



Received: 11-02-2025  
Accepted: 21-03-2025

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### From Skillset to Success: Evaluating the Link between Research Skills and Preparedness

<sup>1</sup>Suson Kristel, <sup>2</sup>Faldonea Mary grace, <sup>3</sup>Ricaplaza Cresca Mae, <sup>4</sup>Santos Jlord, <sup>5</sup>Lazaro Bryan Louis G  
<sup>1, 2, 3, 5</sup>Noveleta Senior High School, Noveleta, Cavite, Philippines  
<sup>4</sup>Senior High School Noveleta, Cavite, Philippines

DOI: <https://doi.org/10.62225/2583049X.2025.5.2.3975>

Corresponding Author: **Suson Kristel**

#### Abstract

The conducted study entitled From Skillset to Success: Evaluating the Link between Research Skills and Preparedness seeks to provide insights into the research skills and preparedness levels of Grade 11 students in Noveleta Senior High School, and explore the relationship between these two variables. A quantitative research design was applied, utilizing a survey to gather data from 120 randomly selected respondents. The study aimed to supply an in-depth understanding of the correlation between research skills and preparedness in practical research.

Findings of the study revealed that students exhibit a moderate level of research skills but a relatively low level of preparedness for research tasks. Using Pearson R-Correlation, the researchers found a significant positive correlation between research skills and preparedness ( $r = 0.60$ ,  $p < 0.05$ ). This suggests that enhancing research skills significantly contributes to increasing students' readiness for practical research tasks. Based on the findings, an intervention program was proposed to address gaps in research preparedness.

**Keywords:** Skillset to Success, Pearson R-Correlation, Cavite

#### Introduction

In today's rapidly evolving world where disciplines and understanding are at the forefront of innovation, research has been defined as the creation of new knowledge or the use of existing knowledge in a new and creative way to generate new concepts, methodologies and understanding. This could include synthesis and analysis of previous Research to the extent that leads to new and creative outcome (Western Sydney University, 2023). Research is a process of investigation aimed at finding solutions to problems, expanding knowledge, and advancing our understanding of the world. Which is essential for societal progress and innovations Atienza (2023)<sup>[3]</sup>. In addition, research can be much broader aiming to address questions that have never been asked before. Furthermore it plays crucial role in expanding humanities knowledge across various fields (Girardin, 2023).

By conducting a research project it is important to have a research capabilities or skills that will help in the success of any research project. According to (Field Engineer, 2024) Research skills are essential abilities that enable individuals to gather, analyze, and interpret information effectively. Research skills allow you to find information and use it effectively including creating a strategy to gather facts and reach conclusions so that you can do the task properly. Also, strong research skills are essential for obtaining accurate and reliable results. Additionally, having strong research skills can offer numerous benefits, in academia to industry including expanding your knowledge base, that can provide the latest information globally or internationally. Developing these skills will improve your studies, help you to understand better and positioning you for academic success whether you are a student, a professional conducting market research, or an academic exploring new frontiers of knowledge.

Moreover, preparedness in research interplays between attitude, interest, and understanding towards the matter. It was found that students have low interest when it comes to conducting a research paper. Regardless of the curriculum they are pursuing, they are not confident in their ability to dedicate time and effort to the tasks involved in the process. The students should be prepared for conducting research in the field, not only as a course requirement but as a skill needed for their career. It allow

yourself to approach situations with all the information you need beforehand. Through planning you are equipped to make knowledgeable choices, adapt to unexpected changes and enhance your livelihood of achieving your goals. Effective planning minimizes doubt, elevates productivity, and enables you to excel, whether you are tackling a project or a significant life event.

Research activity is considered to be one of the high impact educational practices where the learners abilities and attitudes can be cultivated through the sort of learning. Despite the fact that research is an educational practice, it has been gradually applied in a variety of fields as well as in unique cultural contexts, taking into account the possibility that students might take different preferred approaches to learning across cultures. The significance of research collaboration activities in boosting young academics productivity and career advancement, advocating for students to foster a collaborative research culture. Effective collaboration enhances research capabilities and self-confidence among early-career academics, while continuous support and guidance are essential for their development Mydin *et al.* (2021) <sup>[4]</sup>. In response on this, Aranda *et al.* (2022) emphasize the growing demand for essential skills such as strong research capabilities, communication, problem-solving, and critical thinking. Highlighting the growing demand for these competencies in the contemporary workforce. The authors emphasize the need for universities to integrate skill development into their curricula to better prepare graduates for the challenges.

Despite the recognize importance of research, there is a growing concern that many students lack adequate research skills when they transition from academia. According to Lee, S., & Chen, W. (2022), found that students from different cultures often adopt distinct approaches to research, including data collection, analysis, and interpretation. These findings emphasize the importance of acknowledging and respecting cultural diversity in research education and promoting inclusive research environments that value diverse perspectives. Students encounter various difficulties in conducting research it include lack of research skills, knowledge, interest, low self efficacy, and interpreting data as well as lack of procedural to accomplish resarch projects. These challenges indicate a gap between the research skills acquired during formal education and the demands of the workplace raising questions about the effectiveness of current educational approaches in preparing individuals for real-world challenges. Also, research work found as tedious and exhausting to do, contributing to students lack of interest and motivation in engaging with research tasks.

In light of these issues, the researchers decided to conduct this study to assess the impact of research skills, interest, and understanding on students overall readiness when conducting research paper. This investigation aims to fill a gap identified in recent studies which have not thoroughly examine this aspect, and to provide insights that could enhance educational strategies for preparing students for research demands.

### Objectives of the Study

This study aims to assess the relationship between research skills and the level of preparedness of Grade 11 students at Noveleta Senior High School. Specifically, it aims to (1) determine the level of research skills of the students; (2)

assess their level of preparedness in conducting research; (3) examine the degree of correlation between research skills and preparedness; and (4) propose an output based on the findings of the study.

### Methods and Materials

This study employed a quantitative research approach, as it focuses on collecting and analyzing numerical data to identify patterns, make predictions, and test causal relationships. Quantitative research emphasizes objectivity and statistical analysis, making it suitable for examining the link between research skills and students' preparedness in conducting research papers David (2024). Specifically, a Correlational Research Design was used to explore the relationships between research skills and preparedness. According to Bhandari (2021) <sup>[6]</sup>, this design enables researchers to investigate variables without controlling or manipulating them. This method helps in identifying the degree of association between the two variables, providing insights into how students research skills contribute to their readiness for practical research. The study used a structured survey questionnaire to gather numerical data from respondents. This tool was designed to ensure alignment with the study's objectives and included questions that assessed students research skills and preparedness. The latter is used to support the interpretation of quantitative data. Using this design, the researchers gathered the quantitative data for the study first, mainly to identify patterns and relationships between student's research skills and their level of preparedness for taking or conducting research paper. The first phase of gathering data involved administering surveys to the respondents to acquire the quantitative data for the study, followed by selecting participants from Noveleta Senior High School, Then, distributing the survey to the selected participants and provide clear instructions for the completion. After the quantitative data has been gathered and analyzed, the researchers proceeded to the next step discussing the results. The obtained data were statistically analyzed and used to evaluate research skills and the overall student's preparedness for practical research.

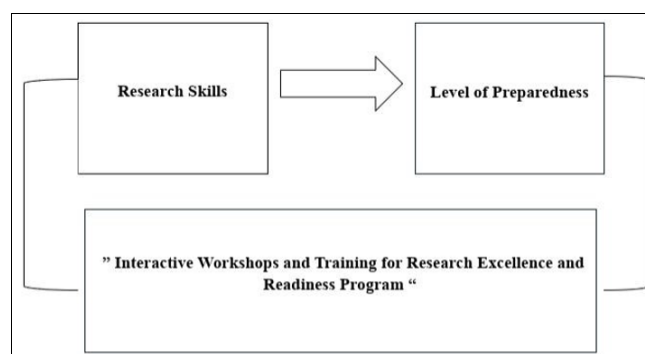


Fig 1: Conceptual Framework of the Study

In the study, there is one factor that may affect the overall readiness of students or individuals. These skills can significantly influence both the development of research competencies and the overall preparednes of students. However, a common challenge faced by students in conducting research is the lack of familiarity with the process or their inability to execute it property. To address this issue, the researchers have developed a program called

“Interactive Workshops and Training for Research Excellence and Readiness Program” This program offer numerous benefits to students and individuals, contribute personal and professional growth by enhancing learning and skills through experience. Participants will gain exposure to the latest trends and technologies, that their knowledge remains current and relevant.

**Results and Discussion**

This section of the study thoroughly discusses the results obtained from the gathered data. The analysis and discussion

are based on a correlational design, where quantitative data were used to examine the relationship between research skills and preparedness of the participants. The results of the quantitative data were computed using Pearson R correlation to determine the level and direction of the relationship between the variables, as well as to discuss its implications and address the research problem. The analysis aims to provide a clear understanding of how research skills are related to the participants level of preparedness, which is crucial in research-making.

**Table 1:** Research Skills

<i>Questions</i>	<i>General Average</i>	<i>Rank</i>	<i>Interpretation</i>
<i>Respondents' Research Skills</i>			
I can manage research articles of a theme drawn from scientific journals, databases, etc.	3.35	7	Neutral
I can recognize a scientific paper, even if it's from general sources like Wikipedia or Rincon del Vago.	3.11	16	Neutral
I understand what a literature review is.	3.51	1	Agree
I can identify scientific journals.	3.17	13	Neutral
I recognize databases containing scientific journals.	3.28	9	Neutral
I can identify the structure of a scientific research article.	3.23	11	Neutral
I use scientific methods to organize information.	3.26	10	Neutral
I analyze main ideas in a scientific article.	3.41	5	Agree
I reflect on my reading of a scientific article.	3.37	6	Neutral
I interpret data, charts, and other visuals in a scientific article.	3.2	19	Neutral
I summarize scientific information.	3.46	3	Neutral
I critically discuss research article.	3.3	18	Neutral
I draw conclusions after reviewing scientific literature.	3.16	14	Neutral
I can write an abstract or an essay on a research topic.	3.33	8	Neutral
I use references in line with scientific writing standards when creating an abstract or essay.	3.35	7	Neutral
I can write keywords in English for a research topic.	3.49	2	Agree
I identify new research topics through literature review.	3.21	12	Neutral
I am able to present the results of a literature review orally.	3.15	15	Neutral
I create keywords for a research topic.	3.43	4	Agree
I contribute my own ideas when developing a research topic.	3.6	17	Neutral
<b>Total Average</b>	<b>3.32</b>		<b>Neutral</b>

The results from the questionnaire indicate that students at Noveleta Senior High School possess a moderate level of research skills, with an overall average mean of 3.32, reflecting a neutral stance. The highest-rated skill is understanding what a literature review is (mean = 3.51), suggesting students are familiar with this foundational aspect of research. Additionally, their ability to write keywords in English (mean = 3.49) and summarize scientific information (mean = 3.46) also shows a degree of competence. However, there are notable weaknesses, particularly in interpreting data, charts, and visuals (mean = 3.2) and critically discussing research articles (mean = 3.3), both of which ranked lowest. These findings suggest a need

for targeted interventions to enhance students analytical and interpretative skills, which are important for conducting comprehensive research. Overall, the results reveal that while students are familiar with basic research concepts, they require further development in higher-level research skills

According to Birt (2024) [7], research skills are the abilities required to find answers to questions or solutions to problems. These include gathering information about a topic, reviewing that information, and analyzing and interpreting the details to support a solution. Research skills are essential for career advancement as they help individuals gain insights and inspire action in themselves and others.

**Table 2:** Level of Preparedness

Question	General Average	Rank	Interpretation
<i>Respondents' Level of Preparedness</i>			
I have experience using research tools and methods.	3.24	9	Neutral
I am skilled in identifying and defining research problems.	3.15	15	Neutral
I can tackle research challenges with creative and innovative solutions.	3.23	10	Neutral
I have previously conducted research projects or studies.	3.03	17	Neutral
I have presented or published research findings.	2.91	18	Neutral
I have both short-term and long-term goals for my research.	3.25	8	Neutral
I am highly motivated to engage in research activities.	3.37	7	Neutral
I have a genuine interest in conducting research within my field of study.	3.19	12	Neutral
I actively seek out research opportunities and challenges.	3.24	9	Neutral
I have a strong curiosity about topics beyond my current academic focus.	3.53	1	Agree
I have a solid understanding of the theoretical concepts related to my research area.	3.19	12	Neutral
I possess strong research skills, including information retrieval and analysis	3.23	10	Neutral
I am confident in my ability to critically evaluate research literature.	3.16	14	Neutral
I am dedicated to pursuing research as an important part of my academic or professional future.	3.47	2	Agree
I can critically analyze information and draw meaningful conclusions.	3.41	5	Agree
I frequently generate creative ideas and innovative approaches to problems.	3.22	11	Neutral
I am comfortable exploring nontraditional research paths.	3.25	8	Neutral
I am skilled in searching for and accessing relevant research materials.	3.43	4	Agree
I can effectively evaluate the credibility and quality of research sources.	3.39	6	Neutral
I can clearly communicate complex ideas through writing and presentations.	3.17	13	Neutral
I am confident in sharing research findings with diverse audiences.	3.11	16	Neutral
I have access to the necessary resources and support to conduct research effectively.	3.25	8	Neutral
I receive guidance and mentorship from experienced researchers.	3.15	15	Neutral
Overall, I believe I am prepared for research and have the potential to make significant contributions to my field.	3.46	3	Agree
<b>Total Average</b>	<b>3.25</b>		<b>Low</b>

The results of this table Questionnaire 2, which assessed the level of research preparedness of students at Noveleta Senior High School, indicate a neutral overall preparedness, with an average mean of 3.25 across 24 items. Students show strength in their curiosity for topics beyond their academic focus (mean = 3.53), ranking 1<sup>st</sup>, reflecting their openness to diverse research areas. Additionally, their dedication to pursuing research (mean = 3.47, ranked 2<sup>nd</sup>) and belief in their potential to make significant contributions (mean = 3.46, ranked 3<sup>rd</sup>) suggest a positive mindset towards research endeavors. However, the results also reveal areas of concern, particularly in presenting or publishing research findings (mean = 2.91, ranked 18<sup>th</sup>) and previous research experience (mean = 3.03, ranked 17<sup>th</sup>). These indicate limited practical exposure, emphasizing the need for more hands-on research opportunities.

According to (Confucius 27), It is essential for students to be prepared for conducting research, not only as a course requirement but also as a crucial skill for their future careers. This idea is supported by Confucius, who stated, "Success depends upon previous preparation, and without such preparation, there is a chance to fail" Preparation entails taking proactive steps to ensure readiness for the next stage.

**Table 3:** Correlation Between Research Skills and Preparedness

Variables	N	M	I	2
1. Research Skills	120	3.32	1	0.60***
2. Level of Preparedness	120	3.25	0.60***	1

Table 3 shows the relationship between the two variables of the study as mentioned above. Using Pearson's r-correlation, the researchers found a moderate positive significant correlation" between Research Skills and the level of preparedness of the students in terms of research-making r

(0.60) which is statistically significant (p < 0.001). Indicating that as research skills increase, the level of preparedness of the students tends to improve. This could imply that students with higher research skills are more likely to feel prepared for research-related tasks

The obtained results not only showed that research skills and the level of preparedness are connected, but also demonstrated that these factors have a significant impact on the overall performance of students in their academic research. Hence, there is a meaningful relationship between research skills and preparedness, both of which affect the respondents' ability to effectively carry out research. To further support the findings, the respondents were surveyed on how their research skills influence their level of preparedness in performing research tasks. To strongly support the correlational findings the respondents were asked on *how their Research Skills affects their overall Preparedness in research-making..* According to the collected data from the surveys with the students of the Noveleta Senior High School, it was revealed that the students say that their research skills affects their overall preparedness. In addition, according to them, as research skills increase, the level of preparedness of the students tends to improve. This could imply that students with higher research skills are more likely to feel prepared for research-related tasks

The findings of this study align with those of Villanueva and Manlapaz (2020) [1], which highlight a significant positive correlation between research preparedness and research skills. The perception of preparedness and competency in research is closely interrelated, as evidenced by the alignment of perceived capabilities and preparedness levels among students. Similarly, a study by researchers from Central Michigan University underscores the importance of this relationship in fostering effective instruction and

preparing individuals to produce high-quality research papers.

### Conclusion

Based on the results of the study, the researchers concluded that the Level of Research Skills and Preparedness among the students is moderate. The average score for research skills was 3.32, indicating that while students possess basic research abilities, they require further development in advanced research skills. On the other hand, the average preparedness level of 3.25 shows that students feel somewhat prepared to undertake research tasks but struggle with creating or executing comprehensive research plans effectively. Despite the moderate research skills, a positive correlation was observed between the students research skills and their preparedness. Students with higher research skills tend to feel more prepared to conduct research tasks, while those with lower skills report feeling less confident. This suggests that improving research skills can lead to an increase in preparedness, enabling students to perform research tasks more effectively. Therefore, the researchers conclude that enhancing the students research skills can significantly improve their readiness for research tasks. Building these skills through workshops and hands-on experiences will boost their confidence, preparing them to contribute meaningfully to academic research.

### References

- Villanueva MM, Manlapaz CJ. Research preparedness and capabilities of ITED students and faculty. Research Gate, September, 2020. [https://www.researchgate.net/publication/344328481\\_RESEARCH\\_PREPAREDNESS\\_AND\\_CAPABILITIES\\_OF\\_ITED\\_STUDENTS\\_AND\\_FACULTY\\_Research\\_Preparedness\\_and\\_Capabilities\\_of\\_ITEd\\_Students\\_and\\_Faculty](https://www.researchgate.net/publication/344328481_RESEARCH_PREPAREDNESS_AND_CAPABILITIES_OF_ITED_STUDENTS_AND_FACULTY_Research_Preparedness_and_Capabilities_of_ITEd_Students_and_Faculty).
- Western Sydney University. DEST definition of research. Western Sydney University, September, 2024. [https://www.westernsydney.edu.au/research/researchers/preparing\\_a\\_grant\\_application/dest\\_definition\\_of\\_research](https://www.westernsydney.edu.au/research/researchers/preparing_a_grant_application/dest_definition_of_research).
- Atienza F. The importance of research: Advancing knowledge and progress in society, March, 2023. LinkedIn. <https://www.linkedin.com/pulse/importance-research-advancing-knowledge-progress-society>.
- Mydin F, *et al.* Research collaboration: Enhancing the research skills and self-confidence of early career academics. Research Gate, August, 2021. [https://www.researchgate.net/publication/356943023\\_Research\\_Collaboration\\_Enhancing\\_the\\_Research\\_Skills\\_and\\_Self-Confidence\\_of\\_Early\\_Career\\_Academics](https://www.researchgate.net/publication/356943023_Research_Collaboration_Enhancing_the_Research_Skills_and_Self-Confidence_of_Early_Career_Academics).
- Aranda, *et al.* Basic skills in higher education: An analysis of attributed importance. Research Gate, February, 2022. [https://www.researchgate.net/publication/358442349\\_Basic\\_Skills\\_in\\_Higher\\_Education\\_An\\_Analysis\\_of\\_Attributed\\_Importance?\\_\\_cf\\_chl\\_rt\\_tk=d.olKMj47QViSk\\_.l0HUmJJz5TO0eaMfD1uqIu0oDWs-1734142219-1.0.1.1-p70s0AKw5PoxXoQJ7WMAeJrWfMRIPm55GypvoKd3A3M](https://www.researchgate.net/publication/358442349_Basic_Skills_in_Higher_Education_An_Analysis_of_Attributed_Importance?__cf_chl_rt_tk=d.olKMj47QViSk_.l0HUmJJz5TO0eaMfD1uqIu0oDWs-1734142219-1.0.1.1-p70s0AKw5PoxXoQJ7WMAeJrWfMRIPm55GypvoKd3A3M).
- Bhandari P. Correlational research | When & how to use. Scribbr, July, 2021. Available at: <https://www.scribbr.com/methodology/correlational-research/>
- Birt J. What are research skills? Definition, examples and tips, August, 2024. Available at: <https://www.indeed.com/career-advice/career-development/research-skills>
- Rosowsky D. The role of research at universities: Why it matters. Forbes, March 2, 2022. <https://www.forbes.com/sites/davidrosowsky/2022/03/02/the-role-of-research-at-universities-why-it-matters/>
- Rind ZUA, *et al.* Attitude of students towards research: A review. Research Gate, 2022. [https://www.researchgate.net/publication/358131015\\_Attitude\\_of\\_students\\_towards\\_research\\_A\\_review](https://www.researchgate.net/publication/358131015_Attitude_of_students_towards_research_A_review).