

Factors Influencing Career Choices Among High School Students in Zambales, Philippines

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Abstract: The purpose of the study was to determine the factors that influence the career choices of STEM students in Zambales. A questionnaire was developed as an instrument to identify attributes that contribute to the career decision-making process of the student-respondents. The questionnaires were answered by STEM students in Public Secondary High Schools in Zambales. The findings revealed that student-respondents gave more importance on their personal career preferences. Although they still acknowledge the guidance and support of their families and peers. Their schools also play a significant role in the process of career decision-making. In terms of the different strategies in making appropriate career choices- the students fairly recognize plenty of external factors that greatly contribute in their way of choosing the professions that are in line with their personal knowledge, skills, and interests. It enables them to identify their short and long-term goals once they already choose a certain career path. It is necessary to understand and comprehend that choosing an appropriate career path is a complex process which needs a thorough evaluation of the different factors that influence a student's career decision-making process. Choosing an appropriate career path is an essential part in students' lives. It helps them shape their future.

Keywords: Career choices, factors, family, gender, high school, influences.

1. Introduction

Career may be regular occupation or profession during which one is making a living. Career preference is that the occupation with the best positive valence among alternative variety of work value. Planning for career is extremely essential for the peaceful living and quality of life. It provides the premise of the individual's future life, his social recognition and eventually contributes to the development of a country through proper utilization of human resources. Career preferences are a developmental process and spans almost through person's lifetime. Career choices development ends up in choices, which starts from early schooling. These choices could even be defined as a sequence of positions, jobs or occupation, which someone engages in during his working life in line with Ahmad & Nadeem (2016). Research on family influence has increased rapidly during the last few years, yet an understanding of family influences on career choices still remains sparse. Much of the research on family influence specialize in individual parents' careers, for example, mothers or fathers influencing children to

take up a particular career. This research considers family members' influence on career choices which includes parents, siblings and family unit members in line with Mtemeri (2017). Career planning is influenced by so many socio-economic and personality factors like sex, family size, education and occupation of parents, social environment and availability of job opportunities. Availability of information of various types/areas of careers is undoubtedly helpful for the learners. Because very often it's seen that almost all of the students are unknown about certain areas of career as stated by Bharadwaja et.al. (2017). Career choice has become a posh task with the advent of information technology. Indeed, career choice is as important as choosing a life partner since it's also a lifetime process.

A. Significance of the Study

This study provides valuable information to the following stakeholders:

Parents. The result of this study envisioned to give parents an idea the importance of career preferences of the students' Postsecondary plans.

Researchers. The result of the study serves as reference materials for future research studies on the relationship of career preferences and academic performance of the STEM students.

Students. The result of this study enlightened the students on the significance of career choices as it exerts a profound influence on an individual's life.

Teachers. It is important for them to know what teaching style and strategies they should use to the students, because they will be the one providing the knowledge to the children.

B. Statement of the Problem

This study is focused in determining the factors influencing career choices among STEM students of Public Secondary High School in Zone 2, Division of Zambales.

1. What are the preferred college career of the STEM Students of Public Secondary High School in Zone 2, Division of Zambales?
2. What is the level of influence as to:
 - a. Personal Influence;
 - b. Family Influence;

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- c. School Influence;
- d. Gender Influence;
- e. Peer Influence.

C. Scope and Limitations

This study was conducted on the first semester of the school year 2019-2020. The respondents were the Senior High School STEM students of Public Secondary High School of Zone 2, Division of Zambales from Botolan, Iba and Palauig particularly those schools offering STEM strand. In Botolan, three public secondary high schools were included in the study, namely: Panan National High School, Botolan National High School and Bancal Integrated School. In Iba, two public secondary high school was included in the study, Zambales National High School and President Ramon Magsaysay State University – Senior High School. Lastly, Palauig has only one public secondary high school that was included, Rofulo M. Landa High School. The scope of the study is to identify the factors influencing career choices of STEM students in Zone 2, Division of Zambales.

2. Methodology

This portion of the study presented the research methods, respondents and location of the study, data collection instruments and procedure and the data analysis that was used.

A. Research Design

The study utilized descriptive assessment method of research to describe the factors influencing career choices among STEM students of Public Secondary High School in Zone 2, Division of Zambales. To answer the research problems of this study, a survey questionnaire was developed to determine the career preferences of the STEM students.

B. Respondents

The survey population consist of 205 Grade 12 Senior High School STEM students from the Public Secondary High Schools in Zone 2, Division of Zambales, Philippines. Student-respondents were selected purposely. Table 1 shows the Distribution of the Respondents.

Table 1
Distribution of respondents

School Name	Population
Bancal Integrated School	11
Botolan National High School	17
Panan National High School	11
President Ramon Magsaysay State University-Senior High School	97
Rofulo M. Landa High School	13
Zambales National High School	56
Total	205

C. Research Instrument

The tool used for measuring questionnaires in the study was a well-known instrument in social research methods the Likert scaling system. This was used to find out the dimensions that underlie a set of ratings or scores assigned to each student's response.

D. Data Gathering Procedure

The researcher sought permission first to the Schools Division Superintendent for the conduct of the research in the selected secondary school in Zone 2, Division of Zambales. After the approval, the researcher prepared several letters to request permission from the respective school principals to conduct survey among the high school students. The survey was personally administered by the researcher immediately after the approval of the request. The researcher immediately retrieved the complete and filled out questionnaires from the respondents. The researcher tallied the retrieved questionnaire for data analysis.

E. Data Analysis

Data analysis was the first step taken following data collection. Data analysis was the process whereby researchers enter raw data into a data matrix to obtain information that can be used to address the research objectives. Raw data was of little use until it has been structured and summarized, and a range of conclusions drawn. In this research, findings from the data were analyzed and were presented using tables and descriptive statistics, such as mean and percentage. Frequency counts are the numbers of times certain values occur in datasets. Weighted Arithmetic Mean was employed to determine the mean on the level of influence of the respondents towards career preferences.

3. Results and Discussions

This portion of the study presented the results and discussion of all the data gathered using a table. Analysis and interpretation of data done after the tabular presentation

Table 2
Profile of the respondents as to preferred college career

Variable	N (205)	%
Engineering	71	34.63
Health Science	46	22.43
Maritime	16	7.80
Science and Mathematics	12	5.85
Architecture	11	5.36
Teacher Education	11	5.36
Business	4	1.95
Arts & Humanities	4	1.95
Information Technology	4	1.95
Agriculture & Other Related Studies	4	1.95
Others	22	10.73

As presented in Table 2, preferred career were listed according to category. These categories were agriculture and other related studies, science and mathematics, arts and humanities, engineering, teacher education, health science, architecture, information technology, and business. Among the listed career, most of the STEM students preferred Engineering 71 or 34.63%, Health Science 46 or 22.43%, Maritime 16 or 7.80%, Science and Mathematics 12 or 5.85%, Architecture and Teacher Education both had 11 or 5.36% each, Business, Arts & Humanities, Information Technology, Agriculture & Other Related Studies had 4 or 1.95% each, and 22 or 10.73% preferred other career. The result was supported by the study of

Garcia et.al. (2017), that engineering was ranked first which means that most of the respondents will take an engineering course in college and will take an engineering career. Second in the list is Medicine. As shown in the results, engineering was the number one choice of most of the students since it's one of the specialized subjects under STEM. But still there are unrelated careers towards STEM that the respondents have answered.

Table 3
Personal influence on career choices

	Mean	Descriptive Interpretation
1. I consider my course choice to be an in-demand course	4.10	Agree
2. I consider the place of my future work in choosing my course	3.99	Agree
3. I consider the work that I will get after finishing my degree in choosing a course	4.41	Strongly Agree
4. My choice of school affects my choice of course	3.18	Moderately Agree
5. The availability of job in the future affects my choice of career	3.76	Agree
6. My preferred course is my "childhood dream" work	3.35	Moderately Agree
7. My preferred course is connected to my favorite subject	3.61	Agree
8. My preferred course is a reflection of my talent	3.45	Agree
Average Weighted Mean	3.73	Agree

As shown in Table 3, respondents agree that there was a personal influence in making career choices. Students have their own preferences in choosing their career. Considering the work after graduation was the foremost influential for the students in choosing their courses with a mean of 4.41 which is interpreted as "Strongly Agree" and their choice of school was least influential with a mean of 3.18 which is interpreted as "Moderately Agree." Overall, it has an average weighted mean of 3.73 which is interpreted as "Agree." This can be a manifestation that student has their own preferences in choosing their career. In keeping with the study conducted by Pascual (2014), the students' first consideration in choosing a course in college is that the availability of possible work. This might be the common response of students since now-a-days graduates finds it difficult to search out employment even if they have already finished well know courses like nursing and education courses. The problem with using this factor as an option in choosing a course was that students may tend to decide on misfit course on their ability and skills. In the future, student will find it difficult to seek out employment with his/her course, chosen out of the motivation that there are plenty of workforce needed in that specific course, which are seasonal and gradually decreases when there are too many graduates produced within the so-called in demand courses. The possible course chosen that's not fitted to the students might also cause their inability to qualify to the competencies needed by companies. This is often because their ability isn't suited with course they have taken, thus won't unleash their maximum potentials.

Table 4
Family influence on career choices

	Mean	Descriptive Interpretation
1. My father influenced me into the career I want to pursue	3.11	Moderately Agree
2. My mother influenced me into the career I want to pursue	3.23	Moderately Agree
3. The dominant profession in my family is also my preferred career	2.70	Moderately Agree
4. Information I got from my parents helped me to choose a career	3.65	Agree
5. My father's career had an impact on my choice of career	2.74	Moderately Agree
6. My mother's career had an impact on my choice of career	2.50	Disagree
7. Older siblings had an influence on my career choice	2.62	Moderately Agree
8. An extended family member was influential in the career that I chose	2.80	Moderately Agree
Average Weighted Mean	2.92	Moderately Agree

Table 4 shows the influence of family in choosing students' career. The results obtained has an average weighted mean of 2.92 or equivalent to its descriptive interpretation as "Moderately Agree." In particular, the respondents were not influenced by their mother on their career choice with a mean of 2.50 with a descriptive interpretation of "Disagree." Student-respondents were not so much affected by their family in their career preferences. The results obtained in this study is contrary to what other studies had found out. In an African study, for example, in Kenya by Mokoro et.al. (2014) have highlighted that many of the settings in which children and youth participate are dependent on the choices of their parents. Thus, parents' decisions, choices of where to live, what to provide materially and relationally in the home and how to structure out-of-school time for children, impacts children's development in ways that are meaningful for later success in the world of work. According to Cullen (2013), the term "helicopter parenting" refers to parents who involve themselves in the minutia of their child's college experience, engaging with university staff and faculty when any event occurs which causes the student any sort of distress. This will affect a student's decision-making process as he/she will become dependent to what his/her parent's desire. It also causes delay in the major developmental goals for the student, including major selection, class selection, and career goals.

Table 5 shows the school as an element of influence to students in choosing their careers. As shown in the table, student-respondents perceived the school as influential to students' choices of careers. The students indicated that schools influenced their careers totally on the simplest career guidance conduct in the school with a mean of 3.87, interpreted as "Agree" while career trips or field trips were identified as having less or little influence the students in making career choices with a mean of 2.57, interpreted as "Disagree." Career guidance is suggested at institutions of learning like schools, colleges and universities among others. As stated by Baloch & Shah (2014), high schools are a transition to higher institutions of learning and therefore the world of labor so that they have a critical role in assisting students choose careers. If students

have too many choices of careers or haven't made a choice on which career to pursue, school career guidance is helpful in selecting their study paths and in identifying their potential strengths to boost their competitiveness for positions consistent to Dodge & Welderndael (2014) and Sun & Yuen (2012). Krumboltz's theory of Social Learning Theory of career development, which informs this study, emphasises teaching people career development techniques so as that they'll give career guidance in schools. Kimiti & Mwova (2012) reported that Kenyan school career guidance positively influenced career decision-making, understanding of careers and career related adjustments about students' career choices. Moreover, the study revealed that when students don't seem to be guided in their choice of careers, they're not doing what's good for them or perhaps what they need. Hence, an absence of career guidance may cause students to decide wrong choices and enroll for studies they know little or nothing about. This suggests that schools play a pivotal role in preparing students for future careers. Similarly, a South African study by Shumba & Naong (2012) found that career choices are decided long before the learners come to universities. Majority of the respondents within South African study attributed their career choices at universities to subject choices they made whilst they were still in schools.

Table 5
School influence on career choices

	Mean	Descriptive Interpretation
1. Career guidance is comprehensively offered at our school	3.87	Agree
2. School career days influenced my career preference	3.26	Moderately Agree
3. Career trips or field trips influenced my career choice	2.57	Disagree
4. School career guidance cleared career confusion that I had	3.00	Moderately Agree
5. My class teachers were influential to the career that I wanted to pursue	3.06	Moderately Agree
6. The career guidance counsellor was influential to the career that I wanted to pursue	2.75	Moderately Agree
7. The subjects I do influenced my career preference	3.46	Agree
8. My preferred career is linked to my favorite subjects	3.54	Agree
Average Weighted Mean	3.19	Moderately Agree

Jamabo *et al.* (2012), viewed Gender as the division of individuals into two categories, men and women, supported on their biological differences. Table 6 indicates a weak influence of gender issues on career choices among high school students with an average weighted mean of 2.70 or its descriptive interpretation as "Moderately Agree." Most of the responses have disagree which indicates weak influence. Student-respondents decided that there have been separate careers suitable for men and women with a mean of 3.54, interpreted as "Agree". Students denied that a woman's role was homemaker and a man's role was breadwinner with a mean of 2.05, interpreted as "Disagree". The influence of gender in career choices has been documented in many studies. In Nigeria,

female students select careers that are feminist in nature while their male counterparts choose careers that are masculine in nature as stated by Durosaro & Adebake (2012). Kenyan females choose careers that correspond with their traditional gender roles and males also choose careers that match those of their traditional gender roles coherent with Migunde *et al.* (2012). It was also established in Nigeria that the usage of computers and internet has the potential to equip students with career information that will give male students an advantage over their female counterparts as stated by Durosaro & Adebake (2012). Igbinedion (2011), revealed that Nigerian male students perceived parental influence as a factor that influenced their choice of a secretarial career, which is more inclined towards female students.

Table 6
Gender influence on career choices

	Mean	Descriptive Interpretation
1. There are careers suitable for men and others suitable for women	3.54	Agree
2. Male students have higher career ambitions than women	2.39	Disagree
3. Men and women were socialized to choose careers that are gender sensitive	3.18	Moderately Agree
4. Women's role is homemaker and male's role is breadwinner	2.05	Disagree
5. Male can use computers more effectively to solve problems that women	2.35	Disagree
6. Male models have influenced me to take the career I want to pursue	2.54	Disagree
7. Female models have influenced me to take the career I want to pursue	2.64	Moderately Agree
8. I value career advice I get from same sex friends	2.93	Moderately Agree
Average Weighted Mean	2.70	Moderately Agree

Table 7
Peer influence on career choices

	Mean	Descriptive Interpretation
1. Career education comes from other students	2.88	Moderately Agree
2. Peer influence regarding career preferences is powerful	3.04	Moderately Agree
3. My friends have influenced me to choose a career	2.66	Moderately Agree
4. Peer advice on career guidance was helpful to me	3.15	Moderately Agree
5. My friends validated the career that I chose	2.72	Moderately Agree
6. I chose a career that is similar to my friends	2.37	Disagree
7. I embrace the advice I get from peers that I value most	3.27	Moderately Agree
8. My friends give comprehensive and proper advice on careers	3.31	Moderately Agree
Average Weighted Mean	2.93	Moderately Agree

Peer influence can't be underrated because it was found to be significant in career choices. Per Failer and Failer (2013), that students were influenced by their colleagues during a variety of ways like peer counselling, peer interaction, peer advice and peer relationships. Peer influence in choosing career is shown in Table 7. It has a weighted mean of 2.93, interpreted as "Moderately Agree." Most of the student-respondents

moderately agree that the type of knowledge they received from peers influenced them to decide on the careers they want to pursue, in which peer influence was powerful in their choice of careers. The student-respondents also agreed that friends gave them comprehensive advice. However, student-respondents denied that they choose careers that were the same as to their friends with a mean value of 2.37, interpreted as “Disagree”. Peers influence career choice through peer interactions. It was revealed in Uganda by Okiror & Otabong (2015) and in Kenya by Walaba & Kiboss (2013) that peer connections influence students in choosing careers. As the student-respondents interact, they share information about careers. This is often in line with Krumboltz’ Social Learning Theory which emphasises the importance of learners interacting with each other in their environment. Obwoye & Kibor (2016) espouse that peer inspiration was found to be a critical factor in influencing American students’ choice of careers. This can be in line with Bandura’s Social Cognitive Theory which states that realistic encouragement results in greater effort and eventually to greater success. Since high school students are adolescents, they will depend upon people of their own age.

Table 8
Summary of factors influencing career choices

Behavior	Mean	Descriptive Interpretation
Personal Influence	3.73	Agree
Family Influence	2.92	Moderately Agree
School Influence	3.19	Moderately Agree
Gender Influence	2.70	Moderately Agree
Peer Influence	2.93	Moderately Agree
Average Weighted Mean	3.14	Moderately Agree

As shown in Table 8, four factors were assessed as “Moderately Agree” and one “Agree” by the respondents with a mean rating of 3.14, qualitatively interpreted as “Moderately Agree.” This finding shows that student-respondents were influenced by these factors in deciding which career to choose. It emerged from this study that personal preferences influence career choices among STEM senior high school students. Family as well influences career choices among students which revealed that parents can create career interests in their children. Gender does not much influence students in career choices. Both male and female compete for the same careers. Peers influence career choices of senior high school students where peer advice on careers is a significant factor when students choose careers.

4. Conclusions and Recommendations

A. Conclusions

1. The most preferred career of STEM students was Engineering.
2. The factors influencing career choices of STEM students of Zone 2, Division of Zambales “Moderately Agree” on family, school, gender and peer influence. “Personal Influence” appears to be the most agreed while “Gender Influence” appears to be the least. It can be concluded that STEM students gave more importance on their own preferences in choosing their

career. The availability of work was most influential to them in choosing their career. It can also be concluded that the family has a significant role in influencing students’ career choices. It can also be concluded that schools play an important role in students’ choices of careers. Career guidance being conducted in schools were helpful in making career choices for the students. It can also be concluded that gender has the least influence in students’ choices of careers. Both male and female students were interested in the same careers. Further, the study concluded that peers have a significant role in students’ choices of careers. Peer advice and encouragement are important to them.

3. Lastly, it can also be concluded that identifying short and long –term goals help the student-respondents to come up with their plans on what kind of lives they are headed to in the future based from their career preferences.

B. Recommendations

1. Career guidance in school must be reviewed to consider factors that influence students’ choices of careers.
2. It is recommended that the “Career Guidance Program” must give importance not just to comply with the Department Order but rather put into practice all the stated theories and application in the curriculum.
3. To sustain the implementation and further improvement of the career guidance program, teachers teaching this particularly advisers must be trained to equip them with necessary skills that enhance teaching in classroom. It is further recommended that staff development of career guidance teachers be prioritized to enhance competitiveness of teachers when executing their duties as career guidance practitioners.
4. Parents should also be trained since their involvement is inevitable. The school should extend their programs in special community programs to help parents guide their children like short courses on career guidance.

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