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#### RESEARCH ARTICLE

# FROM STRAND MISMATCH TO ACADEMIC PATCH: A PHENOMENOLOGICAL STUDY OF FILIPINO COLLEGE STUDENTS WITH STRAND MISMATCH

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#### **ABSTRACT**

The Philippine educational system currently follows the K to 12 Program, covering ten years of basic education and two years of Senior High School (S.H.S.). During the last two years of this program, students have to select a specific strand that will aid in preparation for higher education. However, it is not always that the students' chosen strand will align with their college course. This qualitative paper uses a phenomenological research design to answer the question "How do Filipino college students adapt to the challenges of strand mismatch?" and to raise awareness of the lived experiences of these college students. The set of data was gathered through semi-structured interviews and was analyzed using inductive reasoning in theme development. Four themes were extracted from the verbal musings of the participants. These are: (1) Crucial Circumstances which include Decisive Factors, Restrictive Hindrances, and Reflective Insights; (2) Receptive Response which encompasses Social Support, Exerted Effort, and Adaptive Action; (3) Individual Impact which pertains to Personal Convenience, Relational Indifference, and Emotional Encumbrance; and (4) Acquired Abilities which involve Cognitive Capacity, Progressive Proficiency, and Environmental Expertise. While strand mismatch has made college transition more challenging for most students, there is no fixed way of coping with it. The study reveals that strand mismatch has opened a door of opportunities for personal growth and development amongst college students after facing the adversities that came along with this experience. The researchers recommend further exploration of the perspective of college students who have taken non-academic strands and are also experiencing strand mismatch, the implementation of mixed methods research design to reinforce further the study results, and the impact of strand mismatch to outcome-based education (OBE).

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## **INTRODUCTION**

The world is growing and changing at an alarming rate. As nations continue to grow and grow, the international standard begins to change rapidly, and the Philippines is lagging in many aspects. Education is one of those aspects, and a massive change was needed for students to catch up and compete globally. Republic Act 10533, or the Enhanced Basic Education Act of 2013, which introduced the K to 12 system, is the Philippines' change. The K to 12 system adds Senior High School and requires Kindergarten as a prerequisite to Grade 1.

According to the Official Philippine Gazette (n.d.), "Senior High School is two years of upper secondary education that includes many career tracks known as strands." The additional two years give students sufficient time to hone and master their global recognition and competency skills. This study, however, will highlight only the academic strands, namely Science, Technology, Engineering, and Mathematics (STEM), Humanities and Social Science (HUMSS), and Accountancy, Business, and Management (ABM). The researchers exclude General Academic Strand (G.A.S.) in this study as this strand offers broad information that encompasses all three academic strands and more.

Students under the G.A.S. strand were assumed not to experience strand mismatch as they were ready to face any college course. Based on the development plans formulated by the Department of Education, students who have finished all the essential competencies in Junior High School are promoted to a higher level of learning. Hence, when the students reach Senior High School, they will choose which strand to study based on their interests, plans, and other aspects. With recent implementation of the K-12 System in 2013, the current Philippine curriculum is still in its natal stages. A study entitled "Embracing the K-12 Curriculum: Accounts of Philippine Teachers and Students" by Trance and Trance (2019) discusses the teachers' and students' approaches to the modern educational system. Another study entitled "Unity Foreseen: A Close Look at the Values Formation and Challenges Faced by Senior High School Students" by Aguilar et al. (2020) shows the struggles of having different career tracks in Senior High School. Many more studies like this discuss the problems in Senior High School. Yet, none of them addresses an issue birthed from the K to 12 system found in tertiary education: strand mismatch. Strand mismatch is the phenomenon of a college student studying a course unrelated to their Senior High School strand. For example, an A.B.M. student expected to learn something in the business field takes a college course in the medical area instead. This phenomenon happens because interests can change, and plans can fall apart, among many other potential aspects. This research studies the lived experiences of Filipino college students who graduated Senior High School from a Philippine school in the Philippines and Qatar. Their verbalizations were explored and analyzed to understand strand mismatch better and help those affected by it. This present paper uncovered the lived experiences of Filipino college students who were facing strand mismatch. It aimed to answer the central question, "How do Filipino college students adapt to the challenges of strand mismatch?" From this main question came a specific sub-question, "What are the challenges Filipino college students face with strand mismatch?"

This qualitative research study was conducted by following the phenomenological method. Mendoza et al. (2017) defined phenomenology as "a study wherein human experiences are examined through the detailed descriptions of the people being studied." The participants were chosen based on the criteria that they are first or second-year Filipino college students, enrolled either in the Philippines or Qatar, and are taking a college course unrelated to their Senior High School strand (e.g., an A.B.M. student taking Dentistry). Online interviews asking twenty-eight developmental questions were conducted with the participants to gather the data. Data analysis uses inductive reasoning, which identifies themes from the participants' specific lived experiences. Expectedly, the selected students struggled due to strand mismatch. From the results of this research emerged four themes that describe the participants' lived experiences. They went through decisive factors under (1) Crucial Circumstances with restrictive hindrances and had thoughtful insights. To cope, the participants' (2) Receptive Response included an exerted effort accompanied by adaptive action with the help of social support. They also had a different (3) Individual Impact amid strand mismatch; while some may have faced emotional encumbrance, others felt relational indifference or even personal convenience. While dealing with this challenge, the participants (4) Acquired Abilities in cognitive capacity, progressive proficiency, and environmental expertise.

Despite strand mismatch, the participants managed to find ways to cope and eventually grew from the challenge. However, the fact remains that the participants still faced multiple difficulties that were easily avoidable if not for strand mismatch. As the world keeps changing, newer and more challenging struggles will keep emerging. Education will always be an integral part of society, and research studies are imperative for future generations to face the same challenges.

## **METHODS**

**Research Design:** This study uses a qualitative research design in order to gain better knowledge of the performance and lived experiences being investigated. Qualitative research, according to Silverman (2020), is "characterized as a research that aims to explain people's perspectives and experiences, while it also aids in identifying what is important to people." Additionally, Crossman (2020) defined Qualitative research as a "social science research that collects and works with non-numerical data and that seeks to interpret meaning from these data that help understand social life through the study of targeted populations or places." Moreover, phenomenology was used to better infer the lived experiences of the selected participants. It is used to gain a deeper understanding of the underlying motives and opinions of the participants. According to Creswell (2013), a "phenomenological study is required if there is a need to profoundly understand a human's experience that is mutual to other people as well." In this case, a phenomenological qualitative research is used in this study in order to effectively understand the lived experiences of Filipino students with strand mismatch. The research utilized thematic data analysis in order to come up with four major themes. Braun and Clarke (2006) defines thematic analysis as "a method for identifying, analyzing and reporting patterns (themes) within data." The researchers used inductive reasoning that converted the particular experiences of the participants into sub-themes, then finally to a broader theme that was used to describe the phenomenon. Furthermore, this research was all based on the primary source of data or the verbal responses of the participants using a semi-structured interview. This is where the basis of our conclusion is derived from. The responses are regulated by an interview guide containing the twenty-eight developmental questions.

Research Locale and Sample: This study was undertaken in Philippine School Doha (PSD), a learning institution in Qatar that leads in the provision of Philippine basic education. Since October 1992, the school has been catering to the educational needs of the children of the Overseas Filipino Workers (O.F.W.s) here in the State of Qatar. A total of eight chosen participants were involved in this study. They are all college students who met the following criteria: (1) Filipino; (2) firstor second-year college at this time; (3) studies in Qatar or Philippines; (4) took an academic strand (STEM, A.B.M., or HUMSS) in Senior High School; and (5) experience strand mismatch. The researchers have purposely selected these participants through the set of criteria to ensure the validity of the findings in this study.

**Data Collection and Ethical Consideration:** The data gathering procedure began with the formulation of a central question, which acts as "a broad idea that stimulates curiosity and interest about the central phenomenon (Creswell, 2008, 129)."

The researchers were able to develop one sub-questions that aligned with the central question of this study. Furthermore, twenty-eight developmental questions were derived from the first sub-question to create the interview guide.



Figure 1. Location of Philippine School Doha, Mesaimeer Area, Doha, Qatar

It underwent a validation process to ensure the efficacy of this research. Eight participants were selected to take part in this study. With the help of technology, consent letters were individually forwarded to those participants via email. Once permission has been granted, the researchers communicated with their key participants to schedule their online interviews by setting a convenient time and date. The researchers have also sought permission from the participants to record the entire interview. These audio recordings were solely used for data collection and transcription purposes. The participants were not forced to involve themselves in this study. As confidentiality and anonymity of the participants are highly regarded by the researchers, consent letters were given to inform the participants about this study. Before the interview, an orientation was also conducted to give them an idea of the interview process. Audio recordings of the interview were only utilized upon the approval of the participants. Moreover, pseudonyms (P1, P2, and so on) were used to refer to them to preserve anonymity. All personal information obtained from the data gathering procedure was not disclosed in compliance with the confidentiality protocols. Rest assured, research ethics and protocols were followed accordingly throughout the research process.

Data Analysis: The researchers utilized an inductive approach in analyzing the data, known as thematic analysis. The primary source of data came from the individual responses of the participants, which were carefully studied by the researchers. This enabled them to draw out general themes to describe the phenomenon. The first level of analysis consists of these steps: (1) encoding the emic transcription; (2) converting the emic to etic transcription; (3) Cool Analysis that refers to the treatment of data; (4) Warm Analysis wherein themes are generated and reflected through a dendrogram; and (5) creating the Simulacrum. Subsequently, a second level of analysis is done, which involves the use of related literature. This step is deemed as necessary to reinforce and elaborate on the themes that were generated in the previous process.

#### **RESULTS**

The introduction of the K - 12 law, which was approved by Benigno Aquino III, paved the way for educational advancement. The goal of the K-12 system is to guide students towards their desired careers, with each strand specialized and designed to best fit the students' choices.

Those who are aspiring business owners and entrepreneurs take A.B.M., and those who are intrigued by the wonders of mathematics and different sciences take STEM. Those who have a proficient understanding of human behavior and will fight for social injustices take HUMSS, and those who wish to undertake a more comprehensive and holistic experience take G.A.S. With the implementation of the different strands, students can focus on the subjects that are necessary to them. However, despite having a variety of academic options, there are a substantial number of Filipino college students who experience and are currently experiencing strand mismatch. At this crucial turning point of their lives, students are faced with factors that can influence the decision of their careers. This study investigates the lived experiences of Filipino college students with strand mismatch. It correlates with the central question; "How do Filipino college students adapt to the challenges of strand mismatch?" Based on the anecdotes of the different participants, 4 different themes emerged. These themes are (1) Crucial Circumstances, under which includes Decisive Factors, Restrictive Hindrances, and Reflective Insights; (2) Receptive Response which elaborates Social Support, Exerted Effort, and Adaptive Action; (3) Individual Impact which encompasses Personal Convenience, Relational Indifference, and Emotional Encumbrance; and finally (4) which falls under Progressive Proficiency, Cognitive Capacity, and Environmental Expertise.



Figure 2. Simulacrum

Figure 2 portrays the study's simulacrum shaped like a graduation cap which serves to represent the fact that the participants of the study are students. On a similar note, the graduation cap and the tassel being seen on the left side of said graduation cap signifies that the participants in this study have already graduated from high school. Additionally, the tassel contains four different symbols: flags, a gavel, a calculator, and an Erlenmeyer flask, which denotes that the participants studied in the Philippines and Qatar, the academic strand Humanities and Social Sciences, the academic strand Accounting, Business, and Management, and the academic strand Science, Technology, Engineering, and Mathematics, respectively. The inside of the graduation cap forms a diamond shape which represents transformation, specifically speaking about how the students have transformed through their experience with strand mismatch. The base or the foundation of the graduation cap contains the title, to say that it is the base and foundation of the study.

The base is also in the shade of green which represents growth, specifically, the students who did not give up despite experiencing strand mismatch. The top part of the graduation cap is divided into quadrants which show the four types of themes and subthemes, indicating the findings that came into light or arose from the study. The first quadrant on the upper left corner is dyed in red to represent urgency and something that is critical. The second quadrant on the upper right corner is tinged with the color blue to represent the intelligence and the reflection of the students as they experience strand mismatch. These are the coping mechanisms of the students and the color represents their persistence through the complications. The third quadrant found on the bottom left corner is the combination of the outcomes of the first two themes. Since red and blue make the color purple when combined, the fourth quadrant is thus tinted as purple. The third main theme talks about the effects of the strand mismatch on the students. Red shows the struggles that the students faced and blue shows the solutions or the outcomes. The fourth quadrant found on the bottom right corner is painted yellow to show the positive outcomes and gains from the changes that the student underwent. The themes are arranged in a clockwise manner, starting from the red quadrant up till the yellow quadrant, to holistically represent the experiences of those students who have put up with and are currently facing strand mismatch.

Crucial Circumstances: Entering college starts a student's long journey towards their professional career. Choosing one's course requires deep consideration as it will provide one of the edges needed to survive in a competitive world. The participants had varied conditions that led them to choose a course that resulted in strand mismatch. Strand mismatch brought on many challenges, such as, to quote the participants: "It was problematic knowing that I should have the knowledge that was taught and learned for the past two years, but I do not. That is why a bridging program, foundation, or self-learning is needed." (P6)

"I am pursuing Nursing and it affects my academic mismatch since what I have learned before is very different from what I am studying now, and I cannot relate that much. Unlike if I pursued Law or Political Science, it would be better for me." (P7)

**Decisive Factors:** Various factors play a part in a student's choice of strand and college course. May it be parents, peers, social media, or various circumstances, these all may influence one's decision and lead them to strand mismatch. As participants have stated:

"I was really going to go for Law. However, because of the pandemic, my mom told me that it was better to take an easier course, in which they decided that I should take Nursing. I told them it was very different from what I studied, but I just agreed because that's what they told me to pursue." (P7)

"Yes, I was influenced by a close friend and social media. I ended up choosing dentistry because I didn't know about it when I was in Grade 11 and they told me about the benefits of it." (P1)

"There was a grade cut-off to be able to qualify as a STEM student, and my grades did not make the cut. That is why I went

to A.B.M., knowing that I can still pick a course in the medical field in college." (P6)

**Restrictive Hindrances:** The problems that come with strand mismatch come in many forms, whether social, emotional, or academic. Lagging because they did not take the same classes as others is the most common problem. However, fears, doubts, and anxieties exist regarding the student's future, emotional detachment from learning, and a struggle in creating relationships. To quote from the participants:

"Strand mismatch affects my academic pursuit of knowledge, in a way that the focus of my learning in my previous strand is different from the course I'm taking right now, which is more on architecture and designing. My senior high is more on analyzing calculations of numbers." (P2)

"Since I took A.B.M., the only science subject I had was in grade 11. My major is related to science, and so, when our classes started in college, I tended to struggle with the topics and terms I am not familiar with." (P5)

"[I had a hard time overcoming the challenge of] having a good relationship with my college classmates. There are a lot of challenges that I am currently facing but that was the most helpful one when I resolved it. It is really easy to study when you know that you have classmates to run to, friends to relate with and those who would help you too. It is really a challenge to have a good relationship with them since I am not very social. That was the most difficult part." (P7)

**Reflective Insights:** The participants realized that they would have to put in extra work to succeed in their college courses and future careers fully. They also recognized that if they had background knowledge on these unfamiliar subjects during senior high school, their time studying now would have been easier. As the participants said,

"Although not having a background on A.B.M. strand did not greatly affect my academic performance here in college, it would have been an advantage if I had specialized subjects in senior high so I can be more advanced in my course." (P3) "I needed to study more and go beyond the things that I needed to learn for me to catch up. Although, since there is also school work that I need to do, I did not have time to fully focus on my subjects." (P5)

"Since people's lives are in our hands when we start working, we need to be more responsible." (P4)

Receptive Response: Problem-solving should start with acknowledging that there is an issue that needs resolution. From there, one can develop different plans to overcome such hindrances as there could always be several ways to go about a single problem. Strand mismatch has put students in a situation where they might feel academically left behind or socially alienated, making this a setback for some. In response to this challenge, its affected students have each taken appropriate steps to attenuate the effects of their situation.

"I realized that [I needed to adjust] because, especially in the Philippines, you really have to be flexible because the people are so different. All the people you have to socialize with, and given that I have strand mismatch, I really had to be flexible." (P1)

"I knew that my course and strand were unrelated, and so, just before taking my college course, I already knew that I needed to adjust and give my best." (P5)

"It was challenging knowing that all of your classmates have taken STEM and have the basic knowledge while you're the only one who isn't. You'd need to adjust to pursue your dream." (P6)

**Social Support:** Sometimes it takes a little support, guidance, and encouragement from others to keep the fire burning as one embarks through their endeavors. When doubt and uncertainty may prevail, it should not hurt to seek advice and reassurance. The initial struggles of strand mismatch became bearable for most participants as family members, professors, and peers served as their pillars for support throughout their experience. One participant who has expressed her feelings toward her parents who have helped her cope with her situation:

"I'm thankful that my parents were not really the people that will pressure their wants on us and gave us the freedom to choose the strand we would like. They've trusted us that we are responsible for our decisions." (P2)

Some relationships have also strengthened due to the support and guidance provided by the participants' family members. As mentioned by the participant,

"My family and I got to bond more together. I could tell them about my hardships in my course and sometimes I even ask for help from my relatives who are also in the same field of learning as I am." (P8)

To take a step further, some participants, like the one mentioned below, have been provided with opportunities like bridging programs to assist and help them catch up with the coursework they have missed.

"When you go to the Philippines and you have strand mismatch, they will offer you a bridging program where you take the subjects you were expected to have had during senior high school. I was kind of shocked and it was hard for me to keep up, but it eventually got better." (P1)

The statements go back to the concept that no one is truly self-sufficient. Thus, connection with others is necessary for one to thrive.

**Exerted Effort:** The transition to college life is already challenging enough on its own, but to add strand mismatch into the picture takes this scenario onto another level. The participants, being aware that they have chosen a course that is not aligned to their strand, had to exert extra effort through ways such as making compromises and sacrifices for them to surmount the barriers caused by strand mismatch. As stated by these responses,

"Exerting all my effort and giving my best in every subject helped me to adjust in the new learning environment." (P5) "Extra time and sleep would be a luxury due to the number of schoolwork like quizzes, activities, projects and the monthly exams. It is about not procrastinating." (P6) Even the most minor amounts of effort reflect the dedication of these participants to persevere in their chosen courses regardless of how complex this coping process may have been for them.

Adaptive Action: Finding the proper coping mechanism to survive through an unfamiliar academic environment differs from one student to another. It is a process that requires time, let alone mustering up the motivation to pursue a path that may seem more complex than the usual one. Nevertheless, passion continues to serve as a driving force that allows most of these participants to strive harder and keep going despite the difficulties. Having a solid mental foundation is vital, especially during the higher stages of one's academic journey, but this mental attitude should go beyond college life. As expressed by these responses,

"College is all about what you want to do with your life. Mentality is important. You have to adopt a new mentality that is more about your passion." (P1)

"I think the life skills are to never give up and just to pursue. I think that if you really want something, you are going to find a way to get it and achieve it. Since I want to do well in my course, I study hard, ask for advice from people, and also seek help from God so that I can gain strength from Him. I think these are the life skills that gave me confidence and made me sure to change courses even though it was a mismatch to my strand." (P2)

The students' coping mechanisms do not solely revolve around their grit to pursue the courses they have chosen, but others demonstrate different means of adaptive action through concrete methods such as practicing time management and organization or even by taking the initiative and responsibility, just like what this response mentions,

"In my academic lifestyle, since I am not really a person who studies a lot, I have to study more because I am left behind by two years. I really had to be more organized because my course is really time-consuming." (P2)

**Individual Impact:** Even though the experiences of these participants have one major common denominator that is strand mismatch, this phenomenon still has uniquely impacted these individuals. After undergoing the initial struggles and formulating the right strategies to get through strand mismatch, the participants have received either positive, negative, or even neutral outcomes from this experience.

"Since I had a different senior high strand, it really challenged me to learn new things. It made me explore new learning styles. Aside from that, my academic performance was really different compared to my senior high." (P5)

**Personal Convenience:** While strand mismatch may disadvantage students, it can open gateways filled with endless opportunities. A brighter side of strand mismatch also exists where students can explore passion, acquire skills, and obtain knowledge.

"I did not view strand mismatch as something negative, neither did my parents. My experience with PSD helped me discover various types of skills and knowledge regardless of what senior high strand I was in. PSD focuses on assisting students in overcoming their limits to achieve more. But of course, it would have been advantageous for me if I took a strand suited to my course right now." (P3)

"I don't think there was an instance where I thought about dropping out because before taking this course not related to my strand, I actually consulted a lot of people who are also in this course and sought advice from those people around me who are knowledgeable. This is so that I can be sure that when the time comes, I won't regret that I've taken this course. Even though it's hard and challenging, I have no thoughts and regrets about taking this course because I've already started it, and I'm determined that I'm going to finish it." (P2)

It shows that despite facing the struggles of strand mismatch, the participants can turn this experience to their advantage or into something convenient for them. Through the participants' determination, strand mismatch will not hinder their pursuit of academic knowledge.

Relational Indifference: In some cases, strand mismatch was not entirely something that negatively nor positively affected the participants. Being a strand-mismatched student did not particularly spark any change within the participants' relationships with their peers or parents. According to these responses,

"Actually, it did not affect me and my friends, even if all of our courses are different from one another." (P8)

"It is still the same as when I was in senior high. It is not like they lack support, because the support is there, but it is stagnant. They know that I am studying and they are okay with it. So, I do not feel like the relationship between us strengthened in any way." (P7)

Taking a different course from the participants' friends did not significantly affect their relationship, as some friends underwent strand mismatch the same way they did.

"It did not really affect me since ten percent of my classmates in senior high school changed their course as well." (P4)

However, some participants have felt that strand mismatch was not something that would hinder them from excelling in their chosen field of study, knowing that they are pursuing their desired course, like this specific participant:

"It did not affect me that much because even if there are some struggles due to strand mismatch, I still got to pursue the course or career I wanted." (P1)

Emotional Encumbrance: Emotions may become a burden when it inhibits the ability to reason. These encumbrances can affect a person's mentality, specifically how they deal with the things they are going through. Strand mismatch has given these individuals additional endeavors not to be left behind in academics, leaving them to deal with a burdensome situation.

"I think I am having a more challenging time in my course because there are things that were not taught to us. Especially on the things that cover architecture and engineering lessons as the strand I took was not related to my course right now." (P2)

"The negative effect it had on me is that it sometimes drives me crazy to study in excessive amounts, especially when you do not even have a prior background on what you are studying about." (P8)

They were trying to cope with the stress of trying not to disappoint their parents, which eventually added more mental and emotional pressure.

"The pressure on me to pass the course is very heavy. My parents think that Nursing is easy when it is not since I came from HUMSS." (P7)

There were also instances wherein the participants had faced hardships that even lowered their self-confidence and selfesteem. However, in the end, the participants grew from those hardships, which made them stronger and wiser as individuals. "I really doubted myself, which also lowered my confidence. However, having this type of emotion made me stronger. I realized that every circumstance can serve as an inspiration and a motivation." (P7)

Acquired Abilities: The participants created multiple coping mechanisms to handle the obstacles of strand mismatch. These coping strategies have led the participants to acquire abilities that they have used to triumph over strand mismatch. Coping mechanisms mark the end phase of the struggle as it reveals the realizations while showcasing how the participants grew as a person. The acquired abilities also encompass the outcomes of strand mismatch in terms of their values, comprehension, and environment.

"It was difficult at first, but after many months, I already adjusted to the learning environment by just knowing what my strengths and weaknesses are." (P5)

Progressive Proficiency: There are multiple dilemmas that can appear in a student's journey facing strand mismatch. However, through the problems, the students strived to work harder and were even motivated to study more to keep up with what they had missed in senior high school, thus, making them proficient in their current course. As mentioned by the participants,

"Anatomy and Physiology is a major science subject for nursing however when I was in Grade 11 and 12, we did not have any science subjects, so I had to push myself and exert more effort in order to learn something that we know nothing about or something that we were not given a preface of beforehand." (P8)

"Having online classes really challenged me, but it helped me to focus on my studies. Now, I can control myself, and I found a different style of learning." (P5)

The participants' problems with strand mismatch also made them grow as an individual. As they experienced trouble, they quickly adapted, resulting in a realization that they matured and achieved personal growth. The participants realized,

"I have been responsible. I do not know if it is just part of maturity knowing that I am a college student and I need to grow up from my old ways. Now, I think I have been really working hard with my academic course, and that is a really big change for me." (P7)

"I realized that I have to be more responsible so that my efforts will not be wasted." (P4)

"I am now more productive rather than a person who jokes around and procrastinates a lot." (P6)

## **Cognitive Capacity**

Experts define cognitive capacity as to how one's mind would react when put in a specific situation. Throughout one's lifetime, individuals make decisions that can significantly impact their lives, which may lead to undesirable outcomes. Consequent with decisions, one can learn from the past and appreciate the present, as well as motivate oneself into pursuing new knowledge, as reflected by the respondents' statements:

"The negative outcome is that I really doubted myself, which also lowered my confidence. However, having this type of emotion made me stronger. I realized that every circumstance can serve as an inspiration and a motivation." (P5)

"For the positives, I am appreciating my course a lot better because I realized that in my time in STEM, I was not meant for a field in engineering nor in medicine. Being in the business field now makes me feel more passionate. For the negatives, I sometimes feel guilty for wasting two years of my life on subjects that were really not helpful to my course right now." (P3)

Even though the participants felt a negative impact, as stated by a respondent,

"The pressure that I have given myself because of not knowing what I wanted to do in life. It was mostly anxiety and overthinking if I chose the right career or if I should have pursued a course aligned to my strand. It was mostly negative emotional outcomes." (P1)

The participants were still able to realize the positive impact of the event, leading to the process of learning how to make the best out of a situation as confirmed by the respondents,

"A positive thing is that it is fun to gain knowledge about the medical field even though there are times when it is hard. And as of now, there are no negatives, but I can say that studying in the medical field is stressful." (P4)

"I am currently pursuing accountancy and thankfully strand mismatch was not an issue. In fact, it benefited me in a way that I was able to learn more about various topics of knowledge and not just merely business-related courses. Immersing yourself in different fields and trying out opportunities will help you make better decisions in life. You will learn in the process what works for you best and what does not." (P3)

Environmental Expertise: Through one's journey to pursue their desired course in college, there come hurdles in one's paths. One must know to adapt to their newfound surroundings and create a new environment suitable to their current condition. Given that these participants were experiencing strand mismatch, they were placed in fields that were relatively unfamiliar to them.

"I am still in the process of getting into our new school and learning system. At first, it was really unfamiliar. I did not know what to do and how to join, but now, I am adjusting and coping up little by little." (P7)

"I think since I'm still in my first year, it is still challenging as I am still trying to adapt. I'm also trying to learn how I can do better, and how I can submit my projects on time since as of the moment, I am having difficulty managing my time and having to draw and design faster so that I can cope with the continuous plates and requirements my teacher requires us to submit." (P2)

Although the new surroundings may be challenging initially, the respondents are slowly growing into their current situation. Some learn by asking advice from their family and peers and exploring different coping mechanisms to aid them in their new educational route. As mentioned by the respondents,

"I discovered the methods to overcome challenges through the internet and YouTube videos, as well as by having people to look up to, who are successful in my chosen course. This is so that I could replicate them in a way that I can be successful in the course that I would take. To do that, I did advanced studying and also practiced drawing so that when the time comes that the teacher has a lot of required designs and plans, it would not be hard for me to adjust and be overwhelmed by the workload given to me." (P2)

"I was at the point of already giving up wherein I did not know what to do next, I did not know who to call because of so much pressure and anxiety. At that certain second, I decided to collect my thoughts and call my friends to tell them all my problems and issues. From there, it built my foundation. Little by little, I knew how to cope with this whole problem, and that is what I have been using until now." (P7)

### DISCUSSION

The design of the K12 program in the Philippine Curriculum opens opportunities for Filipino students by enabling them not only with knowledge but also with essential life skills to remain globally competitive (Mohammad, 2016 as cited by Dizon et al., 2019). Specifically, the birth of the S.H.S. strands prepares students for their future as workforce members. When pursuing higher education, students must pick a senior high school strand that matches their course to better cope with high demands and expectations, especially when studying in the medical field (Malaga & Oducado, 2021). Furthermore, a quantitative study by Alipio (2020) revealed that although a student's S.H.S. strand does not automatically dictate their academic performance, students with a strand that does not align with their course adjusted significantly worse than those without strand mismatch.

Crucial Circumstances: Humans make hundreds of decisions every day, some more thought out than others. In the case of decisions that have a lasting effect on one's life, one must consider the many aspects that may be attached to that decision. One such decision, which will be the main topic of the following paragraphs, is choosing one's college course—the lasting effect being that this results in one's eventual career. A focus group study by Ferri et al. (2016) revealed the various reasons younger students chose to opt for a course in nursing, such as being interested starting from childhood and having a personal acquaintance in the field.

"I built up a nice image in my head through my aunt and uncle who drove an ambulance; they used to go and save people, doing something for others; they felt essential..." However, the introduction of K-12 and S.H.S. strands makes deciding for students even more complex. It introduced the existence of strand mismatch - the phenomenon of a student's high school background not aligning with the demands of their college course. This is not to be confused with a sectoral mismatch or job mismatch caused by implementing S.H.S. strands (Pajares et al., 2018). In a case observed in the study, the student could not enroll in their desired strand because they did not meet the requirements of the academe. Another possible situation is to lack the necessary information before choosing a strand or course, which is to say being undecided. Meanwhile, external influences such as family, social circles, and others may entirely overhaul the student's decision.

Regardless of the factors that may have led students to strand mismatch, the fact remains that they must go through the hardships and setbacks that come with it. Though research on the subject is sparse, there is an undeniable moderating effect from the S.H.S. strand towards academic adjustment and performance (Alipio, 2020). Students with strand mismatch lag behind others as it is more difficult for them to follow the unfamiliar subjects of their course. Simultaneously, students suffering from strand mismatch are also deprived of interpersonal relationships as forming them is directly related to academic engagement. It also has various indirect effects from these relationships to cognitive and behavioral participation (Collie et al., 2016). Social relationships are crucial to humans because it is considered a basic need. Thus, if the issue is present, addressing and resolving it is essential for the student.

In the problem-solving process, one must recognize what is already lost and start solving. While studying academic stress in Philippine universities, Austria-Cruz (2019) found that Filipinos tend to cope with stress through spirituality rather than by unwinding or otherwise. One must find themselves and recognize that the focus must be dealt with rather than avoiding it and relying on distractions. For students with strand mismatch, realizing that they need to put in the extra effort to succeed is necessary. Although they are at a disadvantage because of strand mismatch, it is false to believe that they are limited by it and cannot flourish in their course. The capability of students with strand mismatch to overcome their problems will be thoroughly tested as they develop their ways of coping. According to Martin (2013), dealing with strand mismatch falls under academic resilience rather than buoyancy because it is a significant handicap for students and requires the proper response. Strand mismatch cannot be treated similarly to anxiety or stress because it is not a part of everyday academic life. In the end, the student's ability to look forward and maintain a positive outlook will be the one to help them get through any challenge.

Receptive Response: Human beings are naturally born with a survival instinct that allows a person to act in response to being put under unusual or intense conditions. Comparatively, this theory relates to the concept of how students devise unique coping mechanisms in the context of an academic environment. College is when students encounter multiple pressures and challenges to survive through the demands of their college courses (Austria-Cruz, 2019). In this stage, first-year students tend to feel more stressed, anxious and distressed

during the transition period to college life (Bayram & Bilgel, 2008 as cited by Leary & DeRosier, 2012). Coping mechanisms are especially helpful in managing stress and making students have the competence to perform academically (Austria-Cruz, 2019). There are two general categories of coping mechanisms: problem-based and emotion-based. Out of eight, two problem-based strategies include confronting coping and seeking social support, and two emotion-based approaches involve accepting responsibility and self-controlling. (Lazarus, 1988, as cited by Yazon et al., 2018). Based on this study's findings, students facing strand mismatch demonstrate similarly the four methods mentioned above. The college era is one of the most thrilling periods of a student's life. It is also when one embarks on a more autonomous journey away from family members to adapt to new environments (Leary & DeRosier, 2012). Still, students experiencing strand mismatch have sought social support from their parents to help them adjust to their situation. According to Smith (2018), parental involvement impacts the college transition process of a student. Previous research also reveals that parents who actively engaged and supported students during high school events and activities would, later on, strengthen their academic and spiritual support during the students' college transition. Likewise, parents also established the importance of building a relationship where students can freely go to them for advice regarding academics, personal issues, or future goals, which has helped students get through the hardships of college (Edelman, 2013).

As students go through various pressures when they reach higher levels of education, peer pressure will always remain. Rosima et al. (2021) suggest a correlation between peer pressure and academic performance, where friends influence students' academic performance. More literature says that undergraduate medical students tend to compare their academic dedication with their peers. Peer comparison affects their study habits eventually and even boosts student motivation (Lovell, 2015, as cited by Keren et al., 2017). According to De Leon & Balila (2015), Filipinos gain strength from others, and adolescents cope with difficult and stressful situations by looking for support. Students with strand mismatch have sought comfort and help from their peers from senior high school and college not to feel too overwhelmed with the process of catching up in the field. Florence (2017) emphasized that social support from family members, professors, and friends is significant in obtaining the necessary skills for college success. In academics, studying is challenging for students because of distractions and tiresome because it requires more effort than just attempting to pass a test alone (Tus, 2020). For the case of strand-mismatched students, they have acknowledged and expressed the need to exert more effort in their classes to be on par with the background knowledge of those students whose senior high school strands align with their college courses. According to the findings of Masui (2012) and his colleagues, increased study time predicts higher grades in a particular class despite prior study delays, revealing that academic efforts do matter. Although, with the desire to excel and catch up academically, students work harder and even sacrifice sleep to keep up with their course workload. However, research suggests that increasing one's study time will be counterproductive when there is deprivation of sleep exchange for additional time to study (Gillen-O'Neel et al., 2012). Time management is a vital skill that students need to master (Cyril, 2015). Many college professors expect time management to be a skill that students are already proficient in.

However, students show this skill only within the first year of college (Wintre et al., 2011, as cited by Gray, 2015). Since strand mismatch has put students in a situation where they had to exert more effort, time management has eased and simplified this complex journey. Developing other traits and skills such as passion, responsibility, and self-control have also turned into coping mechanisms for students experiencing strand mismatch. Pieces of evidence have shown that students with high levels of academic self-efficacy become more driven to overcome learning challenges while boosting their cognitive capacity. Aside from that, responsible students go beyond the prescribed learning materials. These students were more committed to producing positive academic outcomes using taking the initiative and managing their learning (Fishman, 2014). The rigorous life of college with strand mismatch was made bearable through the different coping mechanisms of first-year college students. There are various ways to overcome the barriers of strand mismatch, but it is up to the students to find which strategy is most applicable for their circumstances. As stated by Gallagher et al. (2019), "It is important not only that college students are selecting appropriate coping mechanisms to use, but that they are also assessing their stress and their ability to handle it on their own."

Individual Impact: Although strand mismatch is a phenomenon that many students are pretty familiar with, the impact it leaves is different or rather unique for each individual, which makes identifying the convenient method of approaching strand mismatch difficult. While students try to adjust to the circumstances of their situation, many outcomes occur when doing so. Fishman (2014) states that academic adjustment and performance results may vary depending on the selected S.H.S. strand. These effects can be convenient to the student, a nuisance, or have no effect. Students undergoing strand mismatch are under an unfavorable situation, where lacking the prior knowledge of the selected course puts these students at a disadvantage. The study of Alipio (2020) noted that health science students who chose STEM performed academically better than those who chose a different S.H.S. strand. While some break down due to unfair circumstances, some are willing to step up and take the challenge. Fishman (2014) mentioned that students would do all it takes to adjust to academic situations if deemed necessary. He also said that students who desire academic achievement would come out of their way to produce desirable outcomes. Strand mismatch can be a stepping stone for students if perceived in a new light. Students can advance and explore endless opportunities, broaden their skills and knowledge, and available choices for plausible career paths.

As discussed in Aguilar et al.'s (2020) study, senior high school students experienced more academic pressure, mainly for personal and future means. Setting goals, decision making, self-assessment, and evaluation are vital components in self-determination, paving the learner's road to success. Thus, strand mismatch does help students become more responsible as they face more challenges, which adds a higher rate of success. On the other hand, there are instances where students facing strand mismatch did not feel like they were at a complete disadvantage because most of their peers experienced the same. Some students also valued their experience studying in the course they desired higher than the struggle of strand mismatch. Their college readiness could be at a higher level than others as the average senior high school graduate is college-unready, according to Mamba et al. (2020).

However, some students are not as prepared and still struggle with the setbacks of strand mismatch. In the study of Gallagher et al. (2020), some factors cause stress to college students: financial situation, academic difficulty, and the suffocating pressure of carrying out high scores. With college being a more rigorous and demanding environment, strand mismatch has made this even more challenging for some students. Challenges brought by strand mismatch further take a toll on their mentality and will eventually consume their minds with regret and low self-esteem. Batu et al. (2018) study revealed that mismatched students had difficulties adjusting to college. Some even felt regret enrolling in a strand that did not align with their selected course; they expressed that they sacrificed a lot but did not feel as rewarded in the end. Students who cannot adjust to the schools' curriculum due to unavoidable circumstances are more likely to drop out, as Fan and Wolters (2014) mentioned. While the struggles of strand mismatch have left students contemplating the idea of dropping out or switching courses, this has only remained as a thought for them as they wish to persevere and not let their previous efforts go to waste.

Acquired Abilities: Stress may come to those who choose to take a different course in college. Highlighted in Batu et al. (2018) study, Accountancy, Business, and Management students had a difficult time adjusting to college; the experience was due to the students not aligning their college course to their senior high school strand. With this, adjustment to college can lead to stress and may affect the students' academic and emotional performance. However, through different mechanisms that may help the students to manage these stresses, they will be able to be competent in their academic performance (Austria-Cruz, 2019). These coping mechanisms lead to different outcomes in the students' proficiency, intellect, and environment. Taking responsibilities of being a college student may create tension in oneself. Although these strains may hinder the students from progressing, they may positively add to their expertise. Accordingly, the ability to cope with the workload due to the mismatch plays a role in handling all the stress it could give. Consequently, students continuously overcome personal problems and achieve a better performance in their academics, as they practice their ability to positively cope with the hardships that the students face (Yazon, Ang-Manaig, & Tesoro, 2018). Thus, stress may lead to positive outcomes as well. In Kumar and Kadhiravan (2012) study, students tend to develop competence that may aid them in coping with stress and challenges. Hence, the proficiency of the students increases as they go through college. Moreover, it is found in the same study that the self-efficacy of the students relates more to their personal beliefs and capabilities rather than the subjects themselves. By this means, the students can improve based on their coping strategies. The human brain has no limit to the amount of information and learning a person can attain; however, there are limits to the amount that the brain may employ at the given moment. Selecting a strand in senior high school is the starting point of their future career, implying that students need to have a solidified decision (Magdadaro 2020). Nevertheless, Filipino college students who experience a misalliance in their strands have been shown to perform exemplary throughout their senior high school years and continue to learn about their new course as they move up to higher education. Comparatively, although they have continued to perform excellently, the absence of an academic adjustment would be a better indicator of the students' academic performance (Alipio 2020).

In addition, studies have come out that non-STEM completers who have taken science and nursing course have struggled and performed lower academically as compared to their peers who have taken the corresponding strand, as the academic subjects in their track and strand are geared towards the learning foundation aligned with science and nursing programs (Malaga & Oducado 2020). Moreover, Filipino college students who have experienced strand mismatch have adept skills in adapting to new learning environments and have managed to create and explore coping mechanisms aiding them in the new learning conditions. Although stress is something every individual experiences, everyone works this stress and struggles differently. Researchers have found that students experiencing increased psychological tension but participating in stress coping mechanisms experience decreased stress levels during the start of pre-university life (Baqutayan & Mai 2012). Furthermore, coping can be defined as an activity that can aid individuals from being psychologically harmed and is essential as it mediates the negative influence that societies have on its members (Parantar, L., Reforzado, J., Costuna, G., Llurag, F., & De Veyra, R. 2021). The ability to innovate and maximize available resources to make the best possible outcome is one of the best practices (Tondo & Detecio 2019). Positive coping mechanisms such as problem-solving have been proven to elevate as individuals pursue self-knowledge and overall selfperception, which in turn reflects a positive impact on their developing self-efficacy and self-concept (Shi & Zhao 2014). The obstacles that colleges offer have different effects on students, whether positive or negative. Nonetheless, positively coping with the stress that strand mismatch may be more advantageous to college students. Enhancing one's expertise leads to the ability to maximize the available resources. Proper management leads to the acquisition of competence as well. Academically, however, it is more advantageous if the learners would not have to focus on academic adjustments. As Baqutayan and Mai (2012) expressed, stress can bring increased capacity and proficiency if it is considered a challenge; however, it may lead to helplessness and a sense of loss if it is a threat.

## CONCLUSION

Picking a college course is difficult due to the various factors that may influence a student's decision, like the financial capabilities of the parents (Samson et al., 2020). This uncertainty leads to the growing phenomenon of strand mismatch that continues to be dealt with by many Filipino college students of today. It is vital to understand the phenomenon to help future students and help identify the possible changes in the Philippine education system. However, due to its recency, only sparse research addresses the correlations between senior high school strands and college adjustment (Alipio, 2020). This research adds to that vast form of knowledge, seeking to address and bring awareness to the education system's possible challenges. **Implementing** academic strands reinforces college readiness and global competence among Filipino students. However, those who have chosen a strand that is not ideally aligned to their course have undergone a more burdensome and complex path. In Bulacan, almost 20% of the pioneer K12 year students fall under this umbrella (Santos et al., 2019). Strand mismatch has brought up challenges that were not only limited to academic pressures; students have also faced social apprehension between classmates and old friends.

Against all the odds, students have demonstrated their determination to stay in the tracks they have chosen to take in the first place. This positive outlook eventually caused some to turn this experience into a fruitful and beneficial opportunity to improve versatility and mental resilience. This study showcased the various issues and adaptations to strand mismatch faced by Filipino freshmen. The most common problem that the Filipino freshmen encountered was that they had to catch up with the rest of the class, falling behind the class's pace during lessons. Additionally, the study showed no single all-solving method of coping with the problems that arose from strand mismatch. The Filipino freshmen came up with various ways of adapting to their situations. Filipino students resort to independently studying in advance to obtain background knowledge for their college course, rewarding themselves with food or leisure time to study harder, and attending bridging programs to catch up with the pacing of their classes. Since its introduction to the curriculum, senior high school has always aimed to prepare students for their integration with the global workforce. As established in this study's simulacrum, the verbalizations of the Filipino college students with strand mismatch are embodied in four interrelated themes, namely: (1) Crucial Circumstances, (2) Receptive Response, (3) Individual Impact, and (4) Progressive Proficiency. The study emphasizes Filipino college students' struggles and attempts to adapt to strand mismatch. Moreover, these discoveries offer the next generations of Filipino firstyear students potential methods of adjusting to college life even when facing setbacks brought about by strand mismatch. The researchers recommend further exploration of the perspective of college students who have taken non-academic strands and are also experiencing strand mismatch, the implementation of mixed methods research design to reinforce further the study results and the impact of strand mismatch to outcome-based education.

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