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Research Article

Empowering Young Researchers: The Influence of Research Consultations on the Perceived Preparedness of Grade 11 Students in Research Writing

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ABSTRACT

As the Philippines strives best to teach Filipino learners how to become globally competent learners and workers of the world in the future through its implementation of K-12 and the teaching of research subjects, it is befitting to assess how students are being prepared for writing research. While other countries conduct research consultations by scheduling appointments with librarians, the schools in the country make the most out of their teachers by serving as research consultants at the same time. This study analyzes how research consultations with Practical Research 1 teachers influence the perceived preparedness of 16 Grade 11 students in one non-sectarian school in Marikina City through qualitative narrative research. Based on the findings, it is concluded that the students view research consultations as a beneficial activity that improves their research writing and communication skills. Although beneficial, challenges such as incoherent feedback from validators, appointment conflicts, and miscommunication hinder them from maximizing the use of research consultations. In the end, the researchers recommend improving research consultation tools and management, and conducting a longitudinal quantitative approach to assess the effectiveness of research consultations in enhancing the competencies of students in research writing.

Keywords: *Preparedness, Research writing, Practical research, Research consultations*

Introduction

In contrast with the previous curriculum in the Philippines, the K-12 education system has mandated Filipino students to take research subjects in senior high school to help them become globally competent (Caraig, 2022). One among these research subjects is Practical

Research 1 (PR1); it is an applied subject that aims to develop problem-solving and critical thinking skills through qualitative research writing. Moreover, it serves as an entry point for the more complex and validation-demanding quantitative research subject, also known as Practical Research (PR2).

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Undoubtedly, the research knowledge and skills that can be acquired by the grade 11 students in PR1 are crucial to their learning process as they approach PR2. While PR1 focuses on enhancing understanding concepts, analysis of data, and making a conclusion from gathered findings, it is needless to say that these are prerequisite skills for the daunting world of quantitative data, where variables come into play, and statistics can be applied. However, issues arise as to how grade 11 students learn the intricacies and interconnectedness of concepts in research and how each section of the paper cannot stand alone without the success of other sections due to its iterative nature. One vital factor in the success of the students' learning experience, as seen by the PR1 teachers, is the role of research consultations in the class. Research consultations usually transpire during the "breakout sessions" where the research advisor and students momentarily pause from plenary discussions and allot their period for queries and clarifications from students and feedback and suggestions from their research advisor. In a local study made by Lucas et al. (2021), it is revealed that students gain numerous benefits from the critiques that research teachers provide during consultations; it allows them not just to check on the progress of their paper by rectifying some errors, but to also be encouraged by the experiences and knowledge that research advisors share as they contribute essential inputs for their study. This way, students build confidence that can be useful for establishing autonomy in their future research endeavors.

Confidence is not the sole indicator of research preparedness among students. According to Shaw et al. (2013), there are four factors that need to be observed in order to conclude that students are ready for such research tasks, and they are: motivation, orientation, environment, and self-efficacy. Although it is perceived as the primary contributor to the preparedness of students in the field of research, self-efficacy, one of the four elements of research readiness, refers only to the perceived ability of the students to accomplish tasks related to the research process, from the conceptualization until the interpretation and presentation of

data. Meanwhile, motivation can be referred to as the perceived usefulness of research towards their future endeavors, how students persist when challenges arise in their research journey, and how students use their cognitive resources to conform to these challenges. On the other hand, research orientation is the journey of students in the research process, identifying the highs and lows of their experiences; thus, it elaborates how students feel towards the path they have taken in their research journey. Lastly, the research environment is also vital for the readiness of the students in research as it enables them to acquire access to adequate resources for their papers. It is also through this that student-researchers are urged to complete their study when they feel a sense of community that shows support and availability toward them.

This framework proposed by Shaw et al. (2013) may be a good model for assessing the preparedness of students in terms of research writing. However, this can only be used if the premise describes a group of students who already had sufficient knowledge and experiences in conducting research, thus making SHS graduates and tertiary students the fit candidates for the said assessment. Grade 11 students who have just been exposed to the concepts of research, particularly qualitative, may be deemed inappropriate to assess their preparedness, knowing that they are still in the early stage of technical writing. Knowing their perceptions about themselves and their readiness to write their research papers can be a good avenue to grab a gist of insight on their concurrent competence level in such a field.

While the teacher-researchers acknowledge these elements that make up and elucidate research preparedness by Shaw et al. (2013) as an existing theoretical framework, they opted to utilize a qualitative research approach to investigate in-depth the influence of research consultations on the perceived preparedness of students in writing research papers by determining how this affects their view on how ready they are in the aforementioned activity.

Specifically, this paper seeks to answer the following research questions:

1. How do research consultations influence the preparedness of Grade 11 students in writing research?
2. How do Grade 11 students describe their research preparedness after the utilization of research consultations?
3. What are the perceived barriers that students face during research consultations? (Altun, 2015)

Methods

This section describes the methodology applied by the researchers in collecting and analyzing data from the 16 selected participants with regard to the influences of research consultations on their perceived preparedness in research writing. These methods help in ensuring the validity and reliability of the data presented in this research.

Research Design

In this action research, the researchers used a qualitative research method and a narrative research design to explore and assess the influence of research consultations on the preparedness of Grade 11 students in terms of writing research. According to Golsteijn and Wright (2013), a narrative design is best used when the goal of research is to explore and make meaning out of the stories and experiences of people or groups of people. Through this research design, the Grade 11 students were able to demonstrate liberty in sharing their stories, struggles, and feelings towards research consultations and how they impact their preparedness in research writing (Bruce, 2020).

Participants

A purposive sampling was utilized in selecting the participants, and the criteria were set by the researchers in order to maximize the depth of the responses and to ascertain the quality of data that would be collected (Campbell et al., 2020). In order to proceed with the data collection, the researchers specified that the participants should be students who have completed the course Practical Research 1 in OLOPSC during the second semester of the school year 2023-2024. Additionally, since it would be impractical to get a large number of participants,

as opposed to quantitative studies, the researchers opted to select only one research leader in each section from both shifts. This decision is in the discretion that: (1) the leaders are the most active communicator during the consultation sessions; (2) only the research leader who has shown consistency in consultations can provide a substantial insight regarding the topic since they were the ones who were actively involved in the process; and, (3) getting more than one participant in one section would mean either data oversaturation or exclusion of other sections to stick with a small number of participants.

As a result, eighteen (18) Grade 11 students from the afternoon shift (AS) and seven (7) Grade 11 students from the morning shift (MS) across all strands were invited to be the participants of this study, making a totality of twenty (25) participants. However, only 16 participants responded positively to the invitation, 11 from the AS and 5 from the MS (Campbell et al., 2020).

Instruments

Prior to the data collection process, the researchers secured a copy of a letter of invitation and a parents' consent to ascertain the willingness of the participants and their guardians in participating in this study. These participants answered a structured written open-ended questionnaire which were validated by two language experts in the field to ensure that they answer the research questions provided in this study. It is composed of six open-ended research questions, each of them addresses a research question. Then, the researchers used Google forms as a platform to gather the narratives of the selected Grade 11 students across strands and shifts on their perceived preparedness after a series of research consultations in Practical Research 1. Although the digital written interview was administered to the 25 sections, 18 in the AS and 7 in the MS, only 16 participants responded and were permitted by their guardians or parents to participate in the study.

Data Analysis

After the completion of the data gathering, the researchers then encoded all the

narratives of the participants into a data transcription and coding table. Pseudonyms, in the form of numbers (Participant 1, 2, and so on), were assigned to each participant to secure their anonymity and safety before the analysis. From there, an inductive coding process was utilized by the researchers to generate themes that address the research questions presented. Inductive coding involves using inductive reasoning to show significant themes from raw data through repeated analysis and contrast. It organizes unprocessed data from sources like academic journals, news stories, and interviews, requiring careful examination, note-taking, and labeling of textual sections (Chandra & Shang, 2019). Through the generated open codes, the researchers analyzed how these codes relate to one another, thus formulating axial codes or bigger overarching terms that will encapsulate all the assigned meanings from the narrative texts. In the end, a selective code was provided to enfold the interrelationships among the codes that emerged in the data.

Following the coding process, a peer debriefing was conducted by the researchers to ensure the reliability and validity of the generated codes. According to Delve and Limpaecher (2021), peer debriefing is advantageous for ensuring the credibility of a work through the aid of peers who are experts of a particular field. It is a process that helps in identifying the biased

assumptions and claims, errors and contradictions in the perspectives of the researchers, and the stand or point of view being presented by the researchers to solidify its trustworthiness in the research field.

To further establish the reliability of the generated codes, the researchers allowed the participants to verify the assigned meanings given to each of their narratives, assuring that misinterpretations have not been employed during the data analysis. According to McKim (2019), member checking is a process that involves the participants in the fulfillment of the research goals in the belief that by allowing them to check the interpretation of the transcripts, the credibility of the analysis is improved. Once the codes were verified through peer debriefing and member checking, the findings underwent thorough interpretation and comparison based on existing literature in the research field.

Result and Discussion

This section presents and elaborates the themes that emerged from the data transcriptions after a rigorous analysis. It will attempt to discuss how research consultations with research advisors influence the preparedness of Grade 11 students in writing a research paper and how it has impacted their skills at the end of their course namely Practical Research 1.

3.1 How do research consultations influence the preparedness of Grade 11 students in writing a research?

Table 1. The Ways How Research Consultations Influence the Perceived Preparedness of Grade 11 students in Research Writing

Participant	Initial Coding	Axial Coding	Selective Coding
1	Helps identify errors	Improves paper quality	Ways How Research Consultations Influence Perceived Preparedness of Grade 11 students in Research Writing
2	Offers diverse reader interpretations and perspectives	Enhances understanding	

Participant	Initial Coding	Axial Coding	Selective Coding
3	Reduces fear of failure	Boosts confidence and motivation	
4	Expands knowledge	Enhances understanding	
5	Adds clarity	Improves paper quality	
6	Organizes thoughts and ideas effectively		
7	Challenges prior knowledge	Enhances understanding	
8	Helps avoid mechanical writing errors	Improves paper quality	
9			
10	Prepares oneself for coming presentations	Boosts confidence and motivation	
11	Helps in locating credible sources of information	Promotes ethical writing practices	
12	Aids data analysis	Enhances understanding	
13	Straightens writing direction	Improves paper quality	
14	Avoids plagiarism and academic dishonesty	Promotes ethical writing practices	
15	Promotes information awareness		
16	Makes difficult processes doable	Enhances understanding	

3.1.1 Improves Paper Quality

Research consultations enhance both information-seeking skills and information-sharing skills, which is an important component in completing a research project (Cutillas, et. al, 2023).

Information-seeking skills include looking for and being able to critically understand various literature or references. This in turn directs the consultations in identifying “mistakes

I may make in writing the paper”, as Participant 1 mentioned, or it adds clarity by “*making [the] research question clearer*,” according to Participant 5.

Meanwhile, information-sharing skills include the technical writing skills being developed among the researchers over the course of the subject. Consultations help in avoiding mechanical writing errors, such as “*grammar*” and it also straightens the writing direction by

“determining mistakes” to be able to *“write a research paper that can be beneficial to society,”* as stated by participants 6 and 13.

Research consultations rely on the proactive role of the student researchers in the information-seeking and information-sharing processes. As presented here, the improvement of the research paper quality is dependent on the previous actions taken by the researchers.

3.1.2 Enhances Understanding

Research consultations are mostly based on the ability of students for introspection. Students' understanding of their research is outlined by Bandura's Cognitive Learning Theory. This happens when research teachers tap on the critical thinking skills of the students by asking probing questions to help in dissecting the student researchers' understanding of their paper, and giving the students opportunities to make errors and self-reflection to encourage them in rerouting their thinking to effectively write a research paper (WGU, 2020).

Research consultations look into the diverse reader interpretation and perspectives, as Participant 2 highlights that consultations *“gives us other viewpoints and comments on how readers might interpret our research,”* expands prior knowledge and help student researchers identify areas for improvement, as Participant 4 mentioned being able to *“widen my knowledge, visualize other possible perspectives,”* and *“recognize areas that we need improvement on in our research paper.”* It also challenged their prior knowledge where their research papers *“evolved over the course of consultation,”* according to Participant 7. Consultations also help in simplifying difficult processes like data analysis, as highlighted by Participant 12, *“I have learned to break down the data gathered to get the most useful data,”* and in other *“technicalities of research [writing]”* as mentioned by Participant 16.

Research consultations aid in understanding the paper among the student researchers when questions are being discussed with their advisor. This suggests that a good rapport between the advisor and students has a positive impact on their shared understanding of the research outputs.

3.1.3 Promotes Ethical Writing Practices

Many agree that digital data and internet-based research technologies are transforming the research landscape. This digital revolution empowers researchers with new avenues of exploration and the potential to generate high-quality knowledge. However, these advancements also introduce new ethical issues such as plagiarism and improper citing and referencing (Clark et al., 2019).

Fortunately, research consultation can be a valuable tool to these emerging ethical challenges. A recent study by Eaton and Hughs (2022) explored effective strategies used by consultants to support student development in the ethical and effective use of sources. Among the most prominent strategies were those that have been coded as asking curious questions; explaining the value of citing, referencing, and paraphrasing; oral paraphrasing; and using resources.

These directly address the ethical concerns raised earlier. By guiding students to locate reliable sources, research advisers help them develop strong source credibility, as evidenced by Participant 14's answer, *“Research consultation...helped us...by finding reliable and credible sources to support and make our paper more powerful.”* This, in turn, strengthens the research paper and avoids plagiarism, as Participant 11 highlights: *“research consultations helped me find the right sources...making me more prepared to write my paper.”* Finally, Participant 15 emphasizes how research consultation fosters a heightened awareness of ethical considerations: *“I became more conscious [of] everything that is written in my paper [due to research consultation].”*

Researchers have critical roles to play in understanding emerging ethical issues and implementing strategies to minimize risks for researcher participants as well as their sources. This commitment to ethical research is essential for ensuring the integrity and trustworthiness of findings in the digital age.

3.1.4 Boosts Confidence and Motivation

Navigating the research process can be daunting, especially for undergraduate students encountering it for the first time. In this context, research consultations, which provide

personalized guidance from librarians or advisors, have emerged as a valuable tool to support student researchers. Sikora et al. (2019) investigated the impact of individualized research consultations on student research skills and confidence. Their study employed a quantitative approach to assess changes in search techniques and confidence levels after consultations with research librarians or advisors. The findings revealed that students who participated in the research consultations demonstrated greater advisors, have emerged as a valuable tool to support student researchers. Sikora understanding of their research questions and a significant increase in confidence.

Meanwhile, results of this qualitative study further supports the positive impacts of consultations to the confidence level of the student researchers. Students, like Participant 3, reported a reduction in fear of failure and a boost in motivation after consultations. Respondent 3 specifically mentioned feeling "*validated*" and gaining "*confidence to be proud*" of their work. Participant 10 highlighted the value of consultations in identifying "*technical mistakes*" and providing "*valuable help for [research] defense*." These testimonials suggest that research consultations not only improve research skills but also enhance student confidence and motivation.

3.2 How do Grade 11 students describe their research preparedness after the utilization of research consultations?

Table 2. The Descriptions of Grade 11 Students of their Research Preparedness After Research Consultations

Participant	Initial Coding	Axial Coding	Selective Coding
1	Strategic Writing	Articulate	Perceived Preparedness of Grade 11 Students in Research Writing After Research Consultations
	Open to Feedback	Communicatively -competent	
2	Self-efficacy	Self-assured	
	Critical thinking Skills	Critical	
	Clarification	Communicatively -competent	
	Collaborative Skills		
	Adherence to writing conventions	Articulate	
3	Self-confidence	Self-assured	
	Critical Thinking Skills	Critical	
	Adherence to writing conventions	Articulate	
	Self-confidence	Self-assured	
Self-efficacy			
4	Critical Thinking Skills	Critical	
	Self-efficacy	Self-assured	
5	Critical Thinking Skills	Critical	
	Self-efficacy	Self-assured	
6	Objectivity	Critical	
	Self-confidence	Self-assured	
7	Collaborative Skills	Communicatively -competent	
	Analytical Thinking Skills	Critical	
	Self efficacy	Self-assured	
9	Self-evaluation	Communicatively -competent	
	Critical Thinking Skills	Critical	

Participant	Initial Coding	Axial Coding	Selective Coding
10	Strategic Writing	Articulate	
11	Self efficacy	Self-assured	
	Critical Thinking Skills	Critical	
12	Self-evaluation	Communicatively -competent	
	Critical Thinking Skills	Critical	
13	Self efficacy	Self-assured	
	Clarification	Communicatively -competent	
	Analytical Thinking Skills	Critical	
14	Self efficacy	Self-assured	
	Self-evaluation	Communicatively -competent	
15	Open to feedback	Communicatively -competent	
16	Adherence to writing conventions		
	Strategic Writing	Articulate	
	Adherence to writing conventions		

3.2.1 Communicatively-competent

One of the core components of research preparedness is the research environment, and having a feeling of sense of belongingness is important among learners because this serves as a support and guide towards their completion of their paper (Shaw et al., 2013). Thus, it should be understood that during the learning process in dealing with research endeavors, the goal of the researchers is not just to produce outputs but to acquire extensive inputs from several individuals (fellow members, peers, teachers, librarians, etc.). However, this can only be accomplished if the young researchers will be able to exhibit communicative competence in all phases of their study.

Based on findings, Grade 11 students were able to enhance their *communicative competence*, and it is seen in the way they are being *open to feedback*, ready for *collaboration*, aims at *clarification*, and do *self-evaluation*. To be communicatively competent, one has to go beyond the use of language and its structure; it is the skill that allows an individual to not just produce but also understand language in varied social contexts (Kiessling & Fabry, 2021). Furthermore, communicative competence is the skill to communicate effectively in a socially appropriate way. It involves choosing and using the right communication techniques to fit

the situation and achieve specific goals. As Participant 1 stated, *"I learned how to take constructive criticism and suggestions to my work more openly."* This statement manifests willingness and acceptance of the learning experience that they possess, as this is an overt indication of the good research community support toward them. Participant 6 also added that, *"The most important skill that I learned is that teamwork can really help and of course without a proper communication a group won't work."*

In order to avoid miscommunication in presenting information, claims, and arguments, the students believe that they were also able to develop their drive to always aim at clarification, and this is evident in what Participant 2 and 13 wrote respectively, *"My ability to communicate has improved, and I can now clearly explain complicated concepts"; "my ability to communicate has improved, and I can now clearly explain complicated concepts."* Furthermore, the students also narrated that they can now do self-evaluation. Socio-linguistic competence, being one of the communicative areas of communicative competence, enables students to maintain awareness, not just of verbal utterances, but also of gestures and nonverbal behaviors (Altun, 2015). Thus, one has to be mindful and reflective of the cultural references and language's social rules to be able to

communicate their ideas effectively and sensitively in their paper and in its process. Participant 12 illustrates what self-evaluation looks like: *"I became more aware of the mistakes I've made, which, in turn, made me learn how to correct them."* Participant 14 also added, *"I think the most important skills that I learned during research consultations is that you must know your paper well."* Meanwhile, Participant 9 expressed that research consultations allowed them *"to grasp the strong points of my research and how to anticipate the questions that may be brought up in a defense."*

Through these findings, it can be realized how research consultations do not only equip students with conceptual knowledge on writing a research paper, but can also be a way to assist students in expressing their ideas and arguments in such a way that their paper communicates interactively and not merely longitudinal.

3.2.2 Self-assured

Consistent with what Shaw et al. (2013) presented as the components of research preparedness, self-efficacy is one of its most known synonymous terms, especially when it comes to readiness in the academic world. Two themes emerged in the analysis of the raw data on how Grade 11 students describe their preparedness in research writing: *self-efficacy* and *self-confidence*. There are subtle differences between the two terminologies according to Jaafar et al. (2019): self-confidence refers to the overall positive perception and feelings of an individual towards themselves due to the acknowledgment of their own abilities, and self-efficacy is the belief of a person that they can accomplish a particular task. Therefore, in the field of research writing, self-confidence helps students to begin in their writing endeavors with a positive attitude towards themselves while self-efficacy assures them to finish a certain task in research, such as: brainstorming, writing, analyzing, interpreting, or presenting their papers.

After several consultations until the culmination of the semester, the students believe that they were able to develop *self-assurance*, both indicated by *self-confidence* and *self-efficacy*. Participant 3 stated *"After attending a*

research consultation, mentally and emotionally, it makes [me] more positive and boosts my confidence. The feedback given [was] applied [to] our research paper, so it feels more accurate and polished." She also added, *"Lastly, I believe I've improved my communication skills after talking to a professional teacher or consultant, making me speak wise and confident to my members."* It is also self-confidence that Participant 7 believed she was able to improve, and according to her: *"I can describe it as the word Confident. Because the research consultation help and gave easy instructions and they also give examples."* All these statements show how confident they have become after the research consultations. Rather than stating which task or activity they are confident in accomplishing, they stated their overall positive feelings during and after the PR1 course.

Meanwhile, other participants were able to gain self-efficacy after research consultations with their research advisors. Participant 8 asserted, *"The recommendation and suggestions of the research adviser guide us in writing the paper accurately. The group became more prepared and confident in writing as they listen well to the recommendation during the consultation."* Also, Participant 5 shared the same sentiment, *"I felt well-prepared to write my research paper, with a clear focus, strong sources, and a solid understanding of effective research."* Similar to the previous are the statements of Participants 2, 4, 6, 11, 13 and 14.

It is noteworthy that while self-confidence is important to be able to maintain a drive in starting a research paper, self-efficacy is what generally predicts the enthusiasm of graduate students toward research. That being so, research advisors should not solely rely on the confidence that they show during the orientation or even in the plenary sessions, for that does not guarantee the preparedness that they have for the tasks that they will be administered. Consistency in guidance is crucial to maintain the confidence that they have until the transpiration of the research process.

3.2.3 Critical

In pursuant of the curriculum guide for PR1 by DepEd (2013), the students must be able to perform the following under the topic: *"select,*

cite, and synthesize properly related literature; use sources according to ethical standards; present written review of related literature,” all of which necessitates them to be meticulous and sound in evaluating which information are credible and relevant for their studies, thus being critical. In addition to that, under the topics “Analyzing the Meaning of the Data and Drawing Conclusions” and “Reporting and Sharing the Findings”, students are expected to: *“analyze and draw out patterns and themes with intellectual honesty”* and *“form logical conclusions; make recommendations based on conclusions; and, write and present a clear report.”* These competencies, although requiring criticalness, highlight the need for analytical skills, too.

Critical thinking is pivotal for research writing endeavors as it equips researchers with the ability to challenge existing theories and concepts based on the available evidence (George, 2024). Even so, it would not be complete in itself, for analytical thinking is a prerequisite for criticalness. It is for the reason that students should be able to first break off the problem and its elements, decipher the mechanics of the problem and why it exists, and juxtapose it to another relative situation or concept, before they can finally evaluate and make a sound judgment (Sternberg, 2006, as cited in Perdana et al., 2019).

According to the participants, both of these thinking skills were enhanced in them, thus making them critical in their research writing tasks. Participant 13 expressed, *“One of the most important skills I learned was the ability to analyze the respondents' answers to correctly group and categorize them based on terms. Having good analyzation skills is important in looking for literatures and studies to back up your statements too.”* This is what is also meant by Participant 7 as she added, *“The most important skill that i learned is that...having a proper comprehension helped a lot when making a research.”* Analyzing any concept or information should not just be done with a simple comprehension but a meticulous understanding of it. Comprehension is a necessary skill to become analytical; while it is not tantamount to analyzing, it is the concourse for understanding the

connections among ideas and breaking these ideas down into blocks (Deller, 2022).

Critical thinking is what nine of the participants believe describes their preparedness in terms of writing a research paper. According to Participant 9, *“Making the paper is very time-consuming and requires a lot of critical thinking to achieve the adequate results. I learned to be more mindful of my time and critical in my writing.”* Participant 2 supported this idea by stating that, *“My ability to analyze and evaluate data has increased, along with my critical thinking and data interpretation skills. My information literacy and problem-solving abilities have improved, which makes it simpler for me to locate and utilize trustworthy sources.”* As reiterated by George (2024), to be critical is to refuse to quickly accept information from various sources. Therefore, students are expected to be a keen reader and writer in order to establish the reliability, validity, and credibility of their paper. As a result, Participant 3 asserted that after research consultations, he has become *“more strict when it comes to credibility.”* Since criticalness also means being unbiased, objectivity also matters in terms of preparing oneself in writing research. According to Participant 6, the most important skill that she learned is *“to think outside the box. It has motivated me to explore different perspectives.”* By considering several views of authors of the same topic, students may be able to decide which argument is worth investigating and which deserves to be given minimal attention.

Ultimately, being critical is a non-negotiable quality that a good researcher must possess. This characteristic does not just teach students the skill to challenge what information is being exposed to them, but also allows them to be careful with the decisions they make in terms of academics or even in terms of their personal lives. It is not only in research subjects that they can utilize this skill; it can also be employed in problem solving activities and other real-life-like tasks.

3.2.4 Articulate

Expression of one's thought is not only observed in verbal communication, but also in writing. Being able to articulate ideas and

information proficiently is an advantage for writers, especially in academic writing such as research, for what people usually misunderstand about articulation is that it is not entirely synonymous with merely “stating”. For instance, when articulating thesis statements, it should be noted that it is not an action of just presenting the thesis statements themselves, but rather a justification of its truth through pieces of evidence, arguments, and even counter-arguments in an organized way (Houston Community College Libraries, 2024).

After a thorough analysis, findings reveal that consultations with the participants’ research advisors resulted in *adherence to writing conventions* and *strategic writing*. Participant 2 stated, “My technical proficiency and adaptability have also increased, which has helped me use research tools and adjust to new knowledge more effectively.” Also, Participant 16 learned to “be sensitive with the errors that you commit regarding the grammar and the overall structure of the sentences...those few consultations helped us to be more technical in

our writing process, more academic in using our words, and more knowledgeable in the technicalities of research that we need to know to be well prepared in writing it.” This is also true with Participant 3 who shared, “I’ve improved in technicalities as well like grammar and punctuation.”

Participants believe they also became strategic in writing. “After getting an opinion from the consultation, it helped my mind think of more ways to improve our paper,” expressed Participant 1. Meanwhile, Participant 16 worded that the most important skill that she learned is “being focused on the main goal of the paper when constructing a research questions.” According to Marsh et al. (2020), strategic writing is a type of writing that is goal-oriented. It allows writers to adapt and contextualize their way of writing based on the specific goals and characteristics of a certain organization or field. Thus, besides conceptualizing the information to be presented in the research paper, students are prompted to think, write, and communicate in an academic way.

3.3 What are the perceived barriers that students face during research consultations?

Table 3. The Perceived Barriers of Grade 11 Students on Research Consultations

Participant	Initial Coding	Axial Coding	Selective Coding
1	Schedule disruptions	Scheduling conflict	Perceived Challenges of Grade 11 Students During Research Consultations
	Network deficiency	Communication barrier	
2	Concept discordance from multiple advisors	Incoherent feedbacks	
3	Communication distress	Communication barrier	
4	Schedule disruptions	Scheduling conflict	
	Lenient monitoring		
5	Lack of concept expression	Communication barrier	
6	Time insufficiency	Scheduling conflict	
	Limited in-person consultations		
7	Imprecise discussions	Incoherent feedbacks	
8	Time insufficiency	Scheduling conflict	
	Misaligned schedule		
9	Imprecise recommendations	Incoherent feedbacks	
10	Constant revisions	Incoherent feedbacks	

Participant	Initial Coding	Axial Coding	Selective Coding
11	Time insufficiency	Scheduling conflict	
	Lenient monitoring	Scheduling conflict	
12	Imprecise recommendations	Incoherent feedbacks	
13	Delayed response to queries	Communication barrier	
	Imprecise recommendations	Incoherent feedbacks	
	Lenient monitoring	Scheduling conflict	
	Limited in-person consultations		
14	Delayed response to queries	Communication barrier	
15	Inadequate reassurance	Limited emphasis on affective motivation	
16	Imprecise recommendations	Incoherent feedbacks	

3.3.1 Scheduling Conflict

Research consultations are defined as *"a reference service in which the librarian meets with a student in a scheduled session away from the reference desk"* by Magi and Mardeusz (2013). Notifying the student and advisors in advance of the appointment helps to distinguish the research consultation from a typical reference service interaction and gives them both time to organize their schedules and prepare (Savage, 2015). Individual consultations are a form of instruction that offer a unique and efficient means of imparting knowledge outside of the traditional classroom (Bruce, 2020). Hence, the importance of proper timetabling of schedules for consultations of advisors and researchers.

The findings show that Grade 11 students have encountered conflicts in scheduling research consultations which impeded the progress of writing their research paper such as *schedule disruptions, lenient monitoring, time insufficiency, limited in-person consultations, and misaligned schedule*. Research consultations are obstructed at times due to unexpected occurrences of events. As Participant 1 stated, *"some of these schedules are often changed or delayed due to circumstances such as sudden class suspensions."* This highlights the uncon-

trolled factors that provide barriers to consultations. This is also evident in the statement of Participant 4: *"I think the biggest and only challenge that we've encountered was the conflict with the schedule. There were many times that we could not consult with our research adviser because our research subject was affected by various school suspensions/events."*

Some participants have encountered lenient monitoring during their research journey. As suggested by Participant 4, *"I think that research advisers must conduct mandatory consultations every meeting. In such way, students will (be forced to) avoid cramming or last-minute research consultations."* This emphasize the limited consultation sessions between the advisors and researchers as Participant 11 added, *"the consultation process could be improved with more personal guidance and follow up sessions"* similar to Participant 13 who stated: *"I believe that consultations every day or at least a few times a week is necessary to keep track on the students' progress."* According to Yi (2003, p. 348), research consultations serve to address significant *"student needs that were not sufficiently covered in a classroom setting."* Librarians can greatly enhance the quality of assistance provided to students during these sessions by *"consciously integrating information*

literacy objectives into their encounters with students." These emphasize the vital role of close monitoring among researchers.

Insufficient time for inquiries also became an obstruction during research consultation as experienced by other participants. As shared by Participant 6, *"the main challenge I encountered was related to time limitation. The limited time availability somehow made it difficult to address all the questions I have regarding our research."* Similar to the statement of Participant 8: *"I guess is the lack of time for the research adviser also for us students."* This demonstrates how the progress of students toward finishing each chapter of their paper is strongly impacted by the short time allotted for consultations. Consequently, Participant 10 suggested that research advisors should "Probably [have] more time offered for the students."

Due to the widespread use of communication technology, advisors have utilized other ways to deliver reference services. The reference encounter now includes transactions made via phone, email, instant messaging, call centers, and texting in addition to in-person encounters at the reference desk (Magi & Mardeusz, 2013). As a result, students have experienced certain difficulties regarding the clarity of inquiries and responses due to limited in-person consultations. As proposed by Participant 6, *"I feel like it is better to have consultations face-to-face rather than personal messages."* Which is also supported by participant 13 who stated, *"it is much better if the consultation is done face to face so that both the adviser and the students are able to clearly articulate what they want to say. F2F consultations are much more efficient..."* Even if digital technologies are helpful during consultations, many students believe that in-person consultations are the most convenient and effective way to receive assistance as compared to online resources like chat. Additionally, in-person consultations are beneficial because they allow students to work with someone with knowledge and experience, either to "bounce" ideas off of them or to obtain assistance in locating resources they were unable to locate on their own (Magi & Mardeusz, 2013).

Another difficulty that students have faced is the discrepancy between the availability of

time for both students and advisors which hampered the flow of consultations. As stated by Participant 8, *"We don't have the same available time for them research adviser to us student to consult for our research paper."* This emphasizes the existence of schedule misalignment for research consultations which further delayed the completion of their research paper.

Among the most frequent challenges that students have when writing a research paper are scheduling discrepancies. Therefore, scheduling research consultations appropriately is one of the most crucial things to take into account in order to prevent difficulties from arising while completing chapters.

3.3.2 Communication Barrier

Students who interact with research advisors receive additional perspectives, subject knowledge, and problem-solving abilities in addition to assistance in framing their inquiries. Students are able to witness a quality research process and personally witness the importance of giving an assignment some thought before searching for information, all while facilitating the interchange of verbal and visual clues (Magi & Mardeusz, 2013). However, findings show that communication breakdowns occurred during research consultations for Grade 11 students, which had a significant impact on the coherence and harmony of ideas in their papers. Hence, the emergence of four themes: Network deficiency, Communication distress, Lack of concept expression, and Delayed response to queries.

Poor internet connections and dropped calls are examples of connectivity issues that can seriously affect virtual communication. It may result in frustration, lost productivity, and missed opportunities (Carnduff, 2024). *"I've also experienced some communication barriers during online consultations (which I think is also the result of suspensions) due to signal issues."* Participant 1 stated. This illustrates the relevance of an efficient medium of communication as it affects the exchange of information between students and advisors.

Apart from medium of communications issues, one participant also experienced communication distress during research consulta-

tions. According to Glaser (2023), Communication apprehension is a kind of anxiety induced by speaking with people or by anticipating speaking with people. The fear of being judged by those with whom one interacts fuels this anxiety. As Participant 3 shared, *"During and even before consultations, one major barrier for me has been the fear of talking to the research adviser just because I don't want to receive any negative remarks and them being disappointed."* This highlights the existing communication roadblock that adds burden in addressing the concerns and queries of Grade 11 students.

Meanwhile, expressing information or queries verbally of both students and advisors play an important role during research consultations. Results have shown that one Participant has encountered a lack of concept expression due to difficulties in putting ideas into words. *"During research consultations, I sometimes found it hard to explain what I needed [and] felt overwhelmed by all the information."* Participant 5 emphasized.

Other participants highlighted how the delayed response to their queries has also hindered the flow of their consultations resulting in impeded progress. As Participant 13 stated, *"I don't raise all the questions I need and there are concerns that pop up while writing the research itself. So, when I need to ask again, my research adviser is busy or it takes a while for them to get back at me."* Similar to the experience of Participant 14: *"Sometimes, our research advisor does not reply immediately, although I understand."* According to the University of Carolina, when students receive feedback right away after demonstrating their understanding, they react more favorably and recall their instruction more vividly. A learner may not make the connection between the feedback and the learning moment if advisors delay it for too long.

Ultimately, good communication plays a major role in the information exchanged during research consultations, leading to either better or worse inquiries and ideas that may have an impact on the caliber of work produced by student researchers. Due to this, a dependable medium, conceptual and idea coherence, and immediate resolution of issues have to be highly

valued in order to prevent current obstacles to finishing the research report.

3.3.3 Incoherent Feedbacks

According to Tanis (2020), prompt feedback from instructors enhances student motivation and course satisfaction, while also fostering positive relationships with the university. By offering insights, recommendations, and criticisms from many stakeholders and points of view, feedback can enhance the quality, significance, and effect of research. However, feedback is not always easy to acquire, manage, or use effectively.

Based on findings, Grade 11 students have encountered some incoherent feedback during consultations which lead to lack of certainty of concepts to come after during their research journey. Four themes have emerged upon analyzing the statements of participants: *Concept discordance from research adviser, Imprecise discussions, Imprecise recommendations, and Constant revisions*. During the process of writing a research paper, it is common to seek multiple recommendations and points of view for the betterment of its overall quality. Thus, student researchers may encounter incoherent ideas that may obstruct them from achieving clarity of concepts. *"based on my experiences as a researcher attending research consultations, it might be confusing to seek advice from multiple advisers because you may receive conflicting responses and recommendations."* Shared by Participant 2.

One participant also experienced bewilderment due to lack of references during research consultations and discussions. As suggested by Participant 7, research advisors should *"give a much thorough discussion and give examples. Since not every student is a visual learner it is important to give them examples for them to follow."* This illustrates that disseminating information to student researchers greatly impacts their understanding as they mostly rely on lectures and class discussions. Hence, the need for intensive monitoring of outputs.

Meanwhile, some students highlighted the imprecise recommendations they received from their advisors which resulted in confusion and loss of ideas. As stated by Participant 7,

"Some individuals are not given enough details on how to further improve their work or not thoroughly explained why it is wrong. Especially online, where it is harder to explain the mistake." This is also evident in the experience shared by Participant 9: *"There were times where I didn't comprehend the suggestions of the research teacher because most of the time, I'm unfamiliar with them. So, I had a hard time applying those suggestions since I didn't understand them."* This points up the struggles of students in comprehending instructions from their advisors. *"There are also times when my adviser does not give me the answer I want or they misunderstand the question so they give me an answer that is far from what I want to know."* Participant 13 added. Consequently, Participant 16 suggested that the *"clarity of instructions and feedbacks"* should be further improved. According to the University of Carolina, when students receive feedback, they should be given an explanation of both their correct and incorrect actions, with an emphasis on their correct actions. Giving students an explanation of what is right and wrong about their work is the most beneficial way to support their learning.

In line with the lack of clarity of feedback, one participant expressed the struggle of having constant revisions during their research journey to further improve their paper. Participant 10 said, *"It would probably be the countless of times that our group needs to do or change something in order for us to create or submit a better research."* Referring to the challenges they have encountered during research consultations.

Coherence of feedback is a vital component in any research consultations as it directs the flow of ideas and guides the researchers towards achieving a high-quality paper. It also offers insights, recommendations, and criticisms that can enhance the quality and significance of research paper. Thus, the clarity of information given to the students should be close monitored.

3.3.4. Limited Emphasis on Affective Motivation

Motivation of students affects their academic performance, determines how they approach their studies, and gets them ready for

the difficulties of the future. Through the cultivation of an educational-driven environment, students are supported and instructed in creativity according to Impact Teachers (2017). This emphasizes the significant role of the different aspects of motivation in order to keep students driven during their research journey.

The findings show that one participant has experienced inadequate reassurance during research inquiries. As Participant 15 stated, *"I think it would be better if consultation for the leaders is also present. On how are they doing? What are the circumstances they are facing? If they are having a hard time handling their group members?... Having someone to talk to, to validate our efforts and emotions."* This highlights their longing for assurance and validations for the efforts they have exerted in completing their research paper. In a study conducted by Magi and Mardeusz, students were asked to describe their feelings after research consultation using one word. Most students answered "relieved", "confident", "prepared", "ready to work", "organized", and "super excited" about accomplishing their paper. A few students said that the consultations inspired them more to think deeply about their output. This highly presents the significance of motivation during the research journey to keep student researchers eager in accomplishing their paper.

Conclusion

Grade 11 students who took PR1 believe that they have been influenced positively by the research consultations with their research advisors in different ways. Interestingly, the perceived roles of students regarding research consultations and the way they described their preparedness in writing research match with one another. While all the necessary skills are believed to be inculcated among the students, what seemed to be the most emphasized among all the statements were the concept of confidence. Based on several studies and literature, confidence is one of the most essential components of preparedness because this serves as the accelerator of the students in dealing with research, especially in the early stage of their encounter with such a course. Relative to what Estacio et al. (2018) found in

their study, students saw themselves as more prepared in the qualitative research than in quantitative. This could be a good opportunity for research teachers to, if not maintain, improve the strategies that they employ in their classroom to empower students, not just to boost their confidence, but to equip them with vital skills for fulfilling their research tasks including: conceptualization, generating research questions, deciding on methods, and interpreting results. Cognizant of the complexities of quantitative research, the preparation of the students is crucial, not just during the phase of the research subjects, but also during the enrolment of the students to preparatory courses toward academic writing, such as *English for Academic and Professional Purposes*, *Reading and Writing*, *Pagbasa at Pagsuri ng Iba't-Ibang Teksto Tungo sa Pananaliksik*, *Filipino sa Piling Larangan*, and even *Statistics and Probability*, which is critical for the PR2 course. Hence, a collaborative effort among these subjects is rather necessitated than just encouraged as it can help students to have a systematized and interconnected learning experience.

Communicative competence is also an important aspect of research writing. While it is a concept often used in the field of sociolinguistics, it is a worthwhile lesson to teach students sensitivity, competency, and strategy in expressing their ideas and thoughts in a way that accuracy is ensured, but fairness and objectivity are observed, and not compromised in terms of the domineering ideologies and unnoticed biases in the field of the academia. Knowing the nature of research writing among senior high school students, it is quite rare to see classrooms that assign individual writing of research papers. Thus, research groups are what most research teachers opt to do, and these require an intensive collaboration among them. By helping students to communicate their thoughts competently in different areas (Communicative Competence of Swain & Canale), students are being conscious of the dynamics of interacting with their peers, teachers, and external critiques, and it veers them away from puzzlement in the entire process.

Despite these perceptions, students face a number of challenges during their research consultations. One of these challenges is the

communication barrier among students, research advisors, and research critiques or validators. It happens when advisors either respond late to the online inquiries outside the class hours or unintentionally forgets to do so because of other administrative tasks. Moreover, varying perspectives from the research advisors and research critiques create perplexity among students, which could manifest in their work. Often, this hurdles students to attain a full grasp of what has to be improved and included in their paper that usually ends up in confusion not just in the making of the study but also in the presentation of the results.

In the emergence of the student-centered learning approach, not putting the learners at the center of the learning process can be considered as a sin in the field of education. One aspect of this approach is to motivate students by hearing their insights and validating their opinions through factual evidence. But more importantly, students should be able to observe the humanistic side of the research consultation sessions. Research consultations may serve as an opportunity to not just seek for improvement of paper but also to check on the milestones of the students in terms of their progress and experiences as a researcher, acknowledging that research is a tedious process that requires proper planning and timing.

In the end, the researchers acknowledge that this research may only scratch the surface of what we can observe in the research classrooms, particularly during research consultations. However, it should be taken into consideration that research preparedness should take enough time and adequate resources to be able to fully achieve it. Thus, unveiling the perceptions of the students can serve as a benchmark for what may transpire and what should be done in the later stages of their research endeavors. It may be unfair to assume that students were already prepared to conduct research when there were just only a few learning experiences for them.

To address the challenges of research consultations, a systematic approach to research consultations is essential. The following recommendations aim to enhance the research experience for students, ensuring they receive the

support and guidance necessary for their academic success.

First, establishing a systematic way of conducting research consultations can significantly alleviate scheduling conflicts and create a predictable environment for students. By clarifying the consultation process and establishing regular times for meetings, students can better prepare and engage meaningfully with their research advisors. This structure not only fosters productive interactions but also leads to clearer guidance on their research projects. A well-organized consultation framework promotes accountability and ensures that students can maximize their learning opportunities.

Second, validating research instruments with other experts in the field is vital for enhancing the credibility of student work. Collaborating with knowledgeable individuals exposes students to diverse perspectives and constructive feedback, which can help overcome communication barriers. This engagement enriches students' understanding of their research topics and equips them with valuable insights that improve the quality of their work. By integrating expert validation into the research process, students gain confidence in their methodologies and findings.

To further support students, providing a recommendation sheet for documentation is essential. This sheet would allow students to clearly record feedback and suggestions received during consultations, reducing confusion about the next steps they should take. By having a tangible reference, students can track their progress and understand the rationale behind the advice given. This documentation fosters a sense of accountability and encourages students to engage actively in the revision process, ultimately enhancing their learning experience.

Additionally, incorporating a final agreement section between students and research advisors can clarify expectations and commitments. This agreement would outline what both parties intend to accomplish, helping to mitigate miscommunication and ensuring that students are well aware of the steps they need to follow after consultations. By formalizing this aspect of the process, students can focus

their efforts more effectively, reducing uncertainty and enhancing their motivation to succeed.

A pre-planned schedule for research consultations is another crucial recommendation. By providing students with a clear timeline for meetings, educators can significantly reduce scheduling conflicts and anxiety about when to seek help. Dedicating specific times for consultations—preferably during independent study days—encourages students to proactively seek guidance, fostering a culture of support and collaboration. This approach not only enhances the quality of feedback received but also promotes a positive attitude toward the research process, boosting students' affective motivation.

Finally, offering flexibility in the consultation format—allowing both personal and online meetings—caters to the diverse needs and preferences of students. This flexibility can help overcome barriers to communication and ensure that all students have access to the necessary support. By accommodating different learning styles and preferences, educators can foster a more inclusive and supportive environment that boosts student confidence and motivation throughout their research journey.

Implementing these recommendations can create a more organized, efficient, and supportive research experience for Grade 11 students. By addressing the challenges they face during research consultations, educators can enhance student engagement, improve the quality of feedback, and ultimately contribute to the students' overall academic success. A systematic approach to consultations not only prepares students for their current research projects but also equips them with essential skills for future academic endeavors.

The researchers recommend that as the Grade 11 students transition to Grade 12 and take Practical Research 2, Inquiries, Investigation, and Immersion, and Research Capstone, a longitudinal cohort quantitative research may be utilized to assess their research preparedness based on an existing theoretical model. This assessment is beneficial as a reference for developing teaching methods, strategies, and tools as students proceed to tertiary education

where research is much more self-paced and discipline-specific.

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