

Research Article

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Examining Graduate Students' Research Performance through Competency and Information-Seeking Skills

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Abstract

Background/purpose. This study aims to describe the research performance, competency levels, and information-seeking skills of graduate school writers, and to examine whether these skills significantly correlate with research performance. It also aims to identify which specific aspects of competency and information-seeking skills most strongly influence research performance. Furthermore, this study seeks to explore the experiences of graduate students in writing their theses or dissertations and to recommend support programs that address their identified needs during the writing stage.

Materials/methods. This study utilized a quantitative descriptive-correlational design to explore the relationships among graduate students' research performance, competency levels, and information-seeking skills, and to determine which factors most influence performance. The participants were 106 graduate students enrolled in Thesis and Dissertation Writing courses at Bulacan State University during the Academic Year 2023–2024.

Results. Graduate school writers generally exhibit strong research performance, with nearly half achieving high ratings and a quarter excelling. While they demonstrate solid information-seeking and literacy skills, such as evaluating sources, using databases, and citing correctly, these abilities do not directly correlate with their research performance. Despite their competence, many face significant challenges throughout the thesis and dissertation writing process.

Conclusion. Graduate students persist in completing their research, confronting resilience and commitment. Providing targeted support in research methodology, academic writing, and time management could help them solve problems more effectively.

1. Introduction

Writing a thesis or dissertation is a defining milestone in graduate education and a crucial measure of academic success. For many graduate students, this journey is not without struggle. According to Holme (2022), the research and writing process demands strong skills in critical thinking, time management, and information gathering, as well as mastery of research methodologies and the ability to locate, evaluate, and use scholarly sources effectively. Research performance reflected in the quality and timely completion of one's work is shaped by multiple competencies that extend beyond technical knowledge into habits of inquiry and persistence. Yet, despite its importance, many graduate students encounter challenges in sustaining momentum, finding reliable information, or building confidence in their academic writing (Oko-Odoi, 2024).

Recent literature echoes these concerns. It is claimed in Research that digital and information literacy is associated with academic achievement, such that students who have extraordinary ability can easily adapt to online learning and behave in self-regulated learning (Chen et al., 2025). The Research of Naidoo et al. (2023) and Miao et al. (2025) highlights that writing self-efficacy and a sense of belonging impact the research output of graduate students in online/blended programs. In the reviews of Pinto (2024), however, it is shown that though universities seem to call more and more for literacy in media, information, and data, assessments vary and occasionally are not consistent. However, the latter Research usually caters to undergraduates or involves an international environment, resulting in a knowledge gap among graduate students in the Philippine higher education system, particularly.

This gap is significant. Along with this, the limited understanding of how these factors influence research performance suggests that institutions may be overlooking opportunities to implement targeted interventions, such as research competency workshops, information literacy programs, and mentoring initiatives responsive to the actual needs of graduate students. By examining these dimensions, this study aims to contribute evidence that is both context-specific and actionable.

The present study does more than measure competencies and skills; it provides a window into the lived challenges of graduate students as they write their theses or dissertations. Students' challenges enable institutions to design targeted support services, improve mentoring, and adjust curricula to foster confidence and skill. These findings can guide administrators and faculty in implementing evidence-based strategies that strengthen research training and reflect students' lived realities.

This study seeks to determine the relationships among graduate students' research performance, competency levels, and information-seeking skills, and to identify their experiences in writing research papers. This will also answer the following research questions:

1. How may the research performance of the Graduate School writers be described?
2. How may the level of competency and information-seeking skills of the Graduate School writers be described?
3. Are research competency and information-seeking skills significantly correlated with research performance?
4. Which specific aspects of competency and information-seeking skills most significantly influence the research performance of graduate school writers?
5. What are the experiences of graduate school writers when writing their thesis or dissertation?
6. What support programs can be recommended to the graduate school to address the needs of students in the writing stage to complete their thesis or dissertation?

2. Literature Review

The Information Literacy Framework for Higher Education (American Library Association, 2015) serves as the theoretical framework of this Research, which conceptualizes information literacy when there is a need to locate, evaluate, and use the needed information efficiently. Under this framework, graduate students' research competency is realized as their ability to utilize higher-order information skills like critical analysis of sources, literature integration, and ethical information. The connection between information-seeking abilities and research performance is made clear through putting the study within this framework: students with greater information literacy levels are more likely to go through research processes successfully. However, students' challenges, such as managing commitments and time management, emphasize the necessity of organized academic support and mentoring to develop these literacies further.

In addition, Bandura's Social Cognitive Theory (1986) offers the behavioral and motivational viewpoint, emphasizing how their drive and sense of self-efficacy shape students' capacity to use these literacies in Research. By incorporating these frameworks, the study recognizes that self-belief in utilizing these skills, despite challenges such as time management, conflicting duties, and skill-based literacies, positively impacts graduate research performance.

Consequently, the combination of Bandura's Social Cognitive Theory (1986) and the Information Literacy Framework (American Library Association, 2015) emphasizes that graduate students' research performance is influenced by their self-efficacy, motivation, and persistence in using these skills in the face of both academic and personal challenges, in addition to their capacity to find, assess, and use information.

3. Methodology

3.1. Research Design

This study employed a quantitative approach using a descriptive–correlational design. A descriptive–correlational study is appropriate when the goal is to determine the extent to which variables are related without manipulating them (Creswell & Creswell, 2018). The researcher selected the design to examine the relationships among graduate students' research performance, competency levels, and information-seeking skills, as well as to identify which specific aspects of competency and information-seeking skills significantly influence research performance.

3.2. Participants

The participants were graduate students enrolled in Thesis and Dissertation Writing courses at the Bulacan State University Graduate School during Academic Year 2023–2024. A total of 106 respondents took part in the study. To ensure reliability, the survey instrument was pilot-tested with 10 graduate students who were not part of the final respondents.

3.3. Data Collection Instrument

Data were collected using a survey questionnaire adapted and modified from Mohd et al. (2012) to reflect current research trends and the objectives of the present study. The instrument measured research performance, competency levels, information-seeking skills, and thesis or dissertation writing challenges. Additional items on challenges were included based on relevant literature. The questionnaire underwent expert validation to confirm its appropriateness and accuracy. A pilot test with 10 graduate students produced a Cronbach's alpha of 0.72, indicating acceptable reliability (Tavakol & Dennick, 2011). The final survey was administered via Google Forms for accessibility and convenience.

3.4. Data Analysis

The data collected were analyzed using both descriptive and inferential statistics. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to describe the research performance levels, competency, and information-seeking skills. Pearson's correlation coefficient (r) was employed to examine the relationships among these variables. At the same time, regression analysis was conducted to identify the aspects of competency and information-seeking skills that significantly influence research performance. In addition, challenges and proposed support programs were analyzed using frequency, percentage, and ranking to highlight the most common issues and suggested programs.

3.5. Ethical Considerations

This study strictly adhered to ethical research standards. Informed consent was obtained from all participants, who were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without penalty. Anonymity and confidentiality were ensured by keeping personal identifiers separate from survey responses and reporting findings in aggregate form only. Data were stored securely and accessible only to the researcher. The Bulacan State University Graduate School Research Ethics Committee reviewed and approved the research protocol prior to data collection, ensuring compliance with institutional and ethical guidelines (Creswell & Creswell, 2018).

4. Results

4.1. Performance in the Research of the Graduate School Writers

Students' overall academic performance and mastery of research-related competencies are depicted by the frequency distribution of their research grades.

Table 1. Frequency Distribution of Students' Grades in Research

Grade	Frequency	Percent
Valid	1.00 25	23.6
	1.25 50	47.2
	1.50 24	22.6
	1.75 7	6.6
Total	106	100.0

The table above shows the frequency distribution of students' grades in Research, with 106 students evaluated. There are four grade categories: 1.0, 1.25, 1.5, and 1.75. Out of 106 students, 50 (47.2%) received a grade of 1.25. The second most common grade was 1.00, received by 25 students (23.6%), while 24 students (22.6%) obtained a grade of 1.5. Only seven students (6.6%) received a grade of 1.75.

4.2. Level of Competency and Information-Seeking Skills of the Graduate School Writers

Graduate school writers' proficiency and information-seeking abilities demonstrate their ability to efficiently locate, assess, and apply information to support their studies. This allows students to include reliable sources, use critical thinking, and exhibit scholarly rigor; these abilities are crucial for generating academic work of the highest caliber.

Table 2. Level of Competency in Conducting Research

	Statements	Mean	Std. Deviation	Descriptive Rating
1	Searching for a research problem	3.41	.814	Moderately Competent
2	Ability to select a research topic	3.36	.795	Moderately Competent
3	Clear presentation of research gaps	3.38	.786	Moderately Competent
4	Developing research questions	3.34	.767	Moderately Competent
5	Doing a literature review	3.40	.836	Moderately Competent
6	Designing an experimental study	3.19	.841	Moderately Competent
7	Selecting an instrument	3.26	.876	Moderately Competent
8	Developing an instrument	3.52	.907	Competent
9	Collecting survey data	3.31	.844	Moderately Competent
10	Selecting an appropriate research method	3.30	.864	Moderately Competent
11	Choosing an appropriate research design	3.43	.840	Moderately Competent
12	Interpreting the result of a research study	3.48	.864	Moderately Competent
13	Utilization of graphs, tables, and charts in the presentation of findings	3.45	.806	Moderately Competent
14	Supporting findings with literature and studies	3.56	.874	Competent
15	Writing conclusions and recommendations	3.51	.897	Competent
16	Writing citations (in-text and reference list citations) in APA format	3.48	.875	Moderately Competent
17	Writing an abstract	3.23	.897	Moderately Competent
18	Preparing a manuscript for publication	3.23	.891	Moderately Competent
	TOTAL	3.38	.850	Moderately Competent

The table implies that graduate school students' highest competency level is Supporting Findings with Literature and Studies, with a mean of 3.56 and a standard deviation of 0.874. This indicates that the students are confident in integrating related literature into their Research, reviewing articles, and synthesizing findings. The standard deviation suggests that participants have relatively similar responses.

The following highest competency is Developing an Instrument, with a mean of 3.52 and a standard deviation of 0.907. This reflects a high level of competency in creating and developing research instruments such as surveys, interview guides, and questionnaires, as well as conducting data collection. However, the relatively high standard deviation indicates that some students struggle in this area. On the other hand, the competency with a low mean of 3.23 is Writing an Abstract, indicating that graduate school students find it challenging to summarize essential key points effectively. The standard deviation of 0.897 indicates significant variation in their abilities. Most students struggle to get their Research ready for publication, as seen by the mean score of 3.23 for Preparing a Manuscript for Publication. The 0.891 standard deviation indicates variability, with some

students doing well and others needing help. The lowest competency is Designing an Experimental Study, with a mean of 3.19 and a standard deviation of 0.841. This indicates that most students find it challenging to design studies investigating relationships between variables, although a few demonstrate proficiency in this skill.

Table 3. Information-Seeking Skills

	Statements	Mean	Std Deviation	Descriptive Rating
1	I planned the types of information that I needed, like books, articles, journals, and others.	3.87	.817	Agree
2	I am aware that information found in journals is more often checked, edited, and criticized compared to information found in magazines.	4.07	.772	Agree
3	I know that information can be obtained through various means (e.g., electronic media, images, audio, and video).	4.15	.802	Agree
4	I am aware that the primary source is the first source (source) that records work related to the literature.	4.09	.868	Agree
5	I am aware that the secondary source discusses the work of others.	4.02	.839	Agree
6	I use other sources besides the library in my institution, such as the inter-library loan service.	3.92	.841	Agree
7	I identify and look for synonyms, themes, or keywords that can be used to find information based on my topic.	4.07	.796	Agree
8	To find information, I read general texts like dictionaries or encyclopedia articles to better understand the terminology used in my topic.	3.95	.785	Agree
9	I need to broaden my search using keywords, given that the existing source of information indicates that my topic of Research is too narrow.	4.06	.754	Agree
10	I can use shortcuts in my search, or I can also use root words to start my search.	3.98	.805	Agree
11	I am aware that I can find an e-book based on the title given.	4.08	.765	Agree
12	I have to search according to the field to identify the titles of the materials according to a particular field.	4.02	.743	Agree
13	I will look at the strategy to find information again to get exactly what I want, if it is not successful the first time.	3.98	.730	Agree
14	I usually evaluate the writer's expertise to see if he/she is qualified in the written field.	3.93	.759	Agree
15	I evaluate the accuracy of the content by reading other sources mentioned by the writer.	4.01	.750	Agree

	Statements	Mean	Std Deviation	Descriptive Rating
16	I understand the contextual effect, for instance, how various cultures, history, and geography can influence the perspective of the information.	4.00	.743	Agree
17	I realize that time is a factor that influences the relevance of the information to my research topic.	4.12	.789	Agree
18	I get the confirmation of my understanding of a certain topic by getting an opinion or an expert's view (through individual interviews, email, telephone, etc.)	3.98	.756	Agree
19	When searching for information, I arrange each item systematically.	3.99	.799	Agree
20	I can adjust to the various quotation styles used.	3.90	.804	Agree
21	When searching for information using a database, I know how to store it in my drive or email it to my email.	3.55	.906	Agree
22	I usually use artificial intelligence (AI), like ChatGPT, to seek information.	4.06	.779	Agree
23	I write down the important concepts myself using my own words.	4.03	.774	Agree
24	I use the main ideas obtained from the information researched to support my topic.	3.72	.848	Agree
25	I combine the main ideas from Artificial Intelligence (AI) sources or more to form a new idea.	3.93	.784	Agree
26	I can construct my conclusion based on the information gathered.	3.93	.780	Agree
	TOTAL	3.98	.793	Agree

The highest mean score (4.15) was recorded in graduate students' awareness of how information can be obtained from various means and sources. The relatively low standard deviation (0.802) indicates that many students consistently agree they are competent in this area. The second-highest mean (4.12) was in recognizing the importance of time as a factor influencing the relevance of information, with a standard deviation of 0.789, suggesting consistent responses. In terms of search strategies, students reported high competency in identifying synonyms, themes, and keywords ($M = 4.07$, $SD = 0.796$) and in the comfortable use of Artificial Intelligence (AI) tools such as ChatGPT for seeking information ($M = 4.06$, $SD = 0.779$). These values indicate adaptability to modern research techniques, with minimal response variation. Students also agreed that academic journals are more credible than magazines, reflected in a mean of 4.07 and a standard deviation of 0.772, demonstrating reliance on peer-reviewed sources.

On the other hand, the lowest competency was in database management skills ($M = 3.55$, $SD = 0.906$), suggesting difficulties in storing and managing database results. Another lower mean was observed in integration and synthesis of Research ($M = 3.72$, $SD = 0.848$), showing challenges in combining and using ideas from sources to support research work. Citation and formatting

proficiency also yielded a relatively low mean ($M = 3.90$, $SD = 0.804$), reflecting student inconsistencies in referencing standards.

4.3. Relationship Between the Research Performance and Level of Competency and Information-Seeking Skills

Table 4 shows that the level of competency does not have a significant relationship with the research grades of the students since the p-value is more significant than 0.05. Also, there is a weak negative correlation between the level of competency and the research grades of the students ($r = -.125$). The Correlation between the students' research grades and their information-seeking skills shows a negative correlation ($r = -.086$), and the p-value is more significant than 0.05, implying that the relationship is not statistically significant.

Table 4. Correlation between the Students' Research Grades and Information-Seeking Skills

		Research	Competency	Information S
Grade in Research	Pearson Correlation	1	-.125	-.086
	Sig. (2-tailed)		.202	.380
	N	106	106	106
Competency	Pearson Correlation	-.125	1	.572**
	Sig. (2-tailed)	.202		.000
	N	106	106	106
Information_S	Pearson Correlation	-.086	.572**	1
	Sig. (2-tailed)	.380	.000	
	N	106	106	106

4.4. Aspects of Competency and Information-Seeking Skills Most Significantly Influence the Research Performance of Graduate School Writers

Table 5. Research Competency Regression Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.686	17	.040	.882	.596 ^b
	Residual	4.027	88	.046		
	Total	4.713	105			

Table 5 shows the overall regression between the dependent variable, Grade in Research, and the independent variables' research competency skills. The overall regression coefficient of $p = 0.596$ suggests that research competency skills are not statistically significant, implying that they do not explain much of the variance in the dependent variable. On the other hand, the low F-statistics of .882 indicate that competency skills do not significantly influence the grades of graduate school writers. The model may have little predictive potential.

Table 6. Information Seeking Skills Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.005	25	.040	.868	.646 ^b
	Residual	3.708	80	.046		
	Total	4.713	105			

The relationship between the independent variables (Information-Seeking Skills) and the dependent variable (Grades in Research), as well as the overall model fit, is shown in the table. According to the analysis, graduate school writers' research grades are not substantially impacted by their ability to seek information. The p-value of 0.646 and the F-statistic of 0.868 show that the selected criteria are not significant predictors of research grades. In other words, because the independent variables do not significantly affect the dependent variable, the low F-statistics and p-value imply that they are insufficient to explain the research performance.

4.5. The Experiences of the Graduate School Writers

Among the one hundred six (106) graduate school writers currently enrolled in the different programs at the Bulacan State University-Graduate School, all of them encountered several difficulties and problems while writing their thesis or dissertation. These challenges are listed below. This led to a state of dilemma and confusion about their thesis or dissertation writing journey. Despite these uncertainties and problems, graduate school writers had to proceed with their thesis or dissertation writing, as it was a final requirement for earning their master's and doctorate degrees in graduate school.

Table 7. Difficulties in Writing Research

Rank	Difficulties in working on thesis/ dissertation	f	%
1	Balancing my research workload with personal and professional responsibilities.	97	91.5
2	Experiencing self-doubt and a lack of confidence in my research abilities.	66	62.3
3	Struggling to find relevant and credible sources for my Research.	56	52.8
4	Struggling to stay motivated and focused over a long research period.	55	51.9
5	Limited access to needed resources, such as books, journals, or software.	53	50
6	Challenges in organizing my ideas and writing clearly.	45	42.5
7	Difficulty understanding and applying research methodologies.	37	34.9
8	Facing technical issues, like analyzing data or formatting my document.	33	31.1
9	Receiving inconsistent or delayed feedback from my adviser.	20	18.9

Table 7 indicates that graduate School writers encountered numerous hurdles while working on their thesis or dissertation. The most frequently cited problem, according to 91.5% of respondents, was balancing Research with one's personal and professional life. Self-doubt and a lack of confidence came next at 62.3%. Fitful sourcing was a problem for more than half of the writers (52.8%), whilst remaining motivated and focused through the extended periods involved was a factor for 51.9%. Some others also stated that they had restricted access to resources, such as books, journals, and

software. Organizing ideas and writing were difficulties for 42.5% while 34.9% had issues with research methodologies. Data analysis and formatting were concerns for about 31.1% at the technical level. Finally, 18.9% of them stated that inconsistent or delayed feedback from their advisers impaired their work.

Table 8. Challenging Parts of the Research Process

Rank	Difficulties in working on a thesis/ dissertation	f	%
1	Ability to select a research topic	20	47.2
2	Searching for a research problem	47	44.3
2	Developing an instrument	47	44.3
4	Doing a literature review	41	38.7
5	Crafting research questions	39	36.8
5	Clear presentation of research gaps	39	36.8
7	Choosing an appropriate research method and design	33	31.1
8	Selecting an appropriate research method	27	24.5
9	Interpreting the result of a research study	26	22.5

Table 8 shows that the graduate research writers assigned specific challenges to the practice process. More people were supposed to find selecting research topics, as it had the highest number of respondents who claimed that they found it difficult at 47.2%. Next, we searched for research problems and developed an instrument, both of which accounted for 44.3% of respondents cited as challenges. The literature review gave trouble to 38.7% of respondents. Formulating research questions and presenting research gaps were perceived to be difficult by 36.8 percent of respondents. Thirty-one point one percent raised issues about developing a suitable method and design. In contrast, 24.5 percent remarked that selecting a method was challenging. Lastly, interpreting results was also regarded as a challenge by 22.5 percent of respondents.

Table 9. Challenges that Delayed Research Writing

Rank	Difficulties in working on thesis/ dissertation	f	%
1	Balancing Research with other responsibilities slowed me down.	77	72.6
2	The workload was so overwhelming that I kept postponing research tasks.	52	49.1
3	Finding reliable sources delayed my work.	38	35.8
4	Lack of confidence in writing held me back.	37	34.9
4	Struggling to finalize my topic has delayed my start.	37	34.9
4	Burnout forced me to take breaks.	37	34.9
7	Accessing materials took too much time.	23	21.7
8	Technical issues with data analysis caused delays.	22	20.8
8	Lack of direction	22	20.8
10	Revisions took longer due to unclear feedback from the adviser	19	17.9

Table 9 gives information, from the perspective of graduate school writers, on many delay variables for research writing. These include balancing Research with other responsibilities, which are reported by 72.6 percent of the respondents. Close to half of the population (49.1 percent) confessed that they failed to take on the tasks due to a heavy workload. Delay was because one-third, or 35.8 percent, found it hard to get reliable sources, and about a third were held back due to lack of confidence in writing (34.9%), having difficulty finalizing their topic (34.9%), and burnout that forced them to take breaks (34.9%). Access to needed materials slowed progress for 21.7 percent, while technical issues with data analysis and lack of direction affected 20.8 percent. Finally, 17.9 percent reported that revisions took longer due to unclear feedback from their adviser.

4.6. Programs to Address the Needs of Students to Complete Their Thesis or Dissertation

Table 10. Propose Programs

Rank	Recommendations from the participants	%	f
1	Provide more precise and more detailed guidelines for thesis and dissertation writing.	64.2	68
1	Offer regular workshops on research methods and academic writing.	64.2	68
3	Increase access to research resources like journals, books, and databases.	55.7	59
4	Improve the mentoring programs for graduate students.	50	53
5	Offer technical support for tools like statistical software and citation managers.	47.2	50
6	Provide more flexible schedules or deadlines to accommodate personal challenges.	44.3	47
6	Conduct regular check-ins or consultations to track progress and address issues.	44.3	47
8	Assign more accessible and supportive advisers.	40.6	43
9	Introduce funding or financial aid for research-related expenses.	34.9	37
10	Organize sessions on time management and stress management.	34	36

The answers provided by the participants revealed a strong demand for more straightforward writing guidelines and skill-building opportunities, suggesting that many students struggle with thesis and dissertation writing. Without clear instructions, they often face delays, frustration, and the need for multiple revisions. Results also indicate that students need more research resources and mentoring programs, showing that access to information and expert guidance remains challenging. At the same time, participants emphasized the importance of holding regular research workshops, as these are viewed as highly beneficial for developing academic writing and research skills. Students highlighted that workshops make complex concepts easier to understand and provide opportunities for interactive learning. Based on the interviews and quantitative results, the most requested seminar topics include (a) how to search for a research problem, (b) how to select a research topic, and (c) how to develop a research instrument. These areas were consistently identified as among the most challenging parts of the research process. Another significant finding relates to access to resources. Students stressed the importance of accessing electronic databases, journals, and other scholarly materials. They believe that such resources strengthen the quality of their Research and writing.

Finally, mentoring emerged as a key need. Students reported that practical guidance from mentors, particularly during the early stages of Research, such as topic selection and problem refinement, helped them navigate difficulties and provided much-needed clarity.

5. Discussion

5.1. Graduate School Students' Performance in Research

According to the findings, nearly half of the graduate school students exhibit strong research performance and writing skills, reflected by their 1.25 grade. Higher-achieving students are better at Research because they can synthesize literature, create reliable approaches, and critically assess data, according to Golde (2016). Furthermore, exceptional research performance is highlighted by one-fourth of students who received a 1.00 grade. On the other hand, the 6.6% who obtained a 1.75 mark indicate that a tiny percentage of students had difficulties with research writing, but the 22.6% who received a 1.5 grade show satisfactory ability. According to Al-Abyadh et al. (2022), grades measure overall academic success and subject-matter mastery. Students' capacity to understand complicated concepts and apply theoretical knowledge in academic and practical contexts is especially reflected in their research grades in graduate school. According to Sitompul (2022), research performance highlights students' areas of strength and growth in terms of information synthesis, methodology development, and findings analysis.

5.2. Graduate Students' Competency in Research

The findings imply that graduate students exhibit higher confidence in integrating literature and producing instruments, reflecting their capacity to evaluate academic Research and create data-gathering methods. However, more complex research tasks like writing abstracts, preparing manuscripts for publication, and designing experiments present difficulties. A primary expectation in graduate-level education is that research outputs be translated into publishable academic work.

As highlighted by Meerah et al. (2012), the ultimate objective of graduate education is to transform students into competent researchers with the knowledge to conduct and share Research in their areas. The findings of the study emphasize the necessity of focused academic guidance and support to address the areas in which graduate students struggle most, especially when it comes to turning complete Research into outputs that can be published and creating more complicated studies. These gaps must be filled to improve research readiness and guarantee that graduate students are sufficiently prepared to handle the rigors of scholarly inquiry.

5.3. Relationship of Graduate Students' Research Performance with Competency and Information-Seeking Skills

Based on this result, other factors influence the research grade or performance of the graduate students more than the level of research competency and information-seeking skills. These aspects could include the role of educators, mentorship, self-efficacy, or grading policies. According to Smith (2017), advancements and difficulties in graduate education highlight faculty members' involvement in developing research competencies. Gardner et al. (2017) discovered that good mentorship and coaching from faculty significantly increased graduate students' research productivity and success. Dolan and Johnson (2017) investigated mentoring through research projects and its favorable impact on undergraduate students' research self-efficacy. They explored the effect of mentorship on students' research self-efficacy using research projects. The findings revealed that mentoring increases students' confidence in their research journey, emphasizing the value of mentorship in developing students' research skills and expertise. Cain et al. (2021) suggested that the academe review evidence on the purpose, impact, and interpretation of grades in the educational process. Despite difficulties and probable opposition, educators should modify grading processes to improve accuracy, interpretability, and learner progress.

5.4. Aspects of Competency and Information-Seeking Skills Most Significantly Influence the Research Performance of Graduate School Writers

The results indicate that, in contrast to assumptions, graduate students' research grades were not strongly predicted by their ability to seek information. In contrast, graduate students demonstrated an excellent knowledge of their competencies, especially in evaluating their information needs, according to a study by Valmores and Acedera (2024). Students showed outstanding levels of information literacy, including evaluation, search strategies, database use, and citation techniques, and they were clear about what they were looking for. They also actively checked the accuracy of the information they found. According to this evidence, research grades, which are additionally influenced by other elements like methodological rigor, writing proficiency, and time management, may represent information literacy abilities even if they exist.

These findings support Bawden's (2018) call for additional empirical studies to explicitly investigate the connection between research achievement and information literacy abilities and identify ways to improve the integration of these abilities into graduate school. Furthermore, Research shows that graduate students frequently need more demanding and structured training, even while they acknowledge the value of information-seeking and comprehension abilities (Zhang et al., 2021). This aligns with Bueno's (2017) findings, which showed that faculty members still need to improve their research skills, as evidenced by their outputs and mentoring methods.

Higher education institutions in the Philippines have recognized the value of information literacy and launched initiatives to meet these demands. However, many of these programs still have a narrow focus and don't offer thorough, graduate-level instruction suited to the unique difficulties confronted by research students. The findings of this study emphasize the necessity of increasing information literacy programs, expanding mentoring opportunities, and providing improved support for students in transforming their information-seeking competencies into quantitative research performance outcomes.

5.5. Experiences of the Graduate School Writers in Writing Their Thesis or Dissertation

The results confirm that time management and workload balancing are the most pressing challenges, consistent with Sadeghi and Ghasemi's (2016) claim that setting boundaries between professional and personal time enhances productivity. Similarly, Kuh (2009) noted the role of digital tools in easing workload pressures, which could address the top concerns identified in this study. The second most common difficulty is self-doubt and lack of confidence, highlighting the psychosocial dimensions of research struggles. This finding reflects the emotional burden noted in earlier literature, where feelings of inadequacy can slow or stall progress. Therefore, confidence-building interventions such as structured mentoring and peer support groups may be essential. Difficulties in sourcing relevant references (52.8%) and sustaining motivation (51.9%) also reinforce Patel et al.'s (2023) emphasis on using databases and digital tools to identify gaps in the literature. The reported limitation in accessing necessary resources (50%) echoes broader academic concerns that restricted access to scholarly materials impedes productivity. Expanding access to e-libraries, databases, and statistical tools would directly address this gap. Meanwhile, although fewer students report methodological and technical challenges, they remain critical as they directly affect the credibility of research outputs. These findings align with Brown et al. (2018), who advocate hands-on training and real-world applications of research methodology courses, and Tavakol and Dennick (2018), who stress the importance of understanding instrument validity and reliability.

Finally, while inconsistent adviser feedback (18.9%) was the least cited issue, it still poses a potential risk to timely completion and quality improvement of research outputs. Addressing this

through more structured mentoring systems may significantly improve research efficiency. Universities can strengthen support systems by offering workshops on time management and productivity, embedding hands-on methodological training in graduate curricula, and expanding access to digital resources. Equally important are confidence-building measures and improved mentoring practices to help graduate students overcome self-doubt. As Brown et al. (2018) emphasized, emotional and technical solidarity is essential in ensuring high research completion rates, stronger academic outputs, and a healthier graduate research environment.

The topic selection (47.2%), problem identification (44.3%), as well as instrument development (44.3%) stages showed in Table 8 are indeed the most difficult ones to complete; these findings are consistent with earlier findings that topic selection and framing of problems are some of the most foundational yet some of the most challenging hurdles a graduate writer must overcome in the process (Magnaye & Malabarbas, 2022; Nguyen et al., 2024). As reported by Magnaye and Malabarbas (2022), the training gaps and time pressures explain why most students find it challenging to work out research issues and compose workable titles. They discuss the necessity of structured approaches to problem identification and question development, which argues in favor of graduate researchers' struggles at identifiable points (Nguyen et al., 2024). The prominence of literature review, formulating research questions, and articulating gaps reflects the value of explicit instructions in literature synthesis and question construction to improve one's research readiness (Jadoon et al., 2023). The emerging difficulties in the choice of design, methodology, and interpretation of results emphasize a need for better methodological training in graduate education, which should include courses offering concepts in designing Research and measurement (Iwazaki et al., 2022). While identifying stage-specific delays, the study fills a gap for policy formulation on curriculum design, targeted advising, and student-support interventions towards strengthening research preparedness and supervisory practices (Magnaye & Malabarbas, 2022; Acheron & Sapungan, 2024). Results favor structured mentoring and early-topic-and-instrument design training to improve graduate research productivity (Acheron & Sapungan, 2024).

The findings show that the most pressing issue for graduate students is balancing academic Research with professional and personal commitments, which echoes Killeen's (2015) observation that competing demands often cause stress and burnout. Alcock (2020) further notes that technological advances, while improving efficiency, can blur work-life boundaries, intensifying these pressures. The high procrastination rate (49.1%) reflects the influence of overwhelming workloads and high expectations. Beaton et al. (2017) argue that such pressures, particularly pushing students to publish, can increase stress levels and delay research progress. The clustering of ability- and emotion-related difficulties such as resource finding, writing confidence, burnout, and topic finalization indicates that psychological and skill factors are just as critical as technical challenges. Less frequent issues, such as technical challenges in data analysis and resource access, remain significant. Tanaka et al. (2021) noted that such technical difficulties, particularly in managing statistical software and data, often impede graduate students' productivity. Finally, although delayed feedback from advisers was the least reported (17.9%), it still has the potential to slow research progress, underscoring the importance of responsive supervision.

Taken together, these findings highlight that delays in thesis and dissertation writing stem from methodological or supervisory problems and psychosocial and logistical challenges. Institutions must therefore implement multi-level interventions, such as flexible scheduling, mental health support, targeted training in source evaluation and research methods, resilience programs to address burnout (Brich & Campbell, 2019), and technical workshops to build students' confidence in data analysis (Tanaka et al., 2021).

5.6. Programs to Address the Needs of Student Writers

The current findings support earlier Research highlighting students' struggles in research writing. For instance, Javed (2019) found that selecting a research topic is one of the most challenging stages for students, and it aligns with the present study's results. Without proper guidance, many experience difficulties in choosing and justifying their topics. A targeted workshop on topic selection and instrument development could address these challenges and make the research journey more structured and manageable. The findings also focus on the critical role of access to resources. Students in this study stressed the need for electronic databases and up-to-date journals, echoing Sawai and Chavan's (2020) conclusion that libraries and e-resources play a vital role in supporting academic Research, like teachers in their study, who relied on e-journals. Graduate students here identified access to resources as a significant factor in overcoming barriers to high-quality Research.

Mentoring likewise proved significant. The results show that students value mentoring for its ability to provide clarity, guidance, and confidence in the research process. This supports Sanyal's (2017) assertion that supervision requires clear communication and timely feedback. Effective mentoring, therefore, is not just a supportive practice but an essential component of successful graduate research training.

6. Conclusion

This study explored how graduate students' research performance relates to their competencies and information-seeking skills. It also shed light on their struggles in writing their theses and dissertations. The findings show that although many students can produce quality work, their performance varies, with stronger results linked to competencies such as defining problems, applying methods, and developing instruments rather than information-seeking alone. Graduate students expressed difficulties in weighing academic responsibilities with professional and personal demands, often citing time constraints and feelings of uncertainty. Despite these challenges, their persistence shows determination to complete their Research and program on time. Such experiences emphasize the need for stronger institutional support through mentoring, expanded access to scholarly resources, and skill-oriented workshops. Targeted initiatives in research training, academic writing, and time management would strengthen students' competencies and enhance their confidence, thereby supporting the timely and meaningful completion of theses and dissertations.

7. Suggestion

Despite having strong information literacy skills, many still struggle with organizing ideas, applying research methods, and maintaining motivation. To address these issues, universities should provide targeted support in research methodology, academic writing, and time management to help students solve problems more effectively. At the same time, establishing mentoring and peer support systems can offer much-needed emotional encouragement and a sense of community, helping students manage stress, overcome self-doubt, and persist through the demands of graduate research.

Declarations

Author Contributions. L.D.J.: conceptualization, manuscript writing, data gathering, instrument testing, validation and modification, manuscript revision, editing, formatting. L.D.A.: theoretical framework, statistical analysis, and interpretation of data. A.D.J.: support in data analysis and interpretation, data gathering, and drafting of the research instrument. C.B.T.: analysis of data and preparation of tables in APA format. W.M.G.: support in interpretation of data, conclusion, and revision of the abstract.

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