



Senior High School Strands: Factors Affecting the Students' Preference

Princes Aires Malaguial*, Goji Gacoscas, Edward Martinez, Hassanal Abusama, Anamarie Valdez

Sultan Kudarat State University, the Philippines

*Correspondence: E-mail: princesairesmalaguial@sksu.edu.ph

ABSTRACTS

Choosing a senior high school strand is one of the most challenging decisions that junior high school students will have to face. The study aimed to help students decide on their future senior high school strand by knowing the factors' influence levels and their relationship with their decision. The survey was conducted online (Grade 9 and Grade 10 students) using the total sampling method. We employed a self-made questionnaire that went through content validation using Aiken's V formula. Descriptive statistics were then used to analyze and interpret the results of the study. In the survey's results, 2.3% of the students chose GAS as their senior high school strand, 15.9% chose HUMSS, and 73.9% chose STEM, leaving the ABM strand with 8%. The personal interest factor had the highest level of influence among the factors, with a mean of 4.21, followed by job opportunities with a mean of 4.17, socioeconomic status with a mean of 3.89, parents with a mean of 3.63, and academic performance with a mean of 3.38. However, in terms of the factors' significant relationships with the senior high school strands, socioeconomic status, parents, job opportunities, and personal interests were found to have no significant influence when deciding, and academic performance is the only factor that has a significant influence on the students' preferred strand. As a result, the null hypothesis of the study is accepted because only one out of five factors were found to have a significant relationship when deciding on a senior high school strand.

ARTICLE INFO

Article History:

Submitted/Received 05 Jul 2022

First revised 09 Aug 2022

Accepted 20 Aug 2022

First available online 23 Aug 2022

Publication date 01 Mar 2023

Keyword:

Academic performance,

Job opportunities,

Parents,

Personal interests,

Senior high school strands,

Socio-economic status.

1. INTRODUCTION

Choosing a senior high school strand is one of the most challenging decisions that junior high school students will have to face. It is greatly important because the strand they choose will serve as their training ground before entering college. This is following their diverse dreams and interests in life that can still change over time (Deil-Amen, 2011). In relevance, knowing and exploring one's field of interest will nurture and help one land on the right career track since these factors play a crucial role in determining a future career that suits them.

In career selection, students have to undergo an intricate process, where they should consider factors that would affect their overall decision such as the sociodemographic profile, socio-economic status, parents, job opportunities, academic performance, personal interest, and many other aspects to forcefully be open-minded of the things they will encounter in the not too distant future (Moneva & Malbas, 2019; Santric-Milicevic et al., 2014).

Oftentimes, this leads to confusion, doubts, and undecidedness that results in unemployment and underemployment if, unfortunately, they misfit their pursued career. Hence, we were prompted to find out the students' preferred strand, the factors' level of influence on the senior high school strand preferences, and if there is a significant relationship between the factors and strands, to help the students decide on their future senior high strand in accordance to the path that suits them most.

This study aimed to determine the students' preferred strand, the factors' level of influence on the senior high strand preferences, and if there is a significant relationship between the factors and strands.

Specifically, the study answered the following questions:

- (i) What are the strands preferred by the student-respondents?
 - (a) GAS
 - (b) HUMSS
 - (c) STEM
 - (d) ABM
- (ii) To what extent is the factors' level of influence in senior high strand preference of the student-respondents in terms of;
 - (a) Socio-economic status
 - (b) Parents
 - (c) Job opportunities
 - (d) Academic performance
 - (e) Personal interest
- (iii) Is there a significant relationship between the student-respondents preferred strand and the factors' level of influence on their preference?

2. METHODS

The study employed a quantitative-descriptive survey via questionnaire, of which copies were distributed to the student-respondents. This is to determine the students' preferred strand; the factors such as (i) socio-economic status, (ii) parents, (iii) job opportunities, (iv) academic performance, and (v) personal interests, as well as (vi) level of influence on the senior high strand preferences. We also must consider if there is a significant relationship between the factors and strands.

2.1. Respondents of the study

The respondents of the study were the Grade 9 and 10 students who were officially enrolled in the school year 2021–2022 at Sultan Kudarat State University-Laboratory High School, ACCESS Campus.

2.2. Sampling method

We used the total sampling method in this study. This means that the respondents weren't chosen, but rather based on the list of the entire target population, with 88 students combined from Grades 9 and 10. Total population sampling is a sort of goal sampling method that examines the whole population, displaying a specific set of characteristics.

2.3. Research instrument

A survey questionnaire was employed. The questionnaire was divided into three parts. Part 1 assessed the students' basic information, where their names and grade level were asked. The second part determined the students' current senior high strand preference and then, in part three, they assessed the specified factors: (i) socioeconomic status, (ii) parents, (iii) job opportunities, (iv) academic performance, and (v) personal interest level of influence in terms of their overall choice.

The respondents personally typed their information for part 1, and checked their preference for part 2, whereas part 3 was answered using a scale ranging from 5 (extremely influential) to 1 (not influential). The data gathered for SOP 1 and 2 were then tabulated to answer the significant relationship between the strands and factors (**Table 1**).

Table 1. The evaluation rating used the following scale.

Scale	Range	Verbal Interpretation
5	4.30 – 5.00	Extremely Influential (EL)
4	3.50 – 4.20	Very Influential (VI)
3	2.70 – 3.40	Influential (I)
2	1.90 – 2.60	Slight Influential (SI)
1	1.00 – 1.80	Not Influential (NI)

We used the 5-point that the Likert scale usually provides five possible answers to a statement or question, allowing respondents to show a positive or negative level of consent or sentiment about the question or statement.

2.4. Validation of the instrument

The survey questionnaires were submitted to credible raters from the faculty of Sultan Kudarat State University - Laboratory High School for checking and validation using the Aiken's V formula (see **Table 2**).

Table 2. Evaluation rating scale.

Scale	Range	Verbal Interpretation
4	3.50 – 4.00	Strongly Agree (SA)
3	2.50 – 3.49	Agree (A)
2	1.50 – 2.49	Disagree (DA)
1	1.00 – 1.49	Strongly Disagree (SDA)

2.5. Data gathering procedure

We first formulated the survey questions based on the study's SOP. The survey questionnaire was expected to consist of personal questions that evolve from the students' experiences for us to assess and answer the questions that concern this study. The student respondents' current preferred senior high strand was also asked in the survey questionnaire for us to determine the extent of influence of the specified factors: (1) socioeconomic status; (2) parents; (3) job opportunities; (4) academic performance; and (5) personal interests.

After writing the first draft of the questionnaire, we sought validation from their adviser and committee for additional suggestions and comments that could help them improve their draft. Then, the comments and suggestions were all edited thoroughly for the betterment of the survey questionnaire.

A written permission letter was later submitted to the Laboratory High School Chairman concerned for us to request permission to conduct the final survey with the student-respondents.

The survey was conducted to gather relevant data for the research. The questionnaire was distributed through Messenger, and the researchers utilized the vacant periods in the distribution not to disrupt the students' classes. We also messaged the respondents individually to encourage them to take part in the research by assuring them of the confidentiality of their responses. The survey also took a week to complete. Finally, descriptive statistics were used to analyze and interpret the results of the study.

2.6. Statistical analysis

All data were analyzed and interpreted using descriptive statistics. Means and percentages were calculated using the chi-square and were presented in the following:

- (i) Mean. This was used to determine the average of the student's responses on the influence of socioeconomic status, parents' occupation, academic performance, and personal interest factors on their preferred senior high school strand.
- (ii) Percentage. This was used to determine the preferred strand of the respondents and compare the results to ensure that false impressions were not created in the study.
- (iii) Chi-square. This was used to measure the significant relationship between socioeconomic status, parents' occupation, job opportunities, academic performance, and personal interest factors in the preferred senior high strand of Grade 9 and 10 students of Sultan Kudarat State University - Laboratory High School.

3. RESULTS AND DISCUSSION

A total of 88 responses were analyzed. There were 41 students from Grade 9 and 47 students from Grade 10 who were encouraged to answer the survey questionnaire for us to assess their senior high school strand preference, determine the factors' level of influence on their decision, and test if there is a significant relationship between the strands and factors. As shown in **Table 3**, 2.3% of the students chose GAS as their senior high school strand, 15.9% chose HUMSS, and 73.86% chose STEM, leaving the ABM strand with 8%.

Thus, it is evident that the STEM strand, which focuses on adaptability, communication, interpersonal skills, troubleshooting, creativity, self-control, and clinical thinking, is the one that the majority of students intend to pursue. STEM is followed by HUMSS, which focuses on developing a deeper understanding of the arts, culture, literature, politics, and society because the strand is focused on the student's reading, writing, and speaking capabilities. Then, ABM is known to prepare students for careers in the corporate sector by providing them

with the skills and information required (Magnaye, 2020). On the other hand, the least preferred strand is the General Academic Strand, which is suitable for students who are not yet sure which route to take but is also flexible enough to become familiar with different areas.

Table 3. Result of the strands preferred by students.

Senior High Strands	Number of Responses	Percentage
1. GAS	2	2.30 %
2. HUMSS	14	15.90 %
3. STEM	65	73.90 %
4. ABM	7	8.00 %
Total	88	100 %

Legend: GAS stands for General Academic Strand. HUMSS means Humanities and Social Sciences Strand. STEM for Science, Technology, Engineering, and Mathematics Strand, while ABM means Accounting, Business, and Management.

According to **Table 4**, the personal interests factor holds the highest level of influence among the factors with 4.21 mean, followed by job opportunities with 4.17, then socio-economic status with 3.89, parents with 3.63, and finally, academic performance, which has 3.38.

Five (5) questions were prepared for each factor that the study aimed to determine, resulting in a survey with 25 questions and statements. We first computed the question's mean individually (presented in the next tables) and then gathered the combined totals to get the result needed for this study. We computed the factors' meaning by using the same formula to get the statements' mean individually.

In consonance, the mean was incorporated with the Likert scale applied. This resulted in personal interests being labeled as an extremely influential factor. Job opportunities, socio-economic status, and parents were found to be very influential factors, and lastly, academic performance was an influential factor.

In general, the grand mean of all five factors is 3.86, which can be interpreted as very influential factors in terms of the level of influence.

Socioeconomic status refers to the measure of household wealth that can be reflected by income, consumption, or spending information (Vyas & Kumaranayake, 2006).

Table 4. General results of the factors' level of influence.

Factors	Mean	Verbal Description
Socio-economic Status	3.89	Very Influential
Parents	3.63	Very Influential
Job Opportunities	4.17	Very Influential
Academic Performance	3.38	Influential
Personal Interests	4.21	Extremely Influential
Grand Mean:	3.86	Very Influential

Presented in **Table 5** is the socio-economic status' level of influence on the senior high school strand preference of the respondents. The statement about students' having the freedom to choose their respective senior high strands gained the highest mean (4.08) among the five. This means that it is up to the students if they will consider their socioeconomic status when deciding on a senior high strand. Then, it is followed by the consideration of the family's financial status (4.05). Then, we also found out that socio-economic status indeed matters, with a mean of 3.93, whereas choosing a practical stand also plays a significant role

with a computed mean of 3.75, leaving the first statement about parents’ having a stable income to support the students’ studies with a 3.63 mean.

The total mean of the socio-economic factor is 3.89 which is interpreted as a very influential factor in deciding on a future senior high strand.

Table 5. Results of the socioeconomic status’ level of influence.

Statements	Mean	Verbal Description
1. My parents have a stable income to support my studies.	3.63	Very Influential
2. I have the freedom to choose my strand.	4.08	Very Influential
3. Due to my socioeconomic status, I consider choosing a more practical strand.	3.75	Very Influential
4. My socioeconomic status matters when I decide on my future career path.	3.93	Very Influential
5. I consider my family’s financial status when deciding on a future senior high strand.	4.05	Very Influential
Total	3.89	Very Influential

The parents’ factor total mean is 3.63 which is interpreted as a very influential factor in choosing a senior high strand.

According to **Table 6**, most parents give the students the freedom to decide about their senior high strand. This statement gained the highest mean (4.07) among the five statements in terms of the parent's level of influence on the senior high strand preference. This is followed by the statements about parents' supporting their child in anything they do or choose (4.02), the students' seeking parental advice when deciding on something (3.82), and how their parents’ opinions matter about the career they want to pursue (3.59). The mentioned statements are all found to be very influential. However, the statement that the final decision would be made by the parents (statement 5) was found to be only slightly influential (2.63).

Table 6. Results of the parents’ factor level of influence.

Statements	Mean	Verbal Description
1. My parents’ opinions about my career decisions matter.	3.59	Very Influential
2. I seek my parents’ advice when deciding on something.	3.82	Very Influential
3. My parents give me the freedom to decide on my senior high school strand.	4.07	Very Influential
4. My parents support me in anything I do or choose.	4.02	Very Influential
5. My final senior high strand decision depends on my parents.	2.63	Slightly Influential
Total	3.63	Very Influential

Statement 5, having the least number mean, is in line with statement 3, which has the highest mean. This is because when parents give their children the freedom to choose for themselves, it signifies that the students will make the final decision, not their parents.

Connections were discovered between the students and their parents in terms of decision-making. Parents even have the greatest effect on their children’s decisions. However, in this study, the total mean of the parents’ factor is only interpreted as a very influential factor, not an extreme one.

In an article by Law Insider, “job opportunities” refer to one or more recruitment occupations for full-time employment with the applicant’s employer within the specific area where the employer is looking for a worker or within the area of intended employment. This factor has a total mean of 4.17, which can be interpreted as a very influential factor in terms of deciding on a future senior high school strand.

Presented in **Table 7** is the job opportunities’ level of influence on the respondents’ senior high school strand preference. All were found to have a mean above the 4.0 scale, resulting in statement 3 (4.33) being considered an extremely influential statement.

This signifies that students choose a senior high school strand based on the job opportunities available since they consider it important. Then, it is followed by the incorporation of preferences into the students’ dream jobs (4.17), looking for job opportunities that are aligned with each strand (4.15), the students' depending on their choices on the job opportunities (4.13), and considering the limited job opportunities (4.07). Hence, these statements are all found to have a great influence on choosing a senior high school strand.

Table 7. Results of the job opportunities’ level of influence.

Statements	Mean	Verbal Description
1. Before deciding on a career path, I consider the available job opportunities.	4.07	Very Influential
2. I look for job opportunities that are aligned with each strand.	4.15	Very Influential
3. Job opportunities are important when deciding on a future career path.	4.33	Very Influential
4. My senior high strand decision most likely depends on the job opportunities aligned with them.	4.13	Very Influential
5. I incorporate my preferences into my dream job.	4.17	Very Influential
Total	4.17	Very Influential

The total mean of the factor academic performance is 3.38 which can be interpreted as an influential factor in choosing a strand.

Table 8 shows the academic performance’s level of influence on the senior high school strand preference of the students. It is reflected that students chose their strand based on their academic strengths, garnering the highest mean of 3.70, out of five statements. This is followed by statement 2 which signifies that grades are important in determining the students’ future strand (3.57). Considering the students’ grades as a basis is also significant (3.53). Relating the academic performance to anything that the students are into gained a 3.43 computed mean, and the statement saying that students challenge themselves by choosing a strand they are not good at had the lowest computed mean (2.65).

Academic Performance across grades is said to be important in terms of data basis in determining the professional strength of each student because this information gives the students, teachers, and parents the idea of where the students perform above and average levels in various areas to help them choose the right career track suitable for them (Sugano & Mamolo, 2021). This means that the student-respondents are most likely to pursue a strand they think they can excel academically, rather than the strand they think they are not good at or not suited to their academic performance. Moreover, the fourth statement is the only one that got an interpretation of “influential,” whereas the other four were found to all be very influential.

Table 8. Results of the academic performance's level of influence

Statements	Mean	Verbal Description
1. I consider my grades as a basis for my future career path.	3.53	Very Influential
2. My grades are important in determining my future strand.	3.57	Very Influential
3. I go for something that acquires my academic strengths.	3.70	Very Influential
4. I challenge myself by choosing a strand I am not good at.	2.65	Influential
5. I relate my academic performance to anything I do.	3.43	Very Influential
Total	3.38	Influential

The total mean for the personal interests factor is 4.21, which is interpreted as an extremely influential factor in choosing a senior high school strand.

According to the survey's result for **Table 9**, the statement that got the highest mean (4.47) is statement 4, which justifies that students are certainly at their best if they are interested in what they are doing. Then, it is followed by the willingness to do things if they are personally interested in them (4.32) and that personal interests matter when they are making important choices (4.20). It is also interpreted that they depend on their likes and interests (4.10), and finally, having the freedom to pursue their desired strand-based personal interests is also very influential with a mean of 3.94.

With this, it is stated in the study of [Nyamwange \(2016\)](#) that prior knowledge of a vocation is vital for generating and nurturing interest in a certain field. This is because prior knowledge, in reality, prepares an individual for the conditions of acquiring and choosing a career, which indirectly explains why the total mean for this factor is interpreted as an extreme one in choosing a preference for a senior high school strand.

Table 9. Results of the personal interest' level of influence.

Statements	Mean	Verbal Description
1. My choices depend on my likes and interest.	4.10	Very Influential
2. I have the freedom to choose my desired strand based on my interests.	3.94	Very Influential
3. I do things willingly if I'm personally interested in them.	4.32	Extremely Influential
4. I'm at my best if I'm interested in what I'm doing.	4.47	Extremely Influential
5. My interests matter when I'm making important choices.	4.20	Very Influential
Total	4.21	Extremely Influential

To get the significant relationship between the factors and strands, we used the chi-square test.

As shown in **Table 10**, socioeconomic status, parents, job opportunities, and personal interests were all failed to reject. They do not have a significant relationship to the Grade 9 and 10 students' preferred strand. Whereas, academic performance is the only factor that is rejected and interpreted as significant in influencing the students' preferred strand. Socio-economic status, parents, job opportunities, and personal interests do not affect the decision of the students in choosing a track for senior high school, while academic performance does affect the decision of the students.

Hence, the null hypothesis is accepted because only one out of five factors were found to have a significant relationship when deciding on a senior high school strand.

Table 10. The significant relationship between factors and strands.

Statements	Mean	Verbal Description
1. My choices depend on my likes and interest.	4.10	Very Influential
2. I have the freedom to choose my desired strand based on my interests.	3.94	Very Influential
3. I do things willingly if I'm personally interested in them.	4.32	Extremely Influential
4. I'm at my best if I'm interested in what I'm doing.	4.47	Extremely Influential
5. My interests matter when I'm making important choices.	4.20	Very Influential
Total	4.21	Extremely Influential

4. CONCLUSION

The majority of students prefer to take the STEM strand. This is followed by HUMSS, ABM, and, lastly, GAS. In terms of the factors' level of influence, the personal interests factor gained the highest level of influence, followed by job opportunities, socioeconomic status, parents, and academic performance. In terms of significant relationships between the factors and strands, socioeconomic status, parents, job opportunities, and personal interests do not affect students' decision in choosing a strand for senior high school, leaving academic performance as the only factor that affects their decision-making. Therefore, the null hypothesis of this study is accepted. There is no significant relationship between the students' preferred strand and the factors affecting it because academic performance is the only factor that can affect and influence the students' decisions.

5. ACKNOWLEDGMENT

This research study is a product of hard work, encouragement, commitment, determination, and the support of many people, who acknowledge and are grateful. To their research adviser, panel members, validators, critic, statisticians, and parents, thank you for the unending support.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

7. REFERENCES

- Deil-Amen, R. (2011). Socio-academic integrative moments: Rethinking academic and social integration among two-year college students in career-related programs. *Journal of Higher Education*, 82(1), 54-91.
- Magnaye, R. P. (2020). Self-Perception of ABM students towards their academic, social and emotional college preparedness. *Online Submission*, 1(2), 1-18.

- Moneva, J. C., and Malbas, M. H. (2019). Preferences in senior high school tracks of the grade 10 students. *IRA International Journal of Education and Multidisciplinary Studies*, 15(5), 167-174.
- Nyamwange, J. (2016). Influence of student's interest on career choice among first year university students in public and private universities in country, Kisi Kenya. *Journal of Education and Practice*, 7(4), 96-102.
- Santric-Milicevic, M. M., Terzic-Supic, Z. J., Matejic, B. R., Vasic, V., and Ricketts III, T. C. (2014). First-and fifth-year medical students' intention for emigration and practice abroad: a case study of Serbia. *Health Policy*, 118(2), 173-183.
- Sugano, S. G. C., and Mamolo, L. A. (2021). Analysis of students' aptitude and academic performance: input to curriculum enhancement. *Anatolian Journal of Education*, 6(2), 51-62.
- Vyas, S., and Kumaranayake, L. (2006). Constructing socio-economic status indices: how to use principal components analysis. *Health policy and planning*, 21(6), 459-468.