing problem formulation, data analysis, and proper referencing skills. Incorporating technology and mentorship in research instruction can further enhance competence and confidence among students.

CONCLUSION

Pre-service teachers from PRMSU and PCB exhibit a very satisfactory level of competence in research writing. Their proficiency is evident in commitment, understanding, and the ability to use research tools effectively. While demographic factors such as age and income had no impact, gender differences slightly influenced research commitment and comprehension. The findings underscore the need for consistent research mentoring and equal learning opportunities for all students to strengthen research culture in teacher education.

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