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Internal and external factors affecting the strand preferences of Grade 10 students in Divine Word College of San Jose

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Celmar, April Joy O.

Divine Word College of San Jose, Philippines (apriljoyorpianocelmar06@gmail.com)

Calera, John Francis D.; Imbien, Myke Ronnael Cyber B.;

Saito, Oliver Mao R.; Caubalejo, Kyle Argie M.;

Schumann, Katharina P.; Punzalan, Edmark O.;

Valdez, Erna Joy T.; Limos-Galay, Jenny A.

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### Abstract

The main objective of this descriptive-correlational design is to determine the internal and external factors affecting the strand preferences of 129 Grade 10 students and their relationships. The researchers adopted questionnaires as the primary instrument in this study. The findings show that parents' expectations and beliefs about their child's academic abilities significantly affect their child's academic track preferences. External factors such as parental interest, financial condition, peer influence, and job opportunities affect grade 10 students in terms of their strand preferences. Among the four factors, job opportunities got the highest weighted mean of 3.27. This implies that students sought employability and stability in their preferred strand. Moreover, with a mean of 3.20 students choosing their strand based on their parental interest, it shows that some students seek guidance from their parents, especially when they have difficulty making decisions. Moreover, the study revealed a highly significant relationship between the internal factors and strand preferences, as well as external factors and strand preferences of the grade 10 students. It is recommended that the school conduct a career week for grade 10 students to learn the best strand that they want to take in their SHS based on their interests and skills. It is recommended that the parents continue providing financial and moral support for their students, especially in decision-making.

*Keywords:* strand preferences, internal factors, external factors, job opportunities, personal interest

# Internal and external factors affecting the strand preferences of Grade 10 students in Divine Word College of San Jose

#### 1. Introduction

One of the most complex decisions grade 10 students must make is choosing a senior high school strand. As also stated by Kilag et al. (2023), the senior high school program is a critical stage in the education system of the Philippines. This educational level provides students with various tracks to prepare them for their future careers, whether in academics, technical-vocational, or entrepreneurship. Choosing the appropriate senior high school track is essential for grade 10 students because it can significantly impact their future academic and professional careers. However, despite its importance, there needs to be more understanding of the factors influencing students' preferences for SHS tracks. With the continuous journey of the world towards a more globalized future and platform, the standards on work-related skills and aptitude are increasingly becoming a significant concern. On a particular note, Malaguial et al. (2023) mentioned that being aware of and pushing one's area of interest may help one develop and get on the appropriate career path because these things are essential in figuring out what line of profession is best for them in the future. Also, they emphasize that skills benefit not only individuals with better wages, greater work satisfaction, and increased adaptation to change but also companies, as they can maximize employee's skills and be more profitable. It highlights the significance of selecting the right senior high school strand, emphasizing the importance of aligning one's interests with future career paths. It underscores the increasing importance of work-related skills and aptitude in a globalized world. Additionally, it discusses how skills utilization benefits both individuals and companies, leading to better wages, work satisfaction, adaptability, and profitability.

In relevance, based on Japitan et al. (2015), the additional two years allow students to choose a particular track related to the field they wish to pursue. It is important to point out that choosing a strand is critical for making a student highly proficient in the field where his/her chosen track is related, especially if the student wishes to work immediately after graduating from senior high school. Consequently, Faelnar et al. (2019) noted the importance of correct and responsible strands in aligning college education career choices. Moreover, Nyamwage (2016) expounded that the student's career choice is one of the major problems and hindrances they face during their academic year. It entails the exchange of a large number of intricately intertwined components.

As Moneva and Malbas (2019) concluded, choosing a strand can be affected by the sociodemographic profile, socioeconomic status, parents, job opportunities, academic performance, personal interest, and many other facets that students need to be open-mindedly considered for the state of things in the future. On one hand, Juttler et al. (2021) found that students' interests, career goals, and perceived benefits of the track were the primary factors influencing their track preference. The study found that students genuinely interested in a particular track were more likely to choose it. It was further stated that students who saw the potential benefits of a track, such as employment opportunities and earning potential, were more likely to choose it. Meanwhile, Lorenz et al. (2020) found that academic performance, peer influence, parental guidance, and career aspirations significantly influenced students' track preferences.

This study will examine the effect of parents' decisions, financial capability, society's demands, academic performance, and aspirations. With the pressing problems relating to mismatched jobs, underemployment, and an insufficient workforce, it is important for the student to choose their strand related to the jobs that they want. The researchers conducted this study to investigate the internal and external motivations of Grade 10 students that affect their strand preferences and to understand the horizons of students' views in choosing their strand. This study may help the school administration, teachers, and parents to know that there is a need to help students determine the factors that affect their decision-making process and provide them with a picture of those aspects for a better overview and weighing of things. Thus, this study investigates the internal and external factors

affecting the strand preferences of Grade 10 students in their strand choice. It hopes to understand the horizons of students' views on choosing their strand.

Statement of the Problem - The main objective of this study was to investigate the internal and external factors and to determine the relationship between internal and external factors affecting the strand preferences of Grade 10 students. The study sought to answer the following questions: (1) What is the extent of internal factors on the strand preferences of Grade 10 students in terms of personal interest and aptitude? (2.) What is the extent of the external factors that affect the strand preferences of Grade 10 students in terms of parental interest, financial condition, peer influence, and job opportunities? (3) Is the strand preference of Grade 10 students significantly affected by the profile of the respondents, internal factors, and external factors?

Significance of the Study - The researcher believes that the study's outcome can bring great benefits to the following: For the students, the result of this study will provide them with an overview of the factors that affect the strand choice of their fellow students that would be vital in their decision-making process. The parents would understand how they can affect their children's decisions; hence, they will be mindful of their actions to create a positive effect that is vital in their children's future. For the administration, they will have an understanding of the factors that affect strand choice; hence, they can offer learning opportunities that will hone students' skills. Teachers will know the factors that affect students' strand choice, providing them with a guide on how to provide a learning environment that will best suit the skills and aspirations of their learners. For the community, the conduct of this study may provide insights regarding the factors that significantly affect the strand preferences of the students. For future researchers, this study will provide relevant information that will enrich their understanding regarding the factors affecting the strand choice of students. Also, this will serve as their reference if they seek to explore similar and related studies.

#### 2. Methodology

**Research Design** - This study used a descriptive correlational design to determine the internal and external factors affecting their strand preferences and test the relationship between the identified variables. This design is useful as it helps obtain information describing existing phenomena by asking individuals about their perceptions, attitudes, and values. Thus, this design was utilized to achieve the study's objective of determining the motivating factors of the Grade 10 students at Divine Word College of San Jose in choosing their strand preferences in the senior high school strand.

**Respondents of the Study** - This study used the whole Grade 10 population at Divine Word College in San Jose. There were 129 junior high school students from three sections: 58 males and 71 females. They were chosen as the study's respondents since they will enroll in senior high school for the next school year.

**Research Instrument** - This study used an adopted questionnaire by Malaguial et al. (2023). The questionnaire was contextualized to fit the nature of the study. The first part of the questionnaire covered the demographic profile of the respondents. Meanwhile, the second part discusses the internal factors, while the last part discusses the external factors affecting the strand preferences of the grade 10 students. Moreover, to determine the validity and reliability of the adopted questionnaire, the researchers used expert validity. They have requested the expertise of five teachers at the Divine Word College of San Jose. They all tested the applicability and appropriateness of each questionnaire item to the problem under study. The researchers followed the comments and suggestions from the experts for the final copy of the instrument.

**Data Gathering Procedure** - This study was conducted after the approval of the research adviser and after the experts at Divine Word College of San Jose validated it. The researchers started gathering the data by introducing themselves, their aims, and the goals and objectives of their study to the Grade 10 students. The researchers also secured the voluntary consent of the students to participate in the study. The questionnaires were administered personally to the respondents for two days and strictly followed the school's rules. The researchers assured that the respondents' data would be kept confidential.

Statistical Treatment of the Data - This study used a weighted mean to determine the extent of internal and external factors affecting students' choice of strand. Moreover, Pearson's r correlation and regression analysis were used to analyze the relationship between the variables. The data gathered was collected, tallied, and treated by the researchers. 4 4-point Likert scale was employed to determine the respondents' responses, and the following limits, verbal description, and rating are presented.

Ethical Considerations - The research was thoroughly addressed to ensure the well-being and confidentiality of the participants, adhering to ethical guidelines and obtaining informed consent. This involved ensuring that participants fully understood the study's purpose, risks, and benefits before agreeing to participate, protecting their privacy by safeguarding their data, minimizing any potential physical or psychological harm, treating participants with respect and dignity, and following established ethical standards to maintain the integrity of the research process.

#### 3. Results and Discussions

 Table 1

 Mean Level of Internal Factors on the Strand Preferences of Grade 10 in terms of Personal Interest and Aptitude

Indicators (Personal Interest)	Weighted Mean	Verbal Description		
1. I want to excel in the track I chose.	3.66	High		
2. I like and enjoy the track I chose.	3.52	High		
3. I think my track is good for me.	r me. 3.42 High			
4. I chose my track because I idolize this kind of work.	3.32	High		
5. My habits were somehow related to my track.	3.22	Moderate high		
Composite Mean	3.43	Moderate Low		
Indicators (Aptitude)				
1. I based my choice on my NCAE result.	2.91	Moderate high		
2. I based my choice in alignment on my skills.	3.37	High		
3. I chose my track based on the subject in which I excel most.	3.27	High		
4. The track I chose is easy for me.	2.98	Moderate high		
5. I based my choice on how my IQ/creativity is.	3.24	Moderate high		
Composite Mean	3.61	Moderate High		

**Legend:** 3.26 – 4.00 High, 2.51 – 3.25 Moderate High, 1.76 – 2.50 Moderate Low, 1.00 – 1.75 Low

Table 1 shows the mean level of internal factors on the strand preferences of Grade 10 regarding personal interest and aptitude. A composite mean of 3.43 for personal interest and 3.61 for aptitude shows the agreement of the respondents presented indicators in the table. This means the grade 10 students agreed that their interests and aptitudes were considered internal factors in choosing the strand preference. This implies that they will choose their course based on their interests and desires, making personal interest the most important aspect. The survey also revealed that students' relevant interests have given them an upper hand when making a career decision. A student's interest dictates which integrating a career plan with the curriculum can help students find a vocation that suits them. For pupils to be able to choose wisely what to study in the future life. This result is in line with the study by Kilag et al. (2023), who asserted that students' track preferences were also influenced by their personal interests and skill sets, with them choosing strands that complemented their interests and abilities. Furthermore, they indicated that academic success, parental influence, future potential, and personal preferences were the most important factors in determining a student's choice of SHS strand. Academically successful students typically chose the academic path, whereas academically failed students were likelier to select the technical vocational-livelihood (TVL) strand. Similarly, Lorenz et al. (2020) found that the main factors influencing student track choices were interest, professional aspirations, and perceived benefits of the strand. In terms of aptitude, results revealed that students' choice will depend on their aptitude test, including their NCAE result, IQ test, and skills. This finding supports the study by Khan et al. (2022), who explain that aptitude results from a complex interaction of environmental and genetic factors that produce predispositions or skills. The Scientific Aptitude Test (SAT) is intended to assess a person's potential ability to pursue a course of study in a science-related discipline. It is another example of a skill in those with exceptional abilities to a much higher degree than its likely expression in adult success. Some, but not all, characteristics shared by people who thrive later in scientific endeavors can be identified.

**Table 2**Mean Level of External factors on Strand Preferences of Grade 10 in terms of Parental Interest, Financial Condition, Peer Influence and Job Opportunities

Indicators (Parents Interest)	Weighted Mean	Verbal Description
1. My parents always give me advice on the decisions I make.	3.54	High
2. I always try to make my parents proud of me.	3.67	High
3. I wanted to follow my parents' work.	2.36	Moderate low
4. My parents' opinions about my career decisions matter.	3.13	Moderate high
5. I seek my parents' advice when deciding on something.	3.29	High
Composite Mean	3.20	Moderate High
Indicators (Financial Condition)		
1. I will choose the strand based on my parents' income.	2.73	Moderate high
2. I will choose this strand based on tuition costs.	2.57	Moderate high
3. I will choose this strand based on scholarship opportunities.	2.84	Moderate high
4. I will choose the strand that would not cause financial stress for	3.10	Moderate high
my parents.		
5. I will choose the strand that would not stress my present work.	3.07	Moderate high
Composite Mean	2.86	Moderate High
Indicators (Peer Influence)		
1. I was influenced by my classmates.	2.43	Moderate low
2. I am afraid to be left out by my friends.	2.32	Moderate low
3. My friend's decision is my decision as well.	2.05	Moderate low
4. I talked to my friend before choosing a strand.	2.70	Moderate low
5. My peer group and I shared the same preferences.	2.67	Moderate high
Composite Mean	2.43	Moderate Low
Indicators (Job Opportunities)		
1. I will choose a strand based on its demand.	3.08	Moderate high
2. I will choose a strand based on its salary expectation.	3.21	Moderate high
3. I will prefer a strand based on its employability and stability.	3.40	Moderate high
4. I will choose a strand based on its future environment.	3.47	High
5. I will choose a strand based on its availability on the news and	2 21	TT:_1.
job market.	3.21	High
Composite Mean	3.27	High
Overall Mean	2.94	Moderate high

 $\textbf{Legend:}\ 3.26-4.00\ High,\ 2.51-3.25\ Moderate\ High,\ 1.76-2.50\ Moderate\ Low,\ 1.00-1.75\ Low$ 

Table 2 shows the mean level of external factors of Grade 10 students in Divine Word College of San Jose in choosing their strands. There are a lot of external factors affecting the process of choosing students' strands. An overall mean of 2.94, interpreted as moderate high, shows the students' agreement that their preferences in choosing their strands in senior high school are affected by their external factors such as parental interest, financial condition, peer influence, and job opportunities. Among the four factors, job opportunities got the highest weighted mean of 3.27. This implies that students sought employability and stability in their preferred strand. Moreover, with a mean of 3.20 students choosing their strand based on their parental interest, it shows

that some students seek guidance from their parents, especially when they have a hard time making decisions for themselves. While other students pick their strands based on their financial condition with a weighted mean of 2.86, their financial condition matters as this will determine their financial capability to pursue the course or strand. The students stated that they chose their strand based on their peer influence, with a mean of 2,43; peer influence still impacts the decision-making of the students as they seek the thoughts of someone who is in the same decisive moment. These four indicators have a big impact on the strand preferences of the students. Choosing strand and track is not easy because you will consider the things or factors that will influence your decision. This is consistent with a study by Kilag et al. (2023) and Badilla and Dioso (2023), which revealed that academic achievement, career prospects, personal interests, and family influence were the most important factors determining SHS strand preference. Students' decisions were heavily influenced by their career prospects since they were more inclined to select courses they thought would result in greater employment chances. Lastly, as parents frequently urged their kids to follow particular paths, parental influence was a significant factor in students' decision-making.

 Table 3

 Correlation Coefficient and p-value for hypothesis testing (Ho)

Variables	Correlation Coefficient	Effect Size	Critical value	t-value	P-value	Interpretation
Internal factors→	0.740	0.548	1.984	12.4	0.000	Highly Significant
Strand Preferences						
External factors→	0.960	0.922	1.984	38.74	0.000	Highly Significant
Strand Preferences						

Legend: p-value<0.01 Highly Significant; p-value<0.05 Significant

Table 3 presents the paths, correlation coefficient, effect size, critical value, T value, and P value that emerged from the direct connection of the variables presented by personal interest, aptitude, parent's influence, financial condition, peer influence, and their strand preferences. Statistical treatment in internal factors shows a correlation coefficient of 0.740, with an effect size R of 0.584 and p- a p-value of 0.000. This proved the rejection of the null hypothesis. Therefore, findings revealed a significant relationship between the internal factors and their strand preferences. Moreover, external factors revealed a correlation coefficient of 0.960, an effect size R of 0.922, and a P value 0.000. This shows that the null hypothesis stating no significant relationship between the external factors and strand preferences is rejected. This proved that there is a highly significant relationship between the two variables. These findings are similar to the study conducted by Badilla and Disoso (2023), who found that selecting a senior high school track is crucial because it establishes the foundation for the career path students choose.

The senior high subject that a student chooses is also an important decision that they have to make because it will affect their future. Students decide which strand to pursue after consulting with their parents and friends, thinking about their desired careers, and considering their financial situation. According to a study by Kilag et al. (2023), the main factors influencing students' preferences for particular strands were their academic achievement, aptitude, and level of interest in the subject. Moreover, Ferrer et al. (2024) found that students from higher socio-economic backgrounds were likelier to choose academic tracks, while those from lower socio-economic backgrounds preferred TVL tracks. When students consider their self-choice, most of them choose a strand that they dream of or a strand where they exile most or the insured one (strand) where their future is secured. Moreover, students consider their financial capability in addition to their existing financial condition, which aids them in choosing a strand that falls within the parameters of their financial capabilities.

#### 4. Conclusions

The following conclusions are drawn based on the findings: The grade 10 students considered their interests

and aptitudes in choosing their strand. External factors such as parental interest, financial condition, peer influence, and job opportunities were also considered by the grade 10 students in their strand preferences. There is a highly significant relationship between the internal factors and strand preferences, as well as external factors and strand preferences of the grade 10 students.

**Recommendations** - Based on the conclusions, the following recommendations are drawn: It is recommended that the school to help their students identify their interests and skills that will fit their chosen strands. Conducting a career week to determine the best strand they want to take in their SHS is recommended. It is recommended that the parents continue providing support, not only financially but also morally, for their students, especially in terms of decision-making. The school may provide seminars for the students about the job opportunities that they will apply for in terms of whether they will enroll in that specific strand. Future researchers may use another variable to explore the factors affecting the strand preferences of the grade 10 students.

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