Examining Senior High School Students' Experiences Toward Learning Qualitative Research Methods

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ABSTRACT

As research is strengthened in the Senior High School (SHS) curriculum, there is a need to examine how students learn the concepts and skills in doing varied works related to it. This means investigating how classroom practices and activities greatly affect students' learning experiences within a research class, particularly in developing their cognitive and affective competencies toward research (Messiou & Lowe, 2023; Vossen et al., 2018). To examine such a process in the Philippine educational setting, the present article explored the teaching and learning of Practical Research 1, an introductory course that focuses on qualitative research methods in SHS. In this qualitative exploratory study, a focus group discussion of 6 SHS students from the academic track was done. Using Biggs' (2003) 3P model, the findings were categorized into presage, process, and product factors. Coming into this course, participants recounted how their past educational backgrounds and limited knowledge of research methods had affected the way they initially perceived the course. Moreover, the role of their teachers and the kind of activities they do in the classroom influenced their motivation and attitude toward research in general. Factoring in these experiences, all students still think that the course is beneficial in preparing them for their future academic and professional endeavors. Through this exploratory study, results were able to identify issues and improvements in the curriculum implementation of this research method class in the SHS.

Keywords: student-researcher, student learning experiences, attitudes toward research, research method class, qualitative research method, Practical Research 1

Introduction

Emphasizing the significance of research in education, many international and local educational agencies have argued for the strengthening of teaching and learning of research and design in academic settings (NGSS, 2013; NRC, 2012). Teaching academic research shows the students the process of how one produces new ideas, and how these turn into something tangible. In effect, learning to do research undertakings can develop students' theoretical knowledge, and practical skills that may result in the development of their worldviews on possible future professions as well as their understanding of the real-life application of research (NRC, 2012). It is essential, then, to assess educational practices (e.g., curriculum reforms, courses, and activities) to enhance students' research experiences and engagement in knowledge creation. This kind of inquiry can be readily framed within Biggs's (2003) 3P model, which examines the learning processes of students towards a particular skill or subject. This model posited how students' learning approaches were influenced by multiple elements such as presage (learner's characteristics), process (responses to the learning activities), and product factors (outcomes being achieved of the subject). Facilitating such inquiry may enhance the development of skills and potential of student-researchers that enable them to peruse academic journals, execute different research methods, and write papers so they can come up with ideas that can contribute to societal changes.

Recent works have argued on the significance of incorporating research in academic institutions from tertiary to primary schools, where students gain foundational knowledge and hone their skills before facing the professional world (Messiuo & Lower, 2023; Vossen et al., 2018). Some of the benefits in developing student-researchers in the classrooms are empowering students for better participation (Wilson, 2000) and helping them develop personal agency (Mitra & Serriere, 2012). By emphasizing research and its importance to how academic institutions work, educators can better teach students to become critical thinkers, effective problem-solvers, and thoughtful decision-makers in the future. However, studies have shown that students still looked at research as boring, difficult, and irrelevant (Ajzen & Fishbein, 2005; Aschbacher et al., 2010; Potvin & Hasni, 2014). As a result, students think that research is challenging, causing them to experience research anxiety (e.g., Oguan et al., 2014; Roxas, 2018). Because of this, encouraging students to appreciate research works can be an arduous job for teachers. Addressing such problems emphasized the need for a shifting educational landscape that integrates research in the curriculum where students understand the significance of doing research, ensuring their roles as not just merely knowledge consumers but active agents in the construction of it (Webster & Kenney, 2011). Hence, the present study aims to determine the views and experiences of SHS students in learning and doing research in Practical Research 1, an introductory course on qualitative research methods. Using Biggs's (2003) 3P (presage, process, product) model, this inquiry tries to determine the factors that enable or disable such learning that may result in providing possible improvements in the classrooms. These improvements can facilitate more research-driven approaches to classroom activities that may enhance the overall learning in the SHS.

Context of the Study

For the present study, this inquiry involved the exploration of SHS students' classroom experiences of Practical Research 1 course, which focused on various qualitative research designs and methods. This course focuses on the development of students' critical thinking, language skills and problem-solving skills by utilizing qualitative research methods in their classroom activities. The course requirements included a variety of research tasks, such as an annotated bibliography, collaborative tasks, written quizzes, and a group research paper. Moreover, the inquiry is situated in a private university in the Philippines which offers basic and tertiary-level education. In the SHS department of the University, the majority of the instructors are licensed professional teachers with master's degrees or currently completing one. Practical Research 1 is taught mostly by teachers with English language education background and who have been teaching for one to more than ten years.

Theoretical Framework

To examine the teaching and learning in a qualitative research methods course, the current research undertaking investigated students' experiences which can be analyzed within Biggs's (2003) 3P model. This model posits how the process of learning can be a system of three interacting variables: a) Presage (student's learning environment, students' physiological attributes), b) Process (learning approaches and strategies inside the classroom), and c) Product (learning outcomes from the classroom). The present study utilized this model to determine and uncover different factors that have affected the learning process of this research course, from identifying the research experiences or background of the participants to evaluating the learning experiences provided in the course. The model also served as a guide on what lived experiences would be recognized to clearly describe how a qualitative research method class has been implemented. Lastly, the model was appropriated for the study for it encompasses the factors of a learning environment that might affect one's attitudes and beliefs, specifically in learning research. This leads to the discussion of the different factors that may affect the way the participants perceive this research course.

Literature Review

There has been growing literature that focuses on developing student-researchers (e.g., Edwards, 2000; Fraser et al., 2004; Messiou & Lowe, 2023). Much of the scholarly works are investigations involving students as researchers through research-driven classroom projects (e.g., Carrington et al., 2010; Hajisoteriou & Angelides, 2015; Hajisoteriou et al., 2017). This increasing attention only proves the argument of Fielding (2001) that states how students can be viewed as sources of data, active respondents, co-researchers, and even primary researchers. Groundwater-Smith and Mockler (2016) posited the shifting conceptualization from treating students as a 'data source' to that of co-researchers who have a more active role in knowledge-construction and research undertaking. In this regard, more studies that examined factors which enable such development of student-researchers' abilities were made. For instance, Salgueira et al. (2012) analyzed undergraduate students' (n=466) individual characteristics, including personality traits and socio-demographic characteristics,

as determinants of one's engagement in scientific research. Their findings revealed that students' involvement in research was influenced by their individual characteristics (i.e., age, gender, personality) as well as contextual factors (e.g., students' autonomy level or students' role model amongst faculty).

In addition, scholars have posited how affective factors (i.e., attitudes and beliefs) significantly affect the learning and development of student-researchers (e. g. Santos et al., 2021). For example, the study of Papanastasiou (2005) on undergraduate students (n=226) revealed five domains of attitudes related to research: a) usefulness of research in the student's professional life; b) research anxiety; c) positive attitudes toward research; d) relevance of research to the students' nonacademic and professional lives; and e) difficulty of research. The results also showed how students strongly favor research if they find it useful to their academic and professional lives. Moreover, the findings of van der Linden et al. (2012) presented how students (n=81) have a mostly positive attitude toward research because of effective classroom practices, authentic learning tasks, and collaborative works provided in introductory research. It was also revealed that students' positive disposition toward research can be attributed to how they perceive the functional and applicable aspect of research to various real-life situations (Vossen et al., 2018). Further, students' attitudes become more positive if they can internalize and understand the usefulness of research, its attributes, and its interpretations (Kidd & Seiler, 2014).

Aside from individual and affective factors, studies also presented the importance of inquiry-centered and research-driven pedagogical approaches in the classroom that may encourage students' engagement in research. The study of Messiou and Lowe (2023), for example, explored how Inclusive Inquiry, an approach to developing inclusive practices and thinking in schools, enabled the development of student-researchers in primary school. With encouraging classroom activities that ensure students' involvement in research, findings revealed how such approaches facilitated efforts toward empowering students' voices, thus, increasing their confidence and engagement. Moreover, the study of Vossent et al. (2018) examined students' attitudes toward doing research in a newly introduced Dutch

subject, O&O (research & design). As O&O involved students to participate in authentic research projects, results showed how students had significantly positive attitudes and less anxiety toward research. These findings demonstrated how positive and effective classroom practices that incorporate research enable students to better understand the relevance of learning and doing research.

In the Philippine context, there has been an increasing scholarly inquiry on developing research engagement among students. For example, the study of Oguan, Bernal and Pinca (2014) on undergraduate students (*n*=338) who had taken an introductory research class revealed how students recognize the usefulness of research in their chosen professions. The results also showed how female students tend to have a higher research anxiety level whereas male students tend to have difficulties in understanding and in doing research. On the other hand, the study of Roxas (2018) used convergent parallel mixed methods to identify research attitudes of SHS students (*n*=100). Similar to other findings, the students generally have a positive perception toward research but experienced anxiety due to the fact they have difficulty understanding the basics and essence of research, as well as its rigorous process. Moreover, the study found that when students view research as relevant to their profession, they are most likely to have a more positive disposition toward it. Furthermore, the article of Landicho (2020) on secondary school students' (*n*=53) attitudes and practices toward research writing and reporting in science uncovered key motivations, such as teacher's expectations and personal drive to obtain good grades in doing research. However, the findings also reported how insufficient time, inadequate background in research, and lack of resources have been some of the barriers students experience when doing research.

Based on the abovementioned studies, it can be inferred that there can be different factors that may enable or disable students' learning process in research. This aligns with Biggs' (2003) 3P model that explains how learning can be a system of interacting factors, from students' individual and internal characteristics to their environmental and external attributes that are greatly shaped by their learning spaces. However, most of the literature only focused on one or two factors

that allow student research engagement like looking at students' attitudes toward research. Because of this, the current study tries to explore how looking into Biggs' presage, process, and product factors can determine the conditions of students' learning in a research methods course. In examining how such courses were taught and experienced by SHS students, the present study can provide a nuanced understanding of the realities of how the implementation of this course and how it can be improved.

Research Questions

The primary aim of this study is to explore the factors that enable or disable the development of practical knowledge and skills of SHS student-researchers in learning in a qualitative research methods course. In addition, the researcher is interested in learning aspects of the course which can be improved and strengthened. Specifically, the study aims to answer the following questions:

1. What are the factors (presage, process, and product) that affect SHS students' learning in a qualitative research methods course?

2. How do these factors inform improvements in the teaching of this qualitative research methods course?

Limitations of the Study

The present study only focused on the teaching and learning process of Practical Research 1, one of the research methods courses in the SHS curriculum. Moreover, the inquiry only involved the perceptions and insights of SHS students in a particular University where implementation of the course might vary compared to other universities in the country. This is because the purpose of the study is not to construct a generalizable evaluation of the teaching of the said research method course, rather to identify and examine the experiences of students in learning in such a context. In effect, the investigation can elicit nuanced understanding of the teaching and learning practices in a research method class that can lead to identifying solutions for possible improvement.

Methods

Research Methods

Due to the purpose of exploring SHS students' personal experiences in the teaching and learning of a qualitative research methods course, the present study employed a focus group discussion (FGD). Six (6) participants were selected to be part of the FGD as Krueger (1994, as cited Lune & Berg, 2016) suggested a focus group should not have more than seven participants. This number of participants is small enough for everyone to contribute, yet large enough to share diverse opinions across the whole group rather than fragmenting into smaller parallel discussions. Lune and Berg (2016) also agreed with this number to effectively elicit the breadth of responses among chosen participants.

An FGD is selected as an appropriate data gathering tool for this study as its main purpose is "to draw upon respondents' beliefs, attitudes and feelings by exploiting group processes" (Freeman, 2006, p. 493). Through an FGD, the study focused on students' classroom experiences that strived towards a participatory approach in investigating the development of students' knowledge and skills in doing research. Particularly, such focus groups facilitated in-depth understanding of students' perceptions and experiences by giving them freedom to articulate such in their own words. Moreso, the idea is that group processes can help people to explore and clarify their views and attitudes efficiently and encourages participation from those who feel that they have little to say (Kitzinger, 1995). Finally, Freeman emphasized "the interpersonal communication between participants additionally helps to clarify similarities and differences in expressed opinions and/or values" (p. 493). FGD was also utilized due to unequal standing between the interviewer and the participants that might affect the validity of the results.

Prior to the group discussion, an FGD schedule was prepared with suggested questions. In addition, the preparation of the schedule for the focus group was guided by the two principles recommended by Stewart and Shamdasani (1998, as cited in Gill et al., 2008): Questions should move from general to more specific questions, and question order should be relative to importance of issues in the research agenda. The discussions were guided, monitored and recorded by the researcher using an audio-recorder. The location for the FGD was organized in advance and was in a quiet place so that the participants can concentrate on the questions but also in an open place where neither the researcher nor the interviewees can be compromised (O'Toole & Beckett, 2010). Considering these factors, a spacious and well-ventilated classroom was selected as a venue for the group discussion. The location is quiet enough that all participants can feel safe and comfortable as they are not removed from their natural setting.

Participants

Six (6) participants from the strands of the Academic Track, namely STEM, ABM, and HUMSS were selected. The student-participants were recommended by their respective Practical Research 1 teachers similar to what was done in the study of Chung and Huang (2009). In addition, these students come from different educational backgrounds (either public or private institutions) to compare whether different prior experiences can produce similar or different findings. Table 1 presents the demographic profile of the student-participants.

Table 1

Demographic Profile of Student-Participants

Pseudonym	Sex	Age	Strand	Type of School Graduated
Student 1-STEM	M	18	STEM	Private School
Student 2-STEM	F	17	STEM	Private School
Student 3-HUMSS	F	17	HUMSS	Private School
Student 4-STEM	M	17	STEM	Private School
Student 5-ABM	M	16	ABM	Private School
Student 6-ABM	M	17	ABM	Private School

Note: STEM = Science, Technology, Engineering and Mathematics; HUMSS = Humanities and Social Sciences; ABM = Accountancy and Business Management

Data Analysis

In the present study, transcripts of the recorded FGD were checked for accuracy against the original recordings. Data analysis was also conducted simultaneously with data collection. Extensive coding of the FGD transcripts was conducted thematically (Braun & Clarke, 2006) by the researcher. Following Braun and Clarke's (2006) analytical approach, transcripts were thoroughly read that created the initial codes of the study. Next, data segments were systematically coded through assignment of labels to summarize content and interpretation of meaning. For example, when asked about where they can use their learning from the subject, one participant answered "I believe that all the things I'm learning through research every day feel like real-life applications. So, all the learnings and lessons I've gained, I think, can be applied to every aspect of life—they can always be useful." This response has been labelled as 'Research can have a real-life application and can be used in every aspect of life'. Guided by Biggs's (2003) 3P model, codes were then clustered into potential themes based on whether they can be considered as presage, process, and product factors. These potential themes were carefully reviewed to identify patterns, enabling more general themes. For instance, in our data, the codes 'widens one's knowledge of the field', 'has real-life application', and 'can be helpful in college and in the workplace' were grouped into a theme called 'Research for career preparation'.

To ensure objectivity of the analyses, the researcher asked two independent inter-raters to examine the data. Any disagreements and coding discrepancies were discussed and, in some cases, labels were renamed until all had reached consensus. Through this method of peer debriefing and examination (Lincoln & Guba, 1985, as cited in Hunter et al., 2010), the inter-raters helped ensure the labels were grounded in the responses and not merely products of individual biases.

Ethical Procedures

As part of the data collection, the participants were asked to complete an informed consent form where they were briefed of the study's rationale and the use of data for derivative work. All participants voluntarily participated, and they were guaranteed confidentiality and anonymity. Due care was observed in this study to ensure that the positionality of the researcher does not potentially impact the participants' answers which may lead to influencing the findings of the research.

Results and Discussion

Results

The data analysis determined seven themes from the focus group discussions: Presage Factors (Varying students' learning opportunities, Lack of familiarity of qualitative research, and Misconceptions about qualitative research methods), Process Factors (Teachers' role in the learning process, Additional expectations and academic pressure, and Lack of engaging collaborative work), and Product Factors (Research for career preparation).

Presage Factors

Varying student learning opportunities. Based on the FGD, it was clear the participants had different research backgrounds. Regardless of whether they came from a private or a public school, students were exposed to research or were introduced to research differently. Half of the students were only introduced to writing a research paper when they had their Practical Research 1 course. It was only where they had been taught citations and evaluation of sources, in which the SHS curriculum had suggested the skills that students should have had already acquired prior stepping in this grade level. Moreover, it was apparent that having an early overview of research became an advantage to these SHS students. During the discussion, Student 1-STEM, the class valedictorian of his junior high school class and a consistent honor student, stated that his research experiences, though it was just a simple project in a private school where he graduated, helped him with the basic concepts one needs to efficiently write a research paper. He narrated:

> "When we were in Junior High School, we had some research work. We had SIP (Science Investigatory Project), but only the basics were taught and were not that really detailed. We also had quantitative research in our English subject last year."

However, this notion is not true to all institutions. Student 2-STEM, a public-school graduate, narrated

that her not being part of the special science classes may have hindered her early introduction to research. She recalled:

> "Only the special science classes were the ones to do research. So, in our case, research was not tasked. It is only writing activities with simple research outputs. It was somewhat easy. Because of this, I really had a hard time in research because I do not have any idea about research and it is as if I am new to doing research.

Such findings aligned with studies (see review of Salgueira et al., 2012) that showed how students' previous research experiences, from attending in research methodology workshops to writing research proposals, directly influence students' development of the appropriate skill sets needed in participating in an introductory research class like Practical Research 1. With only half of the participants having previous research experiences, this might limit some students to fully engage in their research classes.

Lack of familiarity with qualitative research. Based on the research experiences of these students, most of them accomplished science investigatory projects (SIPs) or experimental studies, which were different from any qualitative research designs. Because of this orientation, students had difficulties identifying how they would apply what they know about research in doing a qualitative study. Student 3-HUMSS shared her difficulty in writing a qualitative paper because she was more exposed to quantitative design during SHS. She shared:

> "I've done experimental research where we accomplished a laboratory experiment and did a t-test. I just had a difficult time doing qualitative research study because the fundamentals were different; labels and chapters were different; and the nature of the research was different."

Although some students had already experienced doing research, they were only taught quantitative research designs such as experimental case studies. This may be rooted from how their teachers were taught about research and were acquainted with research. Studies found that teachers' definitions of research commonly focused on positivist concepts and assumptions (Shkedi, 1998, as cited in Borg, 2006) and followed the conventional scientific research methods (Borg,

2008). This echoes some findings that teachers lack the expertise on research methodology (Allison & Carey, 2007). It should also be noted that such qualitative research methods would have different procedures (e.g., interviewing, interpreting qualitative data) from doing a quantitative study that may not have been explicitly taught in the previous school year of the students. With this, it can be inferred that these students were not yet exposed to such qualitative research works; hence, the need for this introductory research course in the SHS level.

Misconceptions about qualitative research methods. In connection with students' unfamiliarity of the qualitative research methods, it was apparent that participants only provided vague and inaccurate descriptions of what they know about the research design. Additionally, it was surprising that the many of what they know about qualitative methods were all the critiques against the research design and most were even misconceptions (see Harper & Kuh, 2007). For instance, Student 4-STEM thought qualitative research as opinion-based studies and solely grounded on one's subjectivity. He stated:

> "Generally, I know that in qualitative research it is more about behavior. There is a side to it that is very much opinion-based and can be very subjective. This can be the reason why some researchers were not too keen about qualitative research that they only focus on doing quantitative study because it is more objective."

Process Factors

Teachers' role in the learning process. When asked about how they perceived their research teachers, students had different opinions about their teachers and whether or not they were effective. While all of the participants thought that their research teachers helped them learn more about the subject, four of the participants stated that there could have been varied teaching strategies that could have helped students be more engaged in the discussions. For instance, Student 6-ABM mentioned how his research teacher has the mastery of the lesson but noted that their classroom activities tend to be boring especially for an afternoon class. He continued:

"Our research teacher explains the lessons well so that she can elaborate concepts and provide in-depth discussions. However, I find her teaching strategy very boring especially for an afternoon class, even the majority of my classmates think so because they had been sleeping in class."

In contrast, Student 3-HUMSS thought that her research teacher was not able to discuss the lessons properly and had not contributed to the information that was already given by their textbooks. Moreover, she and her classmates observed that at times the research teacher seemed aloof and even scared to give his insights especially knowing that her classmates could correct him. This might be attributed to the level of mastery of a teacher in research. If a teacher has little background in the subject of their teaching, the teacher tends to be more reliant with the textbook content and would be more cautious in discussing the lesson (Dorfsman & Horenczyk, 2022; Fan et al., 2021). She narrated:

"Our teacher has become too comfortable with the students that the discussion seemed more of a conversation rather than lecture, and as a result, lacked elaboration of concepts."

Based on the different accounts of the participants, their insights suggest that a teacher can really become a pivotal element in fostering a positive attitude toward learning research. Participants described that though teachers could explain and elaborate the lesson, they still think that teaching strategies and learning activities could have been more interactive and engaging. It is revealed that participants perceive their research teachers as effective if these teachers can deliver instructional expertise in using a variety of activities to transfer information to students. In addition, students perceive their research teachers as effective if they have strong interpersonal skills that promote respect and rapport during the discussions in the classroom (Adu & Olatundun, 2007; Danielson et al., 2014).

Additional expectations and academic pressure in the classroom. During the FGD, motivation was mentioned as an important learning facet that can influence one's attitude and belief towards learning research. Being linked to the volume of intellectual energy in the process of learning, motivation can be viewed as an important attribute of an individual, similar to one's personality (Entwistle, 1988). Learner motivation refers to "the desire to engage in a learning activity" (Kim et al., 2014, p. 173). There are two distinct types of academic motivation that interrelate in most academic settings: intrinsic or the drive of the student to engage in learning for its own sake and enjoyment, and extrinsic or the desire to obtain rewards or to avoid punishments (Middleton & Spanias, 1999). Student 4-STEM, for instance, pointed out that having a healthy competition inside the classroom can push students to do better in the subject. This healthy competition was influenced by the quality of teaching his research teacher has provided, together with the constant reminder to do their best to produce a substantial output. He stated:

"There is a constant air of competition in our class that we need to push through. I commend the quality of teaching of my teacher because I definitely learnt from her and it really helped me because we have been part of the colloquium. I think it is good that there is a constant burning fire that motivates students to do their best. Although it can be a lot of pressure, I think it will motivate the class more."

However, he also argued that some students might not be able to cope with this kind of challenge to do well in class. One good point that he mentioned was that persistent pressure to do better can be compared to a flame that students can either utilize for their own benefit or be burned by its heat. Furthermore, he explained that it will always boil down to how students deal with this kind of pressure, and whether or not they will be up for it.

The findings suggest that teachers' academic pressure and high expectations from their classes have become the students' primary motivation to do better in the class. This is parallel with the findings of Landicho (2020) that revealed how teacher's expectations and drive for good grades had been motivators for students to do research. One participant said that a healthy competition inside the classroom helps students stay motivated but this "burning fire" he mentioned might not be a fire that is fueled by students' own desire for improvement. All of the participants shared experiences that had motivated them which can be associated with how their teachers interacted with them and how their teachers put emphasis on the significance of their achievements. It is unfortunate that participants have been more motivated extrinsically rather than intrinsically. Extrinsic motivation refers

to the "performance of an activity in order to attain some separable outcome" (Lucas et al., 2010, p. 7). In this case, that outcome is to meet the teacher's expectations of the students and to cope with the pressure of the subject. This might be the reason why many of their classmates had negative perceptions on their research course as recounted by the participants. This is also similar to studies (e.g., Wang & Guo, 2011) that found that students were extrinsically motivated in their research methods classes that exhibit a reduced level of motivation to participate and only tend to work for subject compliance.

Lack of engaging collaborative work. During the FGD, students were asked about the different activities they experienced in the course and how well they thought these activities helped them. Students were able to identify the different learning opportunities given to them, such as collaborative learning and differentiated activities. As an example, Student 4-STEM mentioned:

> "The classroom activities were unpredictable. We do not know if we're going to start with a lesson already… Sometimes, she changes things up like we would start with an activity then proceed with the lesson."

However, students seemed to think that these collaborative activities had been insufficient to really motivate all students to participate in the class. They also mentioned how they loathe having too much lecture discussion on the subject. Although students know the importance of the lecture discussions in the subject, especially having little to no knowledge about qualitative research, students still think that there can be improvement to the teaching of the concepts without really focusing on just plain lecture. For instance, Student 1-STEM said:

> "I think that the subject will be more efficient if it will be given an application, not just purely lectures that were based in the book in the front of the class."

Product Factors

Research for career preparation. All respondents stated their agreement that having a research class in the SHS could really prepare and equip them with the appropriate skills, specifically different writing and research skills, when they take their undergraduate degrees and eventually graduate programs. Moreover, learning qualitative research designs could help the students learn more about the specializations they chose. For example, Student 2-STEM felt that having learned research in the high school setting could help her better understand the course she will take in college. She expounded how research would help her become more prepared especially when she enters medical school. She described:

> "It is vital for my higher education because I would be taking up pre-med [pre-medicine] in college. In medical school, even if you are already a doctor, you still need to do research. You still need to study about new technology, that is why research is so important."

Participants described learning research as a way to envision themselves in specific careers, such as Medicine or Social Work. They found satisfaction in establishing clear connections between their academic interests, career aspirations, and personal identity for the foreseeable future. Research has strong "affective and identity-related components" (Seymour et al., 2004, p. 524), which manifested in the experiences of the participants. Two of the participants were even interested in the idea of research as a career.

Discussion

With the FGD with SHS students, it was revealed that their previous research exposure was shaped by the learning opportunities provided by their junior high schools. It is also evident that having students be exposed to various research activities like doing SIPs or case studies can help in providing students basic knowledge and skills for them to be prepared once they have introductory research courses in SHS or higher education. Such findings can help schools better understand the significant benefits of integrating research in students' learning as early as junior high school to better equip students not just with knowledge on research but the skills in conducting one. With several studies (e.g., Buchmann & Hannum, 2001) that have supported how school factors and school learning opportunities affect educational outcomes and student achievement, it is clear from the views of the students that having a research background helped them to be more adept with the requirements

of the course. This variation of learning opportunities may be a result of differences in the curriculum implementation of institutions, specifically on how schools integrate research as a significant learning experience for students. These differences can also influence instructional decisions, such as course content coverage and school-based activities (Gamoran et al., 1997).

In lieu of this, the variations on how much learning opportunities were given to students regarding research somewhat influenced the students. For instance, students who lack the research background might not be able to cope with the high expectations of the SHS curriculum. It is noteworthy to point out that low-achieving high school students are also capable of learning much more than is typically demanded of them (Gamoran et al., 1997). Even with the appropriate skills for research to write a successful paper, students might end up just relying on other students who had the same set of skills but with the advantage of knowing the fundamentals of research. This may inhibit one's realization of their own research potential and ability to become an autonomous student-researcher. Further, some institutions' lack of research integration may lose the chance to produce highly competitive graduates who are fully equipped with research skills needed not just in the academe, but also in the corporate world (Leikuma-Rimicane et al., 2022). Strengthening students' learning by integrating some research aspect to their classroom activities might help mitigate such issues, and would also help students be equipped with informational and practical skills in doing research works.

When students were asked to describe what they know about qualitative research prior to taking up the subject, all of them answered that they know almost nothing about the research method. This is expected because qualitative research methods were only introduced in the Practical Research 1 course in the SHS level. Based on the accounts, students were more exposed to quantitative research that engaged them in various experimental studies when they were in junior high school. Because of this, Practical Research 1 as an introductory research methods course offers possibilities for students to gain more perspectives on understanding social realities and knowledge-creation using a more interpretivist and humanistic approach

in research. This entails the importance of the active role of teachers in ensuring effective and engaging classroom practices that privilege critical and inclusive inquiries on human experiences and phenomenon (Messiou & Lowe, 2023). Such practices can include lecture discussion as the majority of the participants still found its relevance, particularly in an introductory course that they might have limited knowledge of. However, teachers should be able to find a balance in incorporating both lecture and other interactive activities. Classroom activities can incorporate more active-learning activities, such as collaborative tasks and process writing techniques (Hassan et al., 2020), where students work intensively and collaboratively in doing their research. This is to challenge the views of students that research courses might not enable the development of their teamwork skills because of the continued prevalence of traditional classroom-based teaching (Lizzio et al., 2002). As a suggestion, participants hoped that teachers would provide more interesting activities and opportunities to work on individually or in small groups, similar to recommendations from various studies (Kaur, 2009).

As the perceived outcome of the course, findings suggest that the participants highly appreciate the usefulness of learning in a research methods class. This aligns with studies (e.g., Kidd & Seiler, 2014; Oguan et al., 2014) which highlight students' positive attitudes toward the value of research. Participants shared that being exposed to research writing before going to college prepared them to be more knowledgeable with the content and skills needed to be successful in the said level. Likewise, Papanastasiou (2005) discovered that students feel positively towards activities or objects that are useful in their lives. With this, students are well-aware of the importance of research in their future careers and professions.

Conclusion

Based on the results, it is revealed that the students' experiences in learning research might have been influenced by different factors. If the SHS curriculum already offers an introductory research methods course like Practical Research 1, research writing should have already been explicitly embedded to the junior high school curriculum to construct a strong

research foundation prior to any research methods class. This can establish well-prepared student-researchers as early as the junior high school that would already have the needed skills going to the SHS. It is also discovered that teachers primarily utilized lecture-type discussions in their classes which is supported by the accounts of students. As recommendations, teachers should employ more interactive activities, specifically active learning activities that will improve student engagement with the classroom discussion (Ghazali et al., 2012; Messiou & Lowe, 2023; van der Linden et al., 012). Aligned with the literature (e.g., Papanastasiou, 2005; Vossent et al., 2018), findings indicated that the integration of research in the SHS has been productive and helpful in so many ways to its students, such as providing more knowledge about different research paradigms, and training students to pursue research undertaking. Such findings only strengthen the significance of establishing more research experiences for students, not just in higher education but also in the secondary level.

Despite the limitations and need for further research, the knowledge gained from this study supports the contention that there are various intersecting factors that play important roles in academic achievement, specifically in the implementation of a research method class. This study sheds light on the actual lived experiences of the senior high school students. Furthermore, a central finding of the study proves that the learning of research is evidently affected by students' personal experiences and socio-contextual environment. Even with the different challenges in the implementation of the course, the students still find the subject beneficial in helping them to be more globally competitive Filipino professionals.

Implications

Findings of the study provided implications for teachers as well as educational researchers. For teachers, the insights and information of the study can help them be more conscious and understanding of the different factors that may affect the student learning of research, particularly at the SHS level. Primary and high school teachers can also improve their teaching by understanding SHS students' research learning experiences. They can adjust their methods, such as adding interactive and real-life research activities, to enhance learning. For educational researchers, this study also provides encouraging results which can be the basis for future studies. For example, a possible research study can be done by examining the experiences of teachers towards teaching and guiding students in research. In doing such inquiry, there can be multiple perspectives on how to better improve the integration of research in the SHS curriculum; thus, creating a stronger foundation of knowledge and skills in developing student-researchers.

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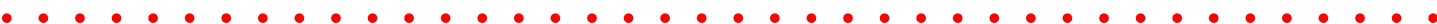
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