

HAIGAZIAN UNIVERSITY

**FACTORS THAT HAVE AN IMPACT ON UNIVERSITY/MAJOR ENTRY
DECISION-MAKING SATISFACTION OF HIGH SCHOOL STUDENTS IN
LEBANON**

By

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A Thesis

**Submitted in Partial Fulfillment of the Requirements for the Degree of
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DEDICATION

I want to dedicate this thesis to the best family one would ask for, Suhail Hariz, Amal Nasereddine, Fadi Hariz, Raed Hariz, Nader Hariz, and Lama Andari. Without your continuous support, I would not have done it. Thank you for believing in me, supporting me and giving me all the love needed to finish my work.

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Finally, I would like to thank all the participants in the survey.

AN ABSTRACT OF THESIS OF

Farah Suhail Hariz for Masters of Business administration

**Title: FACTORS THAT HAVE AN IMPACT ON UNIVERSITY/MAJOR ENTRY DECISION-MAKING
SATISFACTION OF HIGH SCHOOL STUDENTS IN LEBANON**

The main purpose of this study was to examine the factors that affect the decision-making processes of high school students with regards to choosing their major and university and make them satisfied with their choices.

The instrument used in this study is a survey questionnaire composed of 23 questions developed by the researcher based on related literature. The students to which the questionnaires were distributed were selected from both public and private universities all over Lebanon.

The sample size was around 400 responses.

Descriptive Statistics were conducted followed by Reliability Test, Factor Analysis, Multiple Regression Analysis with Step-wise method, Independent samples T-Test, and One-Way ANOVA.

Empirical evidence from this study showed that a number of independent variables have a statistically significant relationships with the satisfaction with the choice of major:

The major I chose provide better career development in the future

My parents guided me in solving my financial problems

My school grades limited my options (negative)

I chose my major based on salary expectations (negative)

At my school, I was introduced to the various university cultures: open doors, campus visits...

I had a certain career in mind

My parents were emotionally supportive to me: encourage, believe in me, worry with me...

And a number of independent variables had statistically significant relationships with the satisfaction with the choice of university:

My parents guided me in solving my financial problems

The major I chose provides better career development in the future

My school grades limited my options (negative)

University's social networking pages were helpful for my choice

The study recommends better information provision by schools, universities, families, the communities at large (i.e. the Education Ministry, NGOs) Schools should play an important role in involving and introducing students and their parents to various university cultures through open doors, workshops, orientation sessions, and campus visits. Moreover, the study recommends that parents should provide their children the needed information regarding finding solutions to their financial problems, and should be oriented to know how important it is to be emotionally supportive to their children. Furthermore, students should be guided by

their schools and parents about their future career options, aware of and informed about the career development related to each major, and should be guided not to choose their majors based on salary expectations, but to do majors that they love. Finally, it is very important for universities to guide students by providing needed information about registration, majors, accreditation status, faculty, admissions, financial aid and scholarships through their websites and social media.

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CHAPTER ONE

INTRODUCTION

Farah Suhail Hariz for Masters of Business administration

Title: FACTORS THAT HAVE AN IMPACT ON UNIVERSITY/MAJOR ENTRY DECISION-MAKING SATISFACTION OF HIGH SCHOOL STUDENTS IN LEBANON

For students choosing the right major or the major they love and knowing how to select, apply and enroll in university has posed a significant challenge to researchers worldwide. Successful university/major entry decision-making processes of high school students are essential factors in the improvement, progress and success of any community since those students are the future generations that need to be well prepared to enter the workforce. According to A. Bergerson, A. Heiselt, and S. Aiken-Wisniewski (2013), university choice has been a topic of research and investigation for so many years. The assumption these researchers reached is that when students select the university they want to be enrolled in and the major that they love to do, it is then that they increase their chance of completing their degree.

Also, according to researchers, such as Li, So, Fung, Lui, Lo, and Lau (2011), students who will choose their university or their major need to be informed in a satisfactory way about their choices, because satisfaction with information received will make them satisfied with their decision making.

The main purpose of this study is to examine the factors i.e. the main sources of information and guidance to students that affect the decision of high school students with regards to their major and university choice satisfaction.

CHAPTER TWO

LITERATURE REVIEW

Farah Suhail Hariz for Masters of Business administration

Title: FACTORS THAT HAVE AN IMPACT ON UNIVERSITY/MAJOR ENTRY DECISION-MAKING SATISFACTION OF HIGH SCHOOL STUDENTS IN LEBANON

According to D.T. Conley (2013), a high school diploma has been for decades known to be the goal that all students should follow, but achieving it is not anymore a hard task, on the contrary every student is expected to earn a high school diploma as a first stage in life. But having a high school diploma alone does not qualify students to start most of the careers especially the ones emerging in the new economy, because they need high talent and competitive caliber. In fact with a high school diploma it is as well hard to get an entry-level job. Conley explains that things are becoming different in this century, employers are not looking anymore for students who are merely competent, but they require students, who will be becoming workers, to have good knowledge and skills which can be achieved best through a university education. Success nowadays and in the future would revolve thus around education, what people have learned and what they are capable of learning. Schools should be qualifying students to learn to continue their education and have a decent career choice. Creating lifelong and permanent learners will be the compelling goal of education, because, as D.T. Conley puts it “It’s not at all clear what today’s students will need to know throughout their lives, but it is likely that they will not be learning in school today much of what will be important to success over the course of their careers”.

According to A. Bergerson, A. Heiselt, and S. Aiken-Wisniewski (2013), university choice has been a topic of research and investigation for so many years and has more recently been tied and highly related to determination. The assumption these researchers reached is that when students select the university they want to be enrolled in and the major that they love to do, it is then that they increase their chance of completing their degree.

According to V.Germeijsa, K. Luyckxa, G. Notelaersb, L.Goossensa, & K.Verschuerena (2012), each year many high school students are faced with the issue of choosing a major in university. This decision involves many difficult decision-making processes during which students are faced with exploring different options, comparing these options and choosing the best. Many school counselors agreed that students differ in the way they deal with taking this decision. They relate that some students who are highly dedicated to a certain option in their mind and they totally know that this is what they will do in university, do not explore any other option, while others explore many different majors and research a lot to know about the several options available, however, they are uncertain about their choice.

Many researches discuss the challenges that secondary school students face while choosing their university degree; they write about the reasons and the different implications of these challenges. For example according to Robbins & Decenzo, 2005, (cited by G.M. Broekemier & K.A. Hodge, 2008) "Stress is a force or influence a person feels when he/she faces opportunities, constraints, or demands that he/she perceives to be both uncertain and important"; and according to these authors, stress is pressure. Everyone feels stressed at one time or another in life, and stress can be positive and can be negative. Positive stress can be a motivation and incentive to complete what has to be done and conversely stress can be

negative when there are a lot of demands and constraints placed on people. G.M. Broekemier & K.A. Hodge (2008) add that students at high school who are trying to decide what to do with the rest of their lives, which university to attend and what major to do, experience stress from many sources. In addition, students feel an added pressure regarding their academic performance, they feel the urge to perform well and get high scores in school and the entrance exams for universities. Many researches were done and prove that University is the major stress for adolescents. University/university attendance is a major life change requiring both academic and emotional adjustments.

According to C.L. Aguado; J.M. Laguarda; J.C.L. Deligero, (2015), high school students do not have a concrete vision about which university to get enrolled in and what major to do. They want to go to university just for the sake of continuing their education but without clearly having any idea what career to pursue for their future. According to Hrnčiar & Madzík, 2013 (cited by C.L. Aguado et al., 2015) sometimes students consider the people and information received in taking a decision, that's why they say high education institutions started thinking of offering quality services that will suit to the needs, expectations, and demands of the community in general. So while preparing an educational program, these academic institutions should observe the requirements of the targeted students and society overall including the parents. These different educational institutions sometimes offer the same programs and therefore they should differentiate themselves, get a competitive edge and offer a unique quality established in educational marketing strategy; this will help and guide the parents towards the achievement of their desire for the success of their children. C.L. Aguado et al., 2015, add that students sometimes take the decision of choosing university and their career

depending on how they perceive the world and their future. However, some of them do not know how to perceive their career and future in the right way, they do not have enough knowledge and consciousness for processing information from personal, social, economic, political, spiritual and environmental points of view.

According to D.T. Conley, (2013), many high school students have accepted the idea of listening to what they are told to do in order to succeed in school, university, and life. Their parents over emphasize on the academic success; their peer groups face the same issue; and everyone thinks that this will lead them to success. However, they do not know that they may also be discouraged and lose their enthusiasm for learning. All their lives they have been working so hard in school to meet their teachers and parent's expectations and have not focused on what they really love and need.

According to by D.T. Conley, (2013), assisting and supporting students to learn requires a lot more than just giving or presenting the information. When students understand, are able to recall and remember information, are able to analyze and link, and are able to apply and use information effectively, it is then that students are really learning deeply and in the correct way; It is then that they are gaining meaningful information and not information good for passing an exam only. This is a key goal of the current educational reforms and most of the teachers are looking forward to get students into deeper levels of learning, so that students become motivated to learn, to know that what they are studying is important, and link their studies to their own interests, aspirations, and goals. This will help them to make up their mind for what they love the most and enter the correct field of study in university.

According to Ginder, & Kelly-Reid, (2012), cited by L. Ruberman, (2014), high school graduates after their high school decide to go to universities - two and four year universities. And according to Dillon, Liem, & Gore, 2013 (cited by L. Ruberman, 2014), some of those students are successful academically and socially, and manage to find the right academic and social life when entering university while others are not and cannot do this; these others need support either from their family, friends, or teachers. This totally outburst with the idea that internal or external familial support is much needed for them since this is a stressful and critical stage for them.

According to Aquilino (2006); Laursen & Collins (2009), the shift or transition from high school to university is a weak, tense, and demanding time for students since they are no more considered to be teenagers but adults, responsible of themselves academically, economically and socially.

Maxakato (1999) and Sedumedi (2002) (cited by C. Nel, C. Troskie-de Bruin and E. Bitzer, 2009), also discuss the inadequate and insufficient career guidance that leads to unrealistic and wrong decisions with regard to specific study programs and incorrect major choices.

T.G. Dolan (2008), discusses what is needed to enter university and what roles the society and schools should play to make the transition for the students an easy one. He observes that middle and upper classes have more access to information than others. Moreover, he says that one needs a lot of knowledge in many different areas, have the basic skills in addition to certain thinking capabilities. Students should be able to understand arguments, interpret and analyze findings. Most importantly, he mentions the self-knowledge: students should know themselves

very well, know their strengths and weaknesses, know how to study and manage their time, know how to make and take the right decisions, how to interact with students from different backgrounds and cultures, how to work with professors and how to apply to a university and know all the information required.

According to D. Kember, A. Ho & C. Hong (2010), knowledge-based societies need a well-educated workforce prepared with excellent characteristics and qualities such as creative and critical thinking, problem-solving, communication skills and the ability to work in teams. Also, it is very important to have a good understanding of what motivates students to become a university student and obtain the degree they desire. One of the things that motivates students and affects the choice of university degree is the choice of subjects studied at school, and the degree of enjoyment of studying them. Given the significance of what motivates students to go to university and choose a particular major and degree to enroll in, there is eminent justification in finding or developing a framework to explain and facilitate these motivational decisions.

P.M. McDonough (1997) says that the late twentieth century was a time of quick change in the university admissions world and students faced strong competition in university access. She states that students with high potential know what to major in and enroll in university with the help and encouragement of family, friends, high school advisors, teachers, counselors, advertisements and many other sources. On the other hand, universities try to attract students through marketing, recruitment, and enrollment.

She adds that a student passes through several stages before taking a decision in attending university and choosing a major. First, the student decides if he/she will attend university. Then, the student searches for general information about universities, put down several options, and begins to consider them. In the final stage, the student goes through his/her choice deeply, decides upon a university and attends the university. Many factors affect the student's choice such as school-university intervention, socio-economic status, parents as key players, friends and peer pressure, academic skills preparation of the students, financial factors, cultural factors, gender, internet-based resources, career prospects, and university characteristics.

Many studies will be discussed below about the different challenges that secondary school students face and what can be done to give the right orientation to them, so that they become capable to choose the major they love, the one they will excel in, and the one that will definitely help them making a change in the society and the world!

1. School-University intervention

According to C. Nel et al., (2009), it is very necessary for secondary schools and universities to collaborate in making the transitional process of students easy and simple, and they think that universities are not doing this contact with high schools early enough. If universities want to improve their rates in the number of students, they should intervene and get involved in early stages by preparing the prospective students and helping out students at risk who are lost in terms of taking the right decision (university or major).

According to Frick, 2007 (cited by C. Nel et al., (2009), a “good academic preparation at school directly correlates with academic success at university”. Similarly, according to Nel (2006), “prospective students should develop the necessary skills at school level to cope with the possible challenges”.

Various studies were conducted on this subject regarding high schools and the projects they do to have the smoothest transitional phase for the students before entering university. Some programs focus specifically on giving information on study opportunities in different fields, while others aim at preparing students academically for the transition. Thomas and Quinn (2007) show the importance of using student mentors in activities in school or on campus to explain for high school students everything related to university and to share their personal experience in university with them, while Frick (2007a) highlights the importance of open days where students visit the university’s campus, get to know the faculty and the different facilities that the university offer along with the majors and admissions information required from the students to know.

In Thomas and Quinn’s, 2007 (cited by C. Nel et al., (2009), examples are given about some pre-university interventions in America, the United Kingdom and Australia. The authors point out that some universities and institutions start intervening with primary schools, giving programs that help students in getting to know the major they need to get in or the career they want to have. According to these authors, to successfully recognize and target prospective students by an intervention is a challenge and there is no guarantee that this intervention will target the right students that will benefit the most from it.

Padron (1992) argues that, most pre-university programs cannot reach all students, they only reach some high school learners. Therefore, it is very important that institutions and universities visit schools broadly and reach high number of students.

According to C. Nel et al., (2009), even though universities are not directly involved in each school system, there should be a better liaison and collaboration between schools and universities. Partnerships with schools, teachers, and students will be of an advantage to all the parties involved, most importantly for the students to be able to take the correct and most suitable decision in choosing their major and university. Moreover, universities should get the parents involved as well in this process. Universities should play a very important role in making the school-university process for students appear to be an easy approach by an early intervention in the program that will engage the students, teachers, and parents in an effective collaboration.

According to David Conley, professor and director of the research center for educational policy, University of Oregon (2008), post-secondary education should make its admissions standards clearer about the knowledge and skills students should master and the university faculty should interact more with high school faculty to present solutions such as placement tests which are given to students in schools to be able to detect their interest in subjects and majors at an early stage.

According to D. Kember et al., (2010), teachers play a role in encouraging students to enter a university and in choosing their university degree. Teachers encourage their students to do well in the entrance exams by explaining that doing well will allow them to enter the university they

want and do the major they desire. The authors also discuss that in their study they interviewed a sample of 36 undergraduate students and it showed that many students knew little about the program they had chosen or little of what their work would be like whenever they graduate. They add that this will be a common phenomenon for school leavers worldwide. More findings showed that students thought that particular teachers acted as their role model, inspiring them in their choice of university major.

In “Going to University: How Social, Economic, and Educational Factors Influence the Decisions Students Make”, the authors D. Hossler, J. Schmit, and N. Vesper (2000) report that students during their junior year at school (Grades 10 and 11) are ready to receive and read more information regarding university more than sophomores. Therefore, they say that it would be wise for university admission recruits to provide brief information to sophomores and give more to juniors especially that students should be preparing for university from junior years, by doing test scores such as SAT and getting high school grades which are the basics to be accepted in university. They add that students usually change their mind a lot about the university they will attend, they start with a university in mind from the 9th grade and then when they are in their junior year, a huge percentage of students switch to another university and they will be open to many options for change. Therefore, during the junior year period for students, universities should intervene the most to influence the students. Universities may influence the students through advertisements and recruitment which should start early in their junior year at school. Moreover, this article studies the influence that university admissions offices have on student’s choices. The admission counselors or recruiters should be committed in helping students at an early stage in any of their concerns, and provide assistance

that would help them feel comfortable to ask more questions and know all the details they need to go to university (including admissions requirements, financial aid, university environment, tuition fees..). They add that the admissions recruiters do not influence students in choosing one university over another, but their role is to help and assist them in answering all their inquiries and guiding them to choose the right major. Furthermore, the authors observe that students have low interest for university fairs, they find the admission counselors, personnel or recruiters more helpful. This shows that recruiters visiting schools for orientation or presentation, students visiting the university campus and having the chance to talk to the admission counselors may be more useful ways of reaching students.

Many researches were done in Lebanon as well about the harmonization between high school and universities. According to Dr. H. Jomaa and A. Shamshoom (2001), many workshops were done to connect and harmonize high school students with university majors. The main purpose of the workshops was to connect directors and instructors of private and public universities with directors and teachers from schools to make sure that the curriculum and what students are studying in schools are effective and help them to get accepted in university tests and to get along at the university level. Moreover, the workshops help in communicating all the admission requirements that each university needs or asks from students when applying. Furthermore, these workshops include all the majors that has each university where students visit; these workshops provide the right orientation from each university; the workshops are open to all students, and all schools in Lebanon receive the invitation to participate. Universities suggested that they should follow a flexible system in accepting students, should always take into consideration specific cases of students and the changes in the curriculum, they should orient

students in schools to their majors and their admissions requirements and should match their majors with the different branches in high school (life science, sociology and economics, humanities, and general sciences). In the article they added a table that shows in each branch in Grade 12 the majors that match with them. Below is a table that shows an example of what each last year school section open choices for students to select different majors.

According to G.F. Martinez; R. Deil-Amen (2015), high schools vary by the specific “university-linking” strategies that they follow and are engaged in. There are three types of strategies that appear generally:

- Traditional high schools: limited resources and commitment to easing entrance to university.
- Clearinghouse high schools: provide a concrete solid structure for university planning but have a limited commitment to the equal resource allocation among students. This means that students depending on their socio-economic status and their parent’s level of education guarantee access to resources.
- Brokering high schools: provide small but significant resources for university planning and show a strong commitment to assisting all students and their families. Students graduating from these schools mostly attend four-year University.

2. Socio-economic status

According to C. Nel, C. Troskie-de Bruin and E. Bitzer (2009), the school that has a high socio-economic status is more likely to have students that are guided and oriented appropriately in selecting the university, the major they want and in knowing how to apply to these universities.

On the other hand, students who are coming from schools of low socio-economic status or disadvantaged schools are less prepared to enter the university.

According to A.L. Mullen (2014), students from higher social and economic backgrounds are more likely to select majors such as liberal arts and sciences and to attend universities where the learning goals are their main target and not the career goals. The low socioeconomic class students choose majors that would allow them to find a secure job, and well-paid, high-status work.

According to B. Supiano and E. Hoover (2009), high-school seniors should apply for university as early as they can, and in their article based on two surveys with school counselors shows that the economic situation plays an important role in students' decision to university choice. They explain that the recession is an example of why some students change their university plans. A high percentage of low income students said that their plans had changed due to the recession compared to a lower number of middle income students and slightly fewer numbers of high income students. Tough economy leads students to consider a public university or a university close to home. Furthermore, they mention that even if there is a tough financial circumstance in the economy of many families, this condition rarely affects students in giving up on attending university; they do not even consider it as an option for they know well how important education and specifically higher education is in this century.

3. Parents as key players

According to C. Nel et al., (2009), regardless of the parent's educational level, students are affected big time by the support that they receive from their parents. First generation students

(whose parents are not educated) indicate that although their parents are not educated, yet they depend on their support. However, they do not receive the support needed from their parents because the parents do not know how to support them and give them the correct guidance which definitely makes the students feel bad. First generation students need their parents' support as much as students whose parents are educated (either high school level or university level). Yet it seems as though first-generation students' parents do not always provide effective support.

Michele Siqueiros (associate director, Campaign for University Opportunities, Los Angeles, CA, 2008) identifies the big challenges that high school students confronts the information gap. One of the main reasons of having information gap is that parents don't have the tools or information to assist their children in taking the right decisions to enter university. So she focuses on getting the information to the kids and parents early from the 6th through the 9th grades.

She adds that through her organization, she is willing to close this gap by getting out the information through presenting different options, information about financial aid, majors, different universities and giving the children as well as their parents the chance to visit universities. Besides, she added that through her organization she is willing to get the information to all schools to reach all the students and not just select a few. She refers to her own experience where when she was at school she was fortunate in getting the right guidance through a similar organization (that targeted few) and now she has both a bachelor's and a master's degree.

According to D. Kember et al., (2010), family impacts were two types. The first is from educated family members, when parents and/or siblings are graduates, usually the younger ones follow the same path. The second type of impact is from non-educated members in the family, who motivate the students to attend university as they feel obliged to promote the status of their family. However, this kind of motivation is limited to certain societies, in other societies non-educated parents would not be able to motivate and give the needed support to their children to continue their education and their children will not be encouraged to enter university and get their degrees.

According to A.F. Cabrera, S.M. La Nasa (2000), parental encouragement and support has two scopes, the first is motivational and the second is proactive. In the first, parents motivate their children and are expecting a lot from their education. In the second, parents get involved in their school studies, activities, discuss university plans with their children and save money needed for their children to enter university. The encouragement that parents show to their children is directly related to the children's development of their educational goals. Perna (2000) (cited by A.F. Cabrera, S.M. La Nasa 2000), states that the parental involvement starting in early junior high expects that the student will continue his/her higher education. (Stage and Hossler, 1989; Hossler and Vesper, 1993 (cited by A.F. Cabrera, S.M. La Nasa 2000), state that parents who save money for their children's university are showing the children that they are totally supporting them in continuing and pursuing their university degree. Flint 1992, 1993, (cited by A.F. Cabrera, S.M. La Nasa 2000), argues that this parent's encouragement is effective when parents show the university saving plans, advise their children on the universities that they can afford, and search with them for additional sources of financial support. Miller, 1997

(cited by A.F. Cabrera, S.M. La Nasa 2000), adds that the biggest and most important investment that parents can do to their children is helping them by saving for their university education. Definitely, the amount of savings depends on the parents' socioeconomic status. Low socio-economic parents depend highly on financial aid and if this is not available they might go in debt to finance their children's education. Having educated parents would also help in knowing that they need to find a way early to save money for their children's university. Parent's encouragement play one of the biggest roles on the student's university and career choice.

In *Going to University: How Social, Economic, and Educational Factors Influence the Decisions Students Make*, the authors D. Hossler et al., (2000) discuss the role of parents as a key predictor for students who want to enter university. Parents' encouragement in early high school years determines students' aspirations to enter university. The parents' level of education makes a huge difference as well. The more encouragement students receive, and the more the parents are educated, the more likely the children are to go to university. They add that parental income plays also a major role in affecting their children's goals. The financial status of the parents affects the student's considerations in choosing a certain university. Here, the university should play an important role in directing the parents about the financial aid and tuition costs. Parents and children together relate going to university to finding a decent job when graduating which means that interventions pointed at parents should focus on the connection between university education and the labor market and here is again one of the important roles that the university should play.

According to A. Bergerson, A. Heiselt, and S. Aiken-Wisniewski (2013), parental involvement is a main component in the university choice process. According to Stage and Hossler, 1989 (cited by A. Bergerson et al., 2013), there are two features of parental influence on choice, the first is support and the second is encouragement. Support is when parents do real acts with their children like saving accounts from early stages, visiting the campus, interacting with university students, attending students' activities and events, attending commencement...This kind of support would definitely influence students in continuing their education easily and dreaming big. Encouragement, the second feature, is when parents follow up on their children's worries and support them emotionally and socially in facing obstacles, believing in them, and encouraging them to continue their education to reach whatever they are dreaming about.

According to J. Nagaoka, M. Roderick, and V. Coca (2009), applying to university is a complex and difficult process for all students and even for the most academically skilled ones. In school systems where most of the students do not have university-educated parents, improving students' qualifications will not necessarily lead to increases in university enrollments if they do not have the support needed from their parents to guide them in their application process to universities. Low income students whose parents are not university-educated might have difficulty in translating their aspirations into enrollment in university because they do not have access to university knowledge and lack support and guidance from their families, communities and their high schools. High school students need adult support and guidance when thinking of applying to university which is supposed to be a basic task for parents. The authors focus on two ways in which students' family backgrounds may create barriers to the students' enrollment in university:

- 1) Students not taking the steps necessary for acceptance into university and for applying for financial aid.
- 2) Students not considering a wide range of universities and instead enrolling in traditional institutions that do not afford high chances of getting a degree.

According to T. Petty (2014), first-generation students, whose parents are not educated encounter more to leave higher education without entering university when compared to their peers whose parents are educated. Hsiao 1992 (cited by Petty, Tanjula 2014) says that first-generation students meet a major obstacle thriving in two worlds:

- The culture of home
- The culture of higher education

Parents who did not attend university usually have a low-income and therefore their children will bear this consequence and will have to work during university to be able to help in paying for the tuition fees. Mostly, these children spend more hours working than studying unlike their classmates. So, not having time to study, working this much hard, and not gaining any support from parents and family would definitely make a high probability for students to drop university from the second semester or year.

T. Petty (2014), adds that postsecondary institutions should play a basic role in developing successful mechanisms for motivating first-generation students to persist in pursuing university degrees.

According to L. B. Santilli (2015), first-generation students (whose parents are not educated) decide to apply to university to do a profession that meets their desires and necessities unlike

students whose parents are educated who decide to apply to university in order to ““bring honor to their families.”

Several studies show that most of the first-generation students go to university to help their families financially when they graduate and they also think as well about helping their community and giving back unlike non-first-generation peers. Families of first-generation students view their children as their rescuer, protector, representative, delegate, or a way out of poverty and to more appropriate desired living conditions. This leads their children to struggle with the fact that they need to pursue their higher education and upward mobility which may be considered as a rejection of their past or running away from the family or siblings who depend on them. Therefore, it is very important for higher education to recognize the psychological impact that first-generation status has on its students and should provide help. On the other hand, many first-generation students consider themselves pursuing their higher education as a huge great investment for them and their families and a source of strength. They see that their parents have passed through tough conditions and they do not want to live the challenge again knowing that the best weapon to compete in such a world is education and knowledge.

4. Friends and peer pressure

According to C. Nel, C. Troskie-de Bruin and E. Bitzer (2009), the role that friends and peers play as support structures is also becoming increasingly important in the transition phase – even more than the parents’ role in many cases since friends or peers are going through the same exact transition phase and are walking the same road.

According to J. Nagaoka, M. Roderick, and V. Coca (2009), research on university choice finds that one of the most important factors of whether students will go to university is whether they are in a high school that got a high percentage of students who are willing to go to university. Students play a huge impact on each other which can be positive or negative in their decision. Furthermore, when students go to a particular university, more students are likely to follow them.

B. Schneider (cited by J. Nagaoka et al., 2009), emphasizes that “...all teachers in a high school should explicitly articulate the expectation that all students will attend postsecondary school and provide resources and opportunities to make that happen.”

5. Academic skills preparation of the students

According to York 2002; Eiselen and Geyser 2003 (cited by C. Nel, C. Troskie-de Bruin and E. Bitzer, 2009), the academic skills required to adjust effectively to higher education should already be developed at school level. It is very important for high school students to master these skills to be able to take the right decisions in entering the right university and doing the major they like.

According to D.T. Conley (2013), secondary school is the time and place where students start to think about their future and their interests in a mature and more serious way. It is where students should link their interests and what they love to what they shall do when entering university. Secondary school is also the time when teachers can help the students to get ready in the transitional stage to university and being aware of what they will do. To do so, students need interesting and challenging assignments and classroom assessments that require deeper

engagement and more sophisticated information processing skills. In addition, students should learn to use a variety of learning strategies and techniques to develop their minds well to be able to succeed in any difficult situation. Finally, schools should collect information on how well students are ready to apply to university, if they know about the financial aid procedures, and if they are ready to cope with the university's culture. All of this information should be guided by the teachers, students and parents.

According to D.T. Conley (2013), giving students the option to explore potential futures is very important and it should be done in a way to encourage students' aspirations. Helping them doing so requires help from the adults in their lives such as parents, educators, counselors, and online resources. Students should learn about themselves and their interests, they need to be making connections between what they are learning and what they want to do with what they are learning in their lives. The key way to achieve this is through preparing students in their secondary school by giving assignments, projects and application oriented activities that make students think more, question more and analyze more and at the same time provide opportunities to connect what they are studying to their interests. He adds that he is suggesting that schools teach students from Ninth grade how to state a career goal or aspiration because this would open their eyes to know if this is what they really love or they should reexamine their aspiration and search for something else. Schools should always continue to challenge all students to increase their ambitions, but having a first goal as a first step is a great start in a student's educational growth process. He adds that many schools nowadays are having programs besides the curriculum they are following such as internships, job shadowing and mentor relationships.

D.T. Conley (2008) says that students should have a strong academic base in order to enter university in such a competitive environment and they should be challenged in their school to achieve in key areas. It is very important that high schools know that they need a very well designed system that helps students to move on to university. He adds that there should be clear measuring for performance and progress with clear outcomes and standards. Each student should have a portfolio led by his teacher which includes his projects and assignments.

According to F.M. Díaz-Pérez; O. González-Morales, (2012), a study was made in Spain to show the importance of career guidance by teachers in schools, who should help and guide students in choosing their majors and the field of study they want to enroll in. The main two reasons why the existence of career guidance by teachers is important are:

- It is part of their job to follow up on the students in the school
- It is their role to advise students on choosing appropriate field of study based on their ambitions and goals and at the same time based on the labor market

In *Going to University: How Social, Economic, and Educational Factors Influence the Decisions Students Make*, the authors D. Hossler et al., (2000) discuss that the second most solid indicator of university choice is the student's high school grades. High percentage of A and B students plan to attend university and a very low percentage of C students are expected to go to university.

In the article "Prospective First-Generation University Students: Meeting Their Needs Through Social Cognitive Career Theory", M.M. Gibbons; M.F. Shoffner (2004) discuss how school counselors can affect the student's choice by helping and guiding to increase the student's

options and success upon entry into university. The counselor should consider the following questions while working with the secondary students who are potential university students.

- The first set of questions that were addressed by the authors are: “What does this student believe he or she is capable of doing? In which fields? For what reasons?” The authors say that depending on the students’ answers, the counselors should challenge the students’ assumptions if they were negative (saying that they cannot go to university because they are not smart enough for example). Counselors should follow-up and increase the acceptance of a new set of self-efficacy beliefs, and can design interventions that will lead to student success and increased self-efficacy. For example, discussions between the counselor and student can focus on exploring the student's true capabilities and reasons for selecting or eliminating particular career fields. The counselor also can help the student discover the reasons behind low self-efficacy related to specific career opportunities.
- The second set of questions that the counselor should consider with the students as per the authors are: “What does this student believe will be the results of entering university? Of entering particular fields? What has led him or her to hold those beliefs?” The authors said that counselors can help students find activities that can alter outcome expectations reflecting realistic views of their abilities and beliefs about university and work. This can be done through some programs such as job shadowing where a student goes to a field of work that he/she loves during summer school program and can check how the work goes while being an employee all the time so they can tell later if this is what they want to do in the future or not.

- The third set of questions that the counselor should consider with the students as per the authors were: “What barriers does this student perceive that will stand in the way of achievement of the goal of entering university and/or entering into a particular occupation or type of occupation? What supports is he or she able to identify to counterbalance these barriers? Are the perceived barriers based on faulty perceptions?” Counselors again should challenge students’ observations and insights and arrange for students several opportunities to create new perceptions around the obstacles they might face and give them all the support needed to help them. Counselors should as well provide students with role models that will discuss their experiences with them and with university graduates who had same cases as them and are now successful in their careers.

Counselors can provide programs for both students and their parents by helping them in the search process (looking for universities), decision making process (choosing a university), filling and submitting applications, applying for financial aid and explaining it, and guiding students and parents about university life and how would it be.

According to J. Nagaoka et al., (2009), and from an academic perspective, students should have the below three skills:

- Basic skills which are mathematics, reading and content knowledge in basic academic subjects in order to move from high school to university.
- Core academic skills such as thinking, problem-solving, writing and research skills that can again allow students to engage in university level.

- Behavioral and problem-solving skills that allow students to manage new environments and new academic and social demands.

The author add that grading scores of students is an important measure of their readiness to university. Grades are a comprehensive measure of whether students grasped the material they are studying and whether they are ready for university courses.

6. Financial factors

According to Pascarella and Terenzini 1991 (cited by C. Nel et al., 2009), they report that many students and their parents due to their financial circumstances do not even have Internet access and thus they cannot research the internet to know more about universities, admissions procedures, deadlines, and to obtain electronic application forms. Needy students face a lot of challenges when thinking about applying to a university, some worry about the transportation, others about residence, and others about social integration.

According to S. Shim; B. Barber; N.A. Card; J.J. Xiao; J. Serido (2010), the central role of family in the young adults is financial socialization. They say that it is very important that parents give their children responsibility in financial behaviors and share with them their financial status. Parents should be both direct teachers and role models in the financial development of their children. Children should be knowledgeable of their financial status, should be able to have the analytical financial skills in order to take decisions to enter the affordable universities or be able to decide on finding solutions such as taking loans to enter the university they want.

According to Olson and Rosenfeld (1984) (cited by A.F. Cabrera et al., 2000), educated parents are more knowledgeable than non-educated parents about the financial aid programs. Parents

who are educated and have high income look for information about financial aid through several information-seeking strategies including high school counselors, bank loan officers and reading information from books and brochures.

According to J. Nagaoka et al., (2009), in the steps of applying to university is the financial aid application. Studies show that students mix-up between financial aid and real university costs. Students in general consider that applying for financial aid is a complex and inefficient process that do not help students who truly need the aid enough. A lot of students do not know what is needed to apply for financial aid, what the procedure is and when to apply. Low-income students usually say that financial aid is complicated for them to apply and believe that university costs are very high and they prefer to receive institutional and state aid instead.

Grodsky & Jones, 2004; Luna De La Rosa, 2006; Tomas Rivera Policy Institute, 2005; Tierney & Venegas, 2007 (cited by W.G. Tierney, K.M. Venegas, 2009), in their different researches they suggest that low-income high school students do not prepare for university because they believe university is expensive and they cannot afford it.

Baum, 2006; Dowd & Coury, 2006; Doyle, 2005; Heller, 1999 (cited by W.G. Tierney, K.M. Venegas, 2009), in their researches they state that financial aid offer that took place during the past is shifted to loans now and the income-based scholarship is shifted to merit aid. They conclude that the financial aid is basically given to those who are most economically disadvantaged.

According to W.G. Tierney, K.M. Venegas (2009), if a student prosper in university and get high grades then definitely he/she will be granted a university scholarship.

There are different support services that some high school programs offer:

- a. Helping students understand how to navigate the financial aid application process.
- b. Preparing the students academically to be eligible for participation in these special programs.

According to W.G. Tierney, K.M. Venegas (2009), “Not only are there students who miss out on higher levels of financial aid because they are not adequately academically prepared, but there are also those who are eligible and who qualify for aid but do not apply for it.” Many environmental influences play a role in access to financial aid, lives of students and families, and therefore students and their families should be oriented well to know how to apply to financial aid, when to apply, what are the important papers they need to get ready and prepare, and most importantly they need guidance to support them in each step in applying to financial aid.

7. Cultural factors

According to C. Nel, et al. (2009), cultural differences play a major role in affecting the students. Some students, if not introduced earlier to the university’s culture would have a negative perception and get discouraged, while if introduced earlier they will be receptive to cultural diversity and would gain a realistic view of the university environment.

D.T. Conley (2008) points out that many of the students who arrive on campus suffer from a cultural shock and they feel lonely and isolated. He discusses that it is important to make students understand before entering university what campus life is like, how they should fit in and mingle with others, and how to accept others.

According to A. Bergerson, A. Heiselt, and S. Aiken-Wisniewski (2013), the community in which students live influences their decision in choosing the university they want to attend and the degree they need to earn. The community environment can play a serious impact on the student's choice, they give examples about people who grew up in rural towns and most of them talked how their community environment played a huge impact on their higher education decisions. In some rural towns, education is not a priority, unlike urban places where students discuss which university to attend, and not discuss if they should attend a university or not. People in rural communities think about women for example, who need to get married at some point in life and take care of their house and family, therefore do not need to continue their education. The culture therefore is a role factor in affecting the choice of students.

8. Gender

According to A.L. Mullen (2014), women in the United States have been graduating from university at higher rates than men since 1982 and they are earning 57% of the bachelor's degrees, however, the major fields of study are still sharply divided by gender. "In 2011, women earned 85 percent of the degrees in nursing and health professions, 80 percent in education, and 77 percent in psychology, but only 30 percent in economics, 29 percent in philosophy, and 19 percent in physics and engineering". This division between men and women contributes to gender gap in earnings and to occupational segregation of men and women. Studies consistently find that men are more likely than women to major in engineering, the physical sciences, and fields that lead to jobs with high incomes and prestige. A.L. Mullen (2014) gives many examples of how men described their love to some majors but then they refused doing them because they are female dominated fields and that they would be ashamed of doing them

and facing the society. She explains that this image shows how the nature of academic restraints becomes naturally associated with those who study them.

A.L. Mullen (2014) adds that most women choose their majors based on their academic interests and their enjoyment and the passion they got for a field or major. They do not actually have plans to be rich, or famous, or anything, instead they want to find something that they would be happy doing it, something that they love and have passion for. They think about having kids, making a beautiful family and along they want to do what they love as a work or career. Women do not care much about the salary, they want to make enough money to live on as long as they are happy with their jobs.

On the other hand, she discusses that men choose majors based on the status of academic departments and on the kinds of jobs that would allow them to live a wealthy life. Men would be affected in choosing the major that is under a strong department in university and get away from majors that are in weak departments even if they loved these majors. She adds that unlike women, men choose their major often based on the status and power that they want to reach later. Most men are aware that when they are not single anymore, they expect carrying the financial burden of their future families and therefore they would want to have a profitable career.

F.M. Díaz-Pérez et al., 2012, also observed that gender plays an important role for students in considering their university degree. Males and females look at the majors they will do in different ways; males are more affected by the wages they will earn; so there are significant differences caused by the impact of expected earnings according to gender. They explain why

there are such obvious gender-based differences in the choice of majors and give examples. For instance, male students prefer a “science” major more than “education” because they think that the science major will give them higher income or return. Many other majors are decided upon under the impact of a student’s gender. The authors advocate that the school and teachers should play a very important role in helping students decide on their majors based on their own competence.

According to J.M.L. Bonilla, R. Barrera, M.Á. Rodríguez, L.M.L. Bonilla, B.P. Florencio, M.C.R. Rodríguez & B.S. Altamira (2011), there are gender differences in choosing the university degree. López (1995) says that men usually choose their majors according to prestige, job opportunities and high wages while women are more interested in majors that are related in helping others. Candela (2008) shows that the reasons for women to choose “female” degrees are their talents and interests in the degree’s subjects and helping others, while the reasons for men for male degrees are factors such as high wages, job opportunities and professionalism. Likewise, Lightbody (1997) shows that women have a tendency to work with people and to provide social service. Duffy and Sedlacek (2007) also support the difference between women’s social orientation and men’s orientation towards money earning. Finally, Gámez and Marrero (2003) say that men are more involved in power while women turn toward achievements.

On the other hand, other authors didn’t find any gender differences in the reasons behind choosing a university degree. Mainly, Singaravelu, White, and Bringaze (2005) propose that the earlier mentioned differences are not precise.

According to P.D. Chen; P. A. Simpson (2015), gender plays an important role in choosing majors especially when it comes to STEM fields (science, technology, engineering, and mathematics). According to a study they did, the results showed that in general males are twice as likely as females to choose a STEM major. Generally, except in medical sciences and biosciences, women are understated in most STEM majors. They add that an interesting finding was that gender relates with personality type in affecting a student's choice of major. Although males are in general more likely to major in STEM fields, however those that have high social personality (sociable people that love to interact and get along with others, love to make connections) are less likely to choose a STEM major than those that have low social personality. Females, on the other hand, with a high social personality are more likely to choose a STEM major than those with a low social personality.

9. Internet-based resources

According to R.B. Kimberli (2013), internet-based resources are affecting the university choice process. According to Poock, 2006 (cited by R.B. Kimberli 2013), during the past several years students have been using the internet to find out information about universities. Martin, 2006 (cited by R.B.Kimberli2013), says that some students use the university website as the primary source of information to know more about universities. Christiansen, 2003 (cited by R.B. Kimberli 2013), looks at how internet is influencing the way students searched for universities and found that faculty web pages had the most impact, virtual tours were important as well as social networking sites. Hossler 1999 (cited by R.B. Kimberli, 2013) says that the internet shows challenges for higher education. He says that since internet is highly interactive in nature, this shows that higher education institutions have less control over how and what information is

transmitted to students. Hendricks, 2006 (cited by R.B. Kimberli (2013) says that since students can now “browse, formulate impressions, and make decisions with no formal interaction with the school,” understanding how students use the internet in their university choice process is significant for universities. LeFauve, 2001 (cited by R.B. Kimberli 2013) studies qualities of information in traditional publications and traditional books. Her study found that websites are used as an information source in choosing university to narrow the options. She adds that university websites are more useful and practical than viewing books in the search stage; and campus tours are the most helpful source during the choice stage. An example of an article from USA Today indicated that students are using Facebook as a source of communication with universities and gaining knowledge about them. R.B. Kimberli (2013) states some internet-based resources that high school students use while searching for universities such as:

- websites that rank universities based on some kind of criteria such as “U.S. News & World Report,” Forbes.com, or PrincetonReview.com
- websites specifically designed to compare universities such as Petersons.com, UniversityBoard.com, the National Survey of Student Engagement (NSSE), and Unigo.com
- social networking sites such as Facebook and MySpace
- websites of specific universities and universities

10. Career prospects

According to D. Kember et al., 2010, the career aspect plays a role in motivating students to choose their major. Students who already have a certain career in their mind that they want to be in whenever they graduate would make it easier to them to choose their degree. Career and

interest are related to each other in students' minds. However, sometimes interest and career cannot match because having interest in a major that does not allow a good salary would not help in choosing this major, then students would prefer choosing careers that give them good salaries instead of doing what they love.

According to V. Germeijsa, K. Luyckxa, G. Notelaersb, L. Goossensa, K. Verschuerena (2012), choosing a major can be as important as choosing a career. According to Lent, Brown, & Hackett, 1994 (cited by V. Germeijsa et al., 2012), since high school students develop their possible future career choices while making their educational decisions, these decisions can be seen as very important part in career development. According to Super, 1980 (cited by V. Germeijsa et al., 2012), the educational choices that have been discussed can be seen as a mini-cycle inside the big cycle of career development, so whenever a student chooses his/her major, then this can be considered as the very first plan done and achieved in one's career development.

V. Germeijsa et al., (2012), add that from a theoretical point of view, examining students' profiles of choosing a major is important to understand how people make career-related decisions. More specifically, it helps to understand if it is important to dig deep into knowing all the decisional tasks advanced in career decision-making models. For example, knowing that students who are highly committed, attached and self-confident about a career choice have explored and studied different careers is much more beneficial than students who are again highly committed, attached and self-confident but have done limited exploration in searching for other careers.

They add that on the other hand, from a practical viewpoint, educational supervision would also benefit from the identification of these profiles because these profiles would provide a way of understanding differences between students' educational decision-making processes. Studying students' profiles in choosing their majors facilitates counselors work to guide them for assistance in their decisions, identifying their skills and passion to a certain subject and linking these with the career development literature.

11. University characteristics

Vallerand, Pelletier, Blais, Briere, Caroline and Vallieres 1992 (cited by P. J. Bennett; S. D. Geringer; J. Taylor 2015) state that the most important motivational factors in the pursuit of higher education are personal satisfaction and the potential to earn. Stiber 2001 (cited by P. J. Bennett; S. D. Geringer; J. Taylor 2015); they specify self-actualization, job security and job advancement as motivators and reasons amongst individuals who decide to continue their higher education. According to P.J. Bennett et al., (2015) when students become motivated to continue their higher education, it is then when they begin to look for university characteristic that are important to them in their choice of the university to attend. For example, they start checking the tuition costs, quality of faculty, admissions requirements, financial aid, scholarships, location, reputation, and campus size and atmosphere. Also accreditation is one factor that students look for while choosing their university. However, what is interesting about it is that students think about accreditation as a great asset to the university and to their education while they showed little or no understanding and awareness of what accreditation really means or stands for, similar to the customers who want to buy a product that has high brand recognition over a similar product that is less familiar, but do not know what are the

actual differences in value. Accreditation is observed by students as being a valuable asset to both the university and to their education, therefore, universities should be clear in informing and orienting students about accreditation, what it stands for and what are the supportive features of it.

THEORETICAL MODEL OF MY STUDY

Thus, my literature emphasized the factors that affect the decision-making processes of High School students with regards to choosing their major and university and make them satisfied with their choices.

These factors, i.e. my “independent variables” (the school, the family, the career prospects, the university attributes and the internet resources), I explained, were sources of information; they provided needed information to students regarding majors, universities, career options and development, and finding solutions to financial problems,

Also I referred to researchers who observed that information characteristics influencing the students’ information satisfaction is crucial in the satisfaction of students with their choices.

For example, Li, So, Fung, Lui, Lo, and Lau (2011) explain that information satisfaction creation could most likely be a major consequence of a purchase behavior, and that customers perceived different levels of satisfaction with various types of information that was sought and provided by different sources, and students’ satisfaction with the information acquired has the capacity to influence the choice made, hence choice satisfaction. Chan and Chan (2004) concur

with this idea that the satisfaction with information acquired will in turn enhance students' choice satisfaction. And Halstead, Hartman and Schmidt (1994) state clearly that students' expectations and satisfaction are shaped by the information acquired through various sources.

As to Eagle and Brennan (2007), they found in their study that although information characteristics have no direct impact on choice satisfaction, however, the indirect effect of information characteristics onto choice satisfaction through information satisfaction is very sizeable (95% confidence interval: 0.534, 0.802)

Thus, my study became an investigation of the relationship between information characteristics (the independent variables being the sources of information), information satisfaction (measured in the survey questionnaire) and students' choice satisfaction.

Summary of the Model of my Study:



SUMMARY OF LITERATURE REVIEW

From the literature reviewed, we can organize the factors into six categories:

- 1. School**
- 2. Family**
- 3. Career prospects**
- 4. University attributes**
- 5. Internet resources**
- 6. Socio-demographic features**

➤ School

According to D.T. Conley (2013), success nowadays and in the future would revolve around education, what people have learned and what they are capable of learning. Schools should be qualifying students to learn to continue their education and have a decent career choice.

According to D.T. Conley (2013), secondary school is the time when teachers can help the students to get ready for the transitional stage to university and be aware of what they will do. To do so, students need:

- Challenging classroom assignments, projects, application oriented activities, learning strategies, internships, job shadowing that require deeper engagement

and sophisticated thinking, mentor relationships, analyzing and information processing skills, including self-knowledge skills and abilities

According to J. Nagaoka, M. Roderick, & V. Coca (2009), and from an academic perspective, students should have the below three skills:

- **Basic skills**: such as mathematics, reading and content knowledge;
- **Core academic skills**: such as thinking, problem-solving, writing and research;
- **Behavioral and problem-solving skills**: that allow students to manage new environments and new academic and social demands.

D.T. Conley (2008) points out that many of the students who arrive on campus suffer from a cultural shock and they feel lonely and isolated. Students should be acculturated to the university culture, know what campus life is like, how they should fit in and mingle with others, and how to accept others

Thomas and Quinn (2007) show the importance of using student mentors to provide information regarding majors, and everything related to university and their experience

Frick (2007) highlights the importance of:

- Offering programs that will engage the students, teachers, and parents:
choice of subjects studied at school, open days at universities,
workshops...
- College faculty interacting with high school faculty
- School teachers playing a great role in orienting students

- Reaching students through conjoint efforts with university recruiters or admission counsellors.

➤ **Family**

Parents and family members as key players:

According to A.F. Cabrera, S.M. La Nasa (2000), parental encouragement and support has two scopes, the first is motivational and the second is proactive

- a) **Support** is when parents do real acts with their children like saving accounts from early stages, visiting the campus, interacting with college students, attending students' activities and events, attending commencement...This kind of support would definitely influence students in continuing their education easily and dreaming big.
- b) **Encouragement**, the second feature, is when parents follow up on their children's worries and support them emotionally and socially in facing obstacles, believing in them, and encouraging them to continue their education to reach whatever they are dreaming about.

According to C. Nel, C. Troskie-de Bruin and E. Bitzer (2009), parents play a role in financial influence where they discuss that there is a difference between low-income families vs. high income families' impact on internet access, transportation means, residence facilities, financial aid solutions and opportunities.

According to S. Shim; B. Barber; N.A. Card; J.J. Xiao; J. Serido (2010), the central role of family in the young adults is **financial socialization**. They say that it is very important that parents give their children responsibility in financial behaviors and share with them their financial status.

Parents should be both direct teachers and role models in the financial development of their children. Children should be knowledgeable of their financial status, should be able to have the financial analytical skills in order to take decisions to enter the affordable universities or be able to decide on finding solutions such as taking loans to enter the university they want.

➤ **Career prospects:**

According to D. Kember & Hong, C. (2010), students who already have a certain career in their mind would easily make a choice of a major and a degree. However, sometimes students would prefer choosing careers that give them good salaries instead of doing what they love.

According to V. Germeijsa, K. Luyckxa, G. Notelaersb, L. Goossensa, K. Verschuerena (2012), the educational choices can be seen as a mini-cycle inside the big cycle of career development, so whenever a student chooses his/her major, then this can be considered as the very first plan done and achieved in one's career development.

➤ **University attributes:**

According to P. J. Bennett; S. D. Geringer; J. Taylor (2015), when students become motivated to continue their higher education, it is then when they begin to look for university characteristics that are important to them in their choice of the university to attend. For example, they start checking the:

- Tuition costs
- Quality of Faculty
- Admissions' requirements
- Financial aid opportunities
- Scholarships
- Location
- Reputation
- Campus size
- Accreditation status

➤ **Internet resources:**

According to Pooch (2006), during the past several years students have been using the internet to find out information about universities

Martin (2006), says that some students use the university website as the primary source of information to know more about universities

Christiansen (2003) looks at how internet is influencing the way students searched for universities and found that faculty web pages had the most impact, virtual tours were important as well as social networking sites.

R.B. Kimberli (2013) states some internet-based resources that high school students use while searching for universities such as:

- University and Faculty web pages
- Virtual tours
- Social networking sites
- Ranking websites

➤ **Socio-demographic features**

a) **Gender:**

Candela (2008) shows that the reasons for women to choose “female” degrees are their talents and interests in the degree’s subjects and helping others, while the reasons for men to choose for “male” degrees are factors such as high wages, job opportunities and professionalism.

According to A.L. Mullen (2014), most women choose their majors based on their academic interests and their enjoyment and the passion they got for a field or major while men choose majors based on the status of academic departments and on the kinds of jobs that would allow them to live a wealthy life.

According to P.D. Chen; P. A. Simpson (2015), males are twice as likely as females to choose a STEM major (science, technology, engineering, and mathematics).

b) Community:

According to A. Bergerson, A. Heiselt, and S. Aiken-Wisniewski (2013), the community in which students live influences their decision in choosing the university they want to attend and the degree they need to earn. They give examples about people who grew up in rural towns where education for them is not a priority, unlike urban places where students discuss which university to attend, and not if they should attend a university or not.

People in rural communities think about women for example, who need to get married at some point in life and take care of their house and family, therefore do not need to continue their education.

c) Education of parents and family members:

According to D. Kember and C. Hong (2010), **family impacts were two types:**

- i. The first is from educated family members, when parents and/or siblings are graduates, usually the younger ones follow the same path.
- ii. The second type of impact is from non-educated members in the family, who motivate the students to attend university as they feel obliged to promote the status of their family. Or in other societies it can be that non-educated parents would not be able to motivate and give the needed support to their children to continue their education and their children will not be encouraged to enter college and get their degrees.

THEORETICAL MODEL OF MY STUDY

Thus, my literature emphasized the factors that affect the decision-making processes of High School students with regards to choosing their major and university and make them satisfied with their choices.

These factors, i.e. my “independent variables” (the school, the family, the career prospects, the university attributes and the internet resources), I explained, were sources of information; they provided needed information to students regarding majors, universities, career options and development, and finding solutions to financial problems.

Also I referred to researchers who observed that information characteristics influencing the students’ information satisfaction is crucial in the satisfaction of students with their choices.

For example, Li, So, Fung, Lui, Lo, and Lau (2011) explain that information satisfaction creation could most likely be a major consequence of a purchase behavior, and that customers perceived different levels of satisfaction with various types of information that was sought and provided by different sources, and students' satisfaction with the information acquired has the capacity to influence the choice made, hence choice satisfaction. Chan and Chan (2004) concur with this idea that the satisfaction with information acquired will in turn enhance students' choice satisfaction. And Halstead, Hartman and Schmidt (1994) state clearly that students' expectations and satisfaction are shaped by the information acquired through various sources. As to Eagle and Brennan (2007), they found in their study that although information characteristics have no direct impact on choice satisfaction, however, the indirect effect of information characteristics onto choice satisfaction through information satisfaction is very sizeable (95% confidence interval: 0.534, 0.802)

Thus, my study became an investigation of the relationship between information characteristics (the independent variables being the sources of information), information satisfaction (measured in the survey questionnaire) and students' choice satisfaction.

Summary of the Model of my Study:



CHAPTER THREE

RESEARCH FRAMEWORK AND METHODOLOGY

DEPENDENT AND INDEPENDENT VARIABLES:

INDEPENDENT VARIABLES:

1. School students' preparation for university readiness
2. Family impact on students' decision for university and major
3. Career prospects
4. University attributes
5. Internet resources

DEPENDENT VARIABLES:

1. Students are satisfied with their choice of university
2. Students are satisfied with their choice of major

A. RESEARCH QUESTIONS:

Based on the previous literature review, below are the **research questions**:

1. What independent factors have impact on student's satisfaction with their choice of major
2. What independent factors have impact on student's satisfaction with their choice of university
3. Is there a difference in students' satisfaction with their choice of major according to socio-demographic characteristics of the students, i.e. students' gender, parent's level of education, students' community
4. Is there a difference in students' satisfaction with their choice of university according to socio-demographic characteristics of the students, i.e. students' gender, parent's level of education, students' community

B. HYPOTHESES:

1. The factors identified as independent variables affect student's satisfaction with their choice of major
2. The factors identified as independent variables affect student's satisfaction with their choice of university
3. There is a difference in students' satisfaction with their choice of major according to students' different socio-demographic characteristics

4. There is a difference in students' satisfaction with their choice of university according to students' different socio-demographic characteristics

C. APPROACH AND METHODS

The instrument used in this study is a survey questionnaire composed of 23 questions developed by the researcher based on related literature. The questionnaire has been tested through a pilot study to a random sample of 10 participants to check the clarity of the questions.

The questionnaire proved to be clear and easily understood by the sample.

Respondents have to first answer the questionnaire which will be measured based on a **five-point Likert type scale** ranging from “Strongly Disagree” to “Strongly Agree” as follows:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Respondents will choose the best answer that best shows their level of agreement and applicability of the questions to their situation.

The students to whom the questionnaires was distributed were selected from both public and private universities all over Lebanon. The universities are: Lebanese University, AUB, NDU, USEK, USJ, AUL, LIU, and Haigazian University. Around 100 questionnaire was distributed to each university except for the Lebanese University where the questionnaires were distributed and collected by hand to 50 students.

Then, students identified their gender, parents’ level of education, and community they are living in.

The sample size included around 400 respondents.

The hypotheses is tested using Regression Analysis and Factor Analysis, and the answers are analyzed using the Statistical Package for the Social Sciences (SPSS). Factor Analysis is used to identify the relationships among the variables and to understand the group of the variables used in the survey. Regression Analysis is used to identify which among the independent variables do affect the dependent variables. Moreover, Descriptive Statistics will be used.

QUESTIONNAIRE

This Questionnaire is to help me assess the factors that influence the students' satisfaction of their choice of university and major.

Please Read the below statements carefully and specify your degree of agreement or disagreement with them.

Nb.	Please Specify how each of the below statements relate to your own experience of choosing your university and major	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My school worked with universities for academic guidance					
2	My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me					
3	My school grades limited my options					
4	At my school, I was introduced to the various university cultures: open doors, campus visits...					
5	My parents were not involved in my school-university related activities: campus visits, studies, activities...					
6	My parents were emotionally supportive to me: encourage, believe in me, worry with me					
7	My parents guided me in solving my financial problems					
8	I am fortunate with my family financial resources					
9	I had a certain career in mind					

10	I chose my major based on salary expectations					
11	The major I chose provide better career development in the future					
12	I was concerned with the university's accreditation status					
13	The university's financial aspects (tuition, financial aid/scholarships) played a main role in my decision					
14	Convenient admissions requirements were a determinant factor for my choice such as entrance exams, SAT scores...					
15	The university's location was important for my choice					
16	Ranking websites for universities were insightful for my choice					
17	University's social networking pages were helpful for my choice					
18	University's websites were important in making my decisions					
19	I am pleased with my choice of major					
20	I am pleased with my choice of university					

25. My gender:

☐Male ☐Female

26. My parent's level of education:

☐No high school ☐High school ☐University ☐Higher studies

27. My community:

☐Urban ☐Rural

Sample size

Since multiple regression analysis was to be used for testing the hypothesis that the factors identified as independent variables affect student's satisfaction with their choice of major and/or satisfaction with their choice of university and that there is a difference in students' satisfaction with their choice of major according to students' different socio-demographic characteristics (age, parent's level of education and community) and/or satisfaction with their choice of university according to students' different socio-demographic characteristics, the number of observations to each independent variable should not fall below five to avoid the risk of fitting, i.e. making the results specific to the sample, thus lacking generalizability (Bartlett, Kotrlik, and Higgins, 2001).

Moreover, since factor analysis was to be used to detect the structure of variables, a researcher cannot factor analyze a sample of fewer than 50 observations and preferably the sample size should be 100 or larger to provide an adequate basis for the calculation of the correlations among variables.

Therefore 230 was defined to be the appropriate sample size for carrying out both multiple regression and factor analysis. However, to have more accurate results the sample size is increased to 397.

Sample selection

The sample was chosen from different universities (private and public in all regions in Lebanon).

Convenient sampling was used for the sample selection.

Survey Administration

The survey administration period was one week during which the questionnaires were sent through emails and Facebook messages in the form of survey monkey link and at the same time a small number of questionnaires were distributed to some students by hand at Haigazian University.

Ethical Considerations

During the administrations of the survey, certain ethical issues were taken into consideration. Among these were the respondents' right to anonymity and the right to confidentiality of shared information. As addressed in the face sheet of the survey questionnaire, the respondent was not required to disclose any personal information, to identify themselves or their university. Moreover, the data collected from the survey was promised to remain strictly confidential and to be reported in the thesis anonymously.

CHAPTER FOUR

STATISTICAL ANALYSES

4.1 DESCRIPTIVE STATISTICS

To facilitate the display and interpretation of data, descriptive statistics were computed from the responses obtained.

Gender	N
Male	135
Female	261
Total	396

As seen from the table above around 34% of the students were males and 66% of the students were females.

Community	N
Urban	289
Rural	105
Total	394

As seen from the table above around 73% of the students were coming from urban communities and 27% of the students were coming from rural areas.

Parent's level of Education	N
No High School	49
High School	142
University	160
Higher Studies	46
Total	397

Around 12% had parents with no high school level of education, around 35% had parents with high school level of education, around 40% had parents with university level of education and only 11.5% had parents with higher studies level of education.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
My school worked with universities for academic guidance	397	1	5	3.37	1.097
My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me	397	1	5	3.81	.984
My school grades limited my options	397	1	5	2.64	1.161
At my school, I was introduced to the various university cultures: open doors, campus visits..	397	1	5	3.26	1.211
My parents were not involved in my school-university related activities: campus visits, studies, activities...	397	1	5	3.46	1.099
My parents were emotionally supportive to me: encourage, believe in me, worry with me	397	1	5	4.19	.898
My parents guided me in solving my financial problems	397	1	5	4.12	.986
I am fortunate with my family financial resources	395	1	5	3.74	1.011
I had a certain career in mind	397	1	5	3.66	1.053
I chose my major based on salary expectations	397	1	5	2.70	1.109
The major I chose provide better career development in the future	397	1	5	3.41	1.429
I was concerned with the university's accreditation status	396	1	5	3.52	1.128
The university's financial aspects (tuition, financial aid/scholarships) played a main role in my decision	397	1	5	3.45	1.227
Convenient admissions requirements were a determinant factor for my choice such as entrance exams, SAT scores..	397	1	5	3.39	1.112
The university's location was important for my choice	397	1	5	3.53	1.097
Ranking websites for universities were insightful for my choice	397	1	5	3.08	1.090
University's social networking pages were helpful for my choice	397	1	5	2.83	1.070
University's websites were important in making my decisions	397	1	5	2.85	1.038
I am pleased with my choice of major	397	1	5	3.87	1.042
I am pleased with my choice of university	397	1	5	3.95	1.013
Valid N (listwise)	394				

Among the independent and dependent variables, “My parents were emotionally supportive to me: encourage, believe in me, worry with me” has the highest score (4.19) with the lowest standard deviation (0.898).

The mean scores below “3” show that the variable bend towards disagreeing. The mean scores above “3” show that the variable bend toward agreeing.

4.2 RELIABILITY TEST

Cronbach's alpha, also known as the coefficient of reliability, was used to estimate the internal consistency of the scale since it is most commonly used when we have multiple Likert questions in a questionnaire that form a scale and we wish to determine if the scale is reliable. Cronbach's alpha measures the extent to which a set of items are related to each other. Hence, Cronbach's alpha increases as the inter-correlations among the items increase. The generally agreed upon lower limit for Cronbach's alpha is 0.70.

The Cronbach's alphas for all the variables of this study were computed using SPSS, Version 20. First, the reliability of all the independent variables was tested.

Case Processing Summary		
	N	%
Valid	394	99.2
Cases Excluded ^a	3	.8
Total	397	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.702	20

The Cronbach's alpha is 0.702 which is greater than 0.7. Therefore, we will continue with our study and research.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
My school worked with universities for academic guidance	65.48	50.031	.333	.299	.671
My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me	65.04	52.212	.230	.143	.686
My school grades limited my options	66.20	55.913	-.048	.113	.725
At my school, I was introduced to the various university cultures: open doors, campus visits..	65.59	49.545	.317	.303	.672
My parents were not involved in my school-university related activities: campus visits, studies, activities...	65.38	57.875	-.159	.090	.737
My parents were emotionally supportive to me: encourage, believe in me, worry with me	64.66	52.117	.270	.207	.682
My parents guided me in solving my financial problems	64.73	52.635	.197	.240	.690
I am fortunate with my family financial resources	65.11	53.760	.111	.169	.701
I had a certain career in mind	65.19	52.497	.184	.071	.692
I chose my major based on salary expectations	66.14	54.114	.067	.105	.708
The major I chose provide better career development in the future	65.44	50.542	.188	.155	.694
I was concerned with the university's accreditation status	65.32	52.295	.176	.089	.693
The university's financial aspects (tuition, financial aid/scholarships) played a main role in my decision	65.40	51.588	.189	.177	.692
Convenient admissions requirements were a determinant factor for my choice such as entrance exams, SAT scores..	65.46	50.097	.323	.193	.672
The university's location was important for my choice	65.32	51.171	.258	.153	.682
Ranking websites for universities were insightful for my choice	65.77	50.009	.339	.260	.671
University's social networking pages were helpful for my choice	66.02	50.145	.339	.389	.671
University's websites were important in making my decisions	66.00	49.817	.378	.374	.666
I am pleased with my choice of major	64.98	51.107	.284	.386	.679
I am pleased with my choice of university	64.90	52.493	.198	.308	.690

Since all the items of corrected item-total correlation of Internet Resources are above 0.30 and since removal of any item results in a lower Cronbach's alpha, none of the Internet resources items are removed from the study.

4.3 FACTOR ANALYSES

Hair et al. (2006) stated, "Factor analysis is an interdependence technique whose primary purpose is to define the underlying structure among the variables in the analysis". Factor analysis provides the tools for analyzing the structure of the interrelationships (correlation) among a large number of variables by defining sets of variables that are highly correlated, known as factors. In other words, it identifies the broader evaluative dimensions, which are composites of specific items that are highly correlated.

In this study, exploratory factor analysis was used to test construct validity, that is, the extent to which a measure or set of measures correctly represents the concept of the study. To determine the appropriateness of factor analysis the entire correlation matrix was examined using the Barlett Test of Sphericity and Kaiser-Myer-Olkin Measure of Sampling Adequacy (KMO MSA).

The Barlett Test of Sphericity tests the overall significance of all correlations within a correlation matrix. It examines the hypothesis that the variables are uncorrelated in the population, that is, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r=1$) but has no correlation with the other variables ($r=0$).

If the Barlett's Test of Sphericity is significant, that is, less than alpha (0.05) the null hypothesis (the correlation matrix is an identity matrix) will be rejected and factor analysis can be conducted on the study.

Kaiser-Myer-Olkin Measure of Sampling Adequacy (KMO MSA) is used to quantify the degree of inter-correlations among the variables. The KMO MSA ranges from 0 to 1 reaching 1 when each variable is perfectly predicted without error by the other variables. The researchers should always have a measure of sampling adequacy above 0.50 before proceeding with the factor analysis.

Communality is the total amount of variance an original variable shares with all other variables included in the analysis. It is the estimate of the variable's shared (common) variance among the variables as represented by the derived factors. The size of the communality is a useful index for assessing how much variance in a particular variable is accounted for by the factor solution. Higher communality values indicate that a large amount of the variance in a variable has been extracted by the factor analysis. Small communalities show that a substantial portion of the variable's variance is not accounted for by the factors. The factor should explain at least half of each original variable's variance, so the communality for each variable should be 0.50 or higher.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.673
Bartlett's Test of Sphericity	Approx. Chi-Square	818.160
	df	153
	Sig.	.000

The KMO is 0.673 so it is greater than 0.5 so we can move to factor analysis and the Bartlett's Test of sphericity is 0.000 which is less than 0.05 so it is significant and we reject the null that

the variables are uncorrelated. Based on the tests' results it is satisfactory to proceed with the factor analysis.

Based on Anti-image Correlation, the MSA (Measures of Sampling Adequacy) for "my school grades limited my options" and "I chose my major based on salary expectations" is less than 0.5 and therefore this shows that there is a problem among the variable of the item and these two shall be removed.

So we do a factor analysis test again without the two variables "my school grades limited my options" and "I chose my major based on salary expectations" and the results are the following:

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.693
Bartlett's Test of Sphericity	Approx. Chi-Square	758.500
	df	120
	Sig.	.000

The KMO is 0.693 so it is greater than 0.5 so we can move to factor analysis and the Bartlett's Test of sphericity is 0.000 which is less than 0.05 so it is significant. Based on the tests' results it is satisfactory to proceed with the factor analysis.

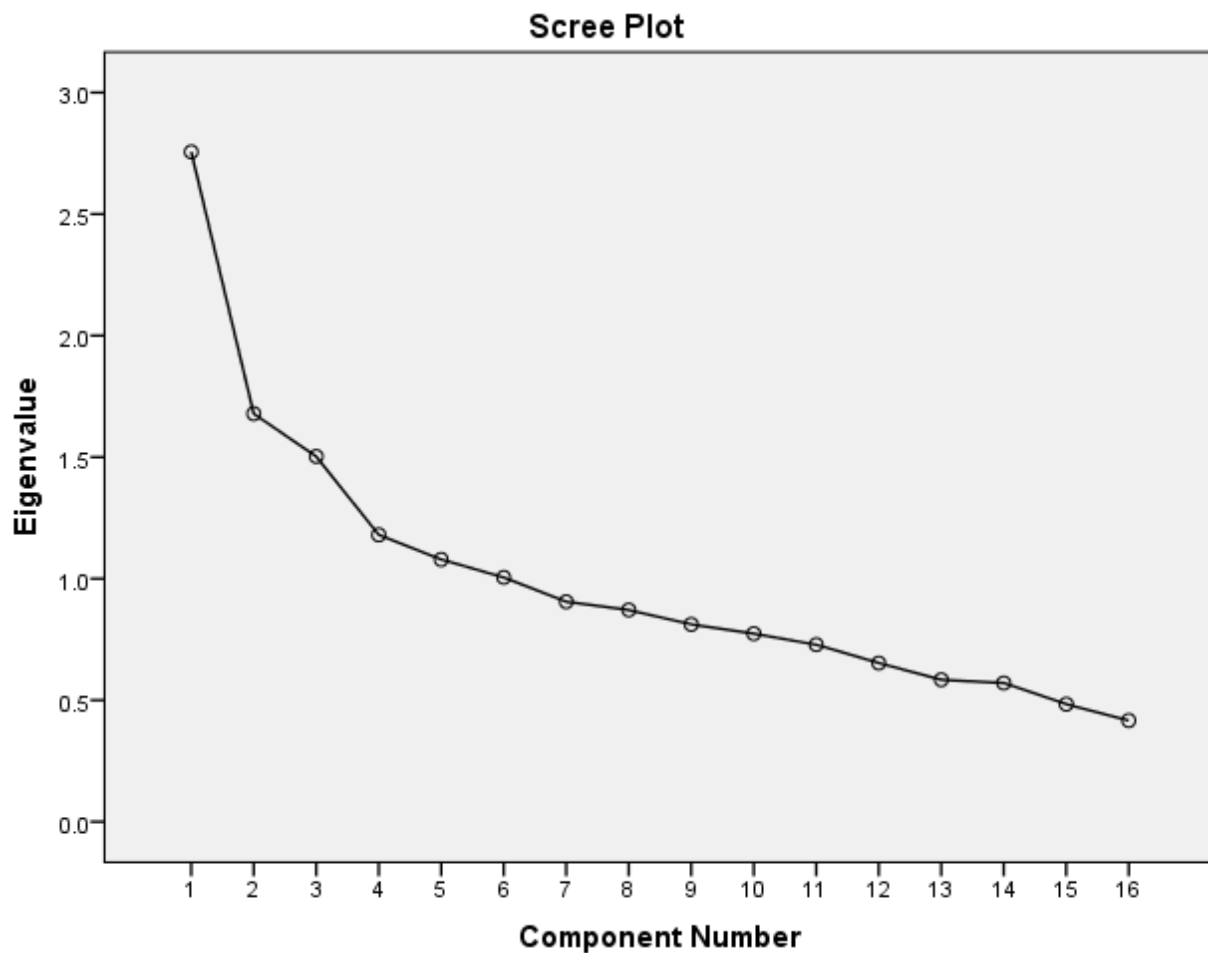
Based on Anti-image Correlation, the MSA (Measures of Sampling Adequacy) is above 0.5 for all variables and therefore we do not need to remove any variable anymore and shall proceed to study the Total Variance Explained.

**Total
Variance
Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.756	17.224	17.224	2.756	17.224	17.224	2.167	13.543	13.543
2	1.679	10.492	27.716	1.679	10.492	27.716	1.730	10.813	24.356
3	1.503	9.393	37.109	1.503	9.393	37.109	1.616	10.100	34.456
4	1.180	7.378	44.486	1.180	7.378	44.486	1.370	8.560	43.016
5	1.079	6.741	51.228	1.079	6.741	51.228	1.200	7.500	50.517
6	1.005	6.282	57.510	1.005	6.282	57.510	1.119	6.994	57.510
7	.905	5.658	63.168						
8	.871	5.445	68.613						
9	.812	5.075	73.688						
10	.774	4.837	78.525						
11	.728	4.552	83.077						
12	.653	4.081	87.158						
13	.584	3.651	90.808						
14	.571	3.568	94.376						
15	.484	3.022	97.398						
16	.416	2.602	100.000						

Extraction Method: Principal Component Analysis.

With reference to the above “Total Variance Explained” table, six factors are extracted accounting for 57.51% of the total variance.



The above Scree Plot shows as well that Eigenvalues above 1 are six factors.

The rotated component matrix makes the interpretation of the Factor Analysis easier showing the factor loadings of the variables on the extracted components. The factor loadings represent the correlation of each variable and the factor with higher loadings making the variable representative of the factor. Factor loadings interpret the role each variable plays in defining

each factor. Factor loadings of 0.50 and above are necessary for practical significance. The table below shows the six factor structure based on the rotated component matrix.

Rotated Component Matrix ^a						
	Component					
	1	2	3	4	5	6
My school worked with universities for academic guidance	.110	.814	.044	.031	.008	.057
My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me	.049	.597	.068	-.034	.103	-.194
At my school, I was introduced to the various university cultures: open doors, campus visits..	.095	.779	.031	.084	.073	.111
My parents were not involved in my school-university related activities: campus visits, studies, activities...	-.168	-.008	-.088	.021	-.019	.827
My parents were emotionally supportive to me: encourage, believe in me, worry with me	.072	-.001	.648	.184	.286	-.184
My parents guided me in solving my financial problems	-.070	.090	.783	.081	.025	-.023

I am fortunate with my family financial resources	.109	.060	.707	-.243	-.194	.052
I had a certain career in mind	.136	.018	.092	-.025	.730	.179
The major I chose provide better career development in the future	-.063	.215	-.050	.056	.642	-.219
I was concerned with the university's accreditation status	.054	.067	.120	.639	-.108	-.310
The university's financial aspects (tuition, financial aid/scholarships) played a main role in my decision	.122	-.002	-.092	.755	.103	.212
Convenient admissions requirements were a determinant factor for my choice such as entrance exams, SAT scores..	.429	.041	.050	.420	.072	.304
The university's location was important for my choice	.444	.113	.022	.255	-.262	-.095
Ranking websites for universities were insightful for my choice	.652	-.013	.166	.187	-.022	-.139
University's social networking pages were helpful for my choice	.798	.128	-.055	-.014	.048	.012
University's websites were important in making my decisions	.781	.100	-.031	-.027	.139	-.060

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Rotated Component Matrix	Component					
	1	2	3	4	5	6
My school worked with universities for academic guidance		0.814				
My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me		0.597				
At my school, I was introduced to the various university cultures: open doors, campus visits..		0.779				
My parents were not involved in my school-university related activities: campus visits, studies, activities...						0.827
My parents were emotionally supportive to me: encourage, believe in me, worry with me		0.648				
My parents guided me in solving my financial problems		0.783				
I am fortunate with my family financial resources		0.707				
I had a certain career in mind					0.73	
The major I chose provide better career development in the future					0.642	
I was concerned with the university's accreditation status				0.639		
The university's financial aspects (tuition, financial aid/scholarships) played a main role in my decision				0.755		
Ranking websites for universities were insightful for my choice	0.652					
University's social networking pages were helpful for my choice	0.798					
University's websites were important in making my decisions	0.781					

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Factor loadings less than 0.5 are not shown and variables are sorted by highest loading.

Component 1:

- Ranking websites for universities were insightful for my choice
- University's social networking pages were helpful for my choice
- University's websites were important in making my decisions

Validates the independent variable of "Internet resources"

Component 2:

- My school worked with universities for academic guidance
- My academic skills, reading, writing, researching and analyzing acquired at my school were useful to me
- At my school, I was introduced to the various university cultures: open doors, campus visits...

Validates the independent variable of “School students’ preparation for university readiness”

Component 3:

- My parents were emotionally supportive to me: encourage, believe in me, worry with me
- My parents guided me in solving my financial problems
- I am fortunate with my family financial resources

Validates the independent variable of “Family impact on students’ decision for university and major”

Component 4:

- I was concerned with the university’s accreditation status
- The university’s financial aspects (tuition, financial aid/scholarships) played a main role in my decision

Validates the independent variable of “University attributes”

Component 5:

- I had a certain career in mind
- The major I chose provide better career development in the future

Validates the independent variable of “Career prospects”

Component 6:

- My parents were not involved in my school-university related activities: campus visits, studies, activities...

It does not validate any variable because it showed alone.

4.4 MULTIPLE REGRESSION ANALYSES

Due to the large number of the independent variables, multiple regression with stepwise method was used to find the most parsimonious set of predictors that are most effective in predicting the dependent variable. Stepwise is the method of selecting variables for inclusion in the regression model that starts by selecting the best predictor of the dependent variable. The independent variable with the greatest contribution to the regression model is added first. Additional independent variables are selected in terms of the incremental explanatory power they can add to the regression model. Independent variables are added as long as their partial correlation coefficients are statistically significant. Independent variables may also be dropped if their predictive power drops to a non-significant level when another independent variable is added to the model.

Variables are added to the regression equation one at a time, using the statistical criterion of maximizing the R square of the included variables. When none of the possible addition can make a statistically significant improvement in R square, the analysis stops.

In stepwise multiple regression, the independent variables are entered according to their statistical contribution in explaining the variance in the dependent variable.

Since variables will not be added to the regression equation unless they make a statistically significant addition to the analysis, all of the independent variables selected for inclusion will have a statistically significant relationship with the dependent variable.

While multicollinearity for all variables can be examined, it is only a problem for the variables not included in the analysis. If a variable is included in the stepwise analysis, it will not have a collinear relationship.

The ANOVA table shows the goodness of fit of the model, that is, how significantly the regression model predicts the outcome variable.

The coefficients for the independent variable show how much the dependent variable changes when the independent variable changes by one unit.

All the independent variables regressed against “I am pleased with my choice of major”.

Model	Variables Entered	Variables Removed
1	The major I chose provide better career development in the future	.
2	My parents guided me in solving my financial problems	.
3	My school grades limited my options	.
4	I chose my major based on salary expectations	.
5	At my school, I was introduced to the various university cultures through open doors, campus visits..	.
6	I had a certain career in mind	.
7	My parents were emotionally supportive to me: encourage, believe in me, worry with me	.

Model Summary^h

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.334 ^a	.112	.109	.984
2	.375 ^b	.141	.136	.969
3	.405 ^c	.164	.157	.957
4	.423 ^d	.179	.171	.949
5	.440 ^e	.194	.184	.942
6	.452 ^f	.205	.192	.937
7	.462 ^g	.213	.199	.933

g. Predictors: (Constant), The major I chose provide better career development in the future, My parents guided me in solving my financial problems, My school grades limited my options, I chose my major based on salary expectations, At my school, I was introduced to the various university cultures: open doors, campus visits., I had a certain career in mind, My parents were emotionally supportive to me: encourage, believe in me, worry with me

h. Dependent Variable: I am pleased with my choice of major

In regression 1, 11.2% of the total variance in “I am pleased with my choice of major” which is the dependent factor is explained by “The major I chose provide better career development in the future”. “My parents guided me in solving my financial problems” is added leading to 14.1%. “My school grades limited my options” is added leading to 16.4%. “I chose my major based on salary expectations” is added leading to 17.9%. “At my school, I was introduced to the various university cultures through open doors, campus visits...” is added leading to 18.4%. “I had a certain career in mind” is added leading to 20.5%. “My parents were emotionally supportive to me: encourage, believe in me, worry with me...” is added leading to increase in the total variance to 21.3%.

Regression Model 7 includes the best subset of independent variable explaining 21.3% of the total variance in the dependent variable “students are satisfied with their choice of major”.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
7	Regression	91.180	7	13.026	14.966	.000 ^h
	Residual	335.957	386	.870		
	Total	427.137	393			

h. Predictors: (Constant), The major I chose provide better career development in the future, My parents guided me in solving my financial problems, My school grades limited my options, I chose my major based on salary expectations, At my school, I was introduced to the various university cultures: open doors, campus visits., I had a certain career in mind, My parents were emotionally supportive to me: encourage, believe in me, worry with me

The probability of the F statistic (14.966) for the regression model 7 is 0.000 which is less than 0.05 hence we accept the alternative hypothesis which is that those independent factors affect the students' satisfaction with their choice of major, that is the regression model 7 is statistically significant in predicting the dependent variable. The factors (independent variables) that significantly affect the dependent variable "I am pleased with my choice of major" are:

- The major I chose provide better career development in the future
- My parents guided me in solving my financial problems
- My school grades limited my options
- I chose my major based on salary expectations
- At my school, I was introduced to the various university cultures: open doors, campus visits..

- I had a certain career in mind
- My parents were emotionally supportive to me: encourage, believe in me, worry with me

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.107	.349		6.030	.000
The major I chose provide better career development in the future	.213	.034	.293	6.294	.000
My parents guided me in solving my financial problems	.121	.051	.114	2.352	.019
My school grades limited my options	-.109	.041	-.121	-2.636	.009
I chose my major based on salary expectations	-.127	.043	-.136	-2.956	.003
At my school, I was introduced to the various university cultures: open doors, campus visits..	.097	.040	.113	2.454	.015
I had a certain career in mind	.098	.045	.099	2.151	.032
My parents were emotionally supportive to me: encourage, believe in me, worry with me	.119	.057	.102	2.095	.037

a. Dependent Variable: I am pleased with my choice of major

We can represent the equation as:

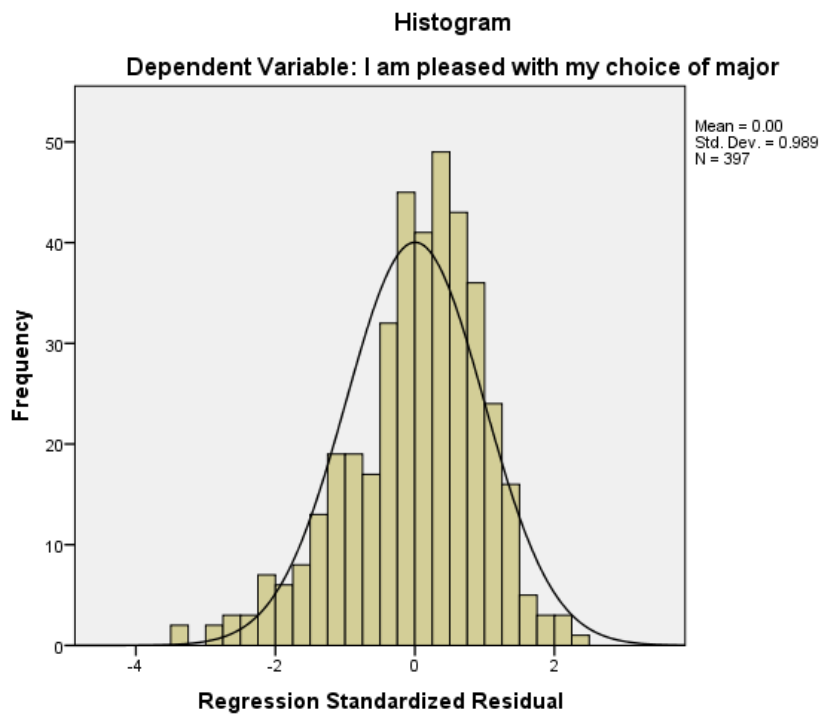
I am pleased with my choice of major = 2.107 + 0.213 (The major I chose provide better career development in the future) + 0.121 (My parents guided me in solving my financial problems) – 0.109 (My school grades limited my options) – 0.127 (I chose my major based on salary expectations) + 0.097 (At my school, I was introduced to the various university cultures: open

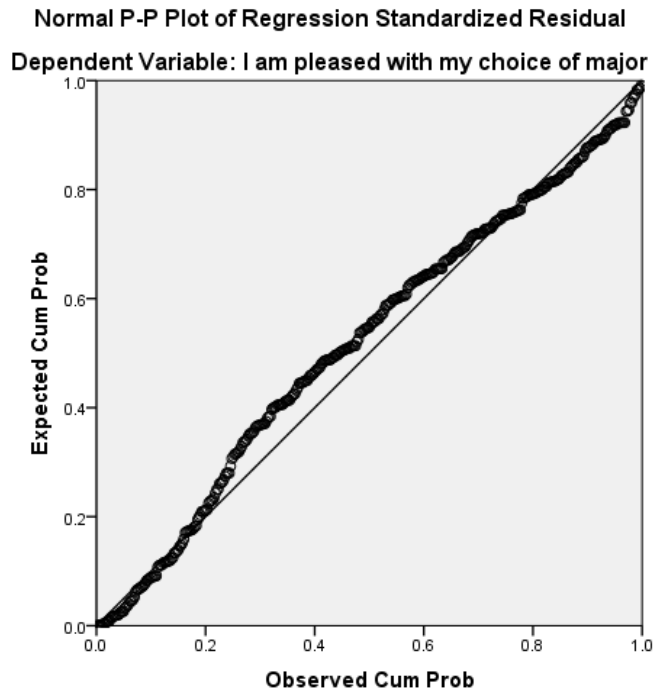
doors, campus visits...) + 0.98 (I had a certain career in mind) + 0.119 (My parents were emotionally supportive to me: encourage, believe in me, worry with me)

Since the significance of the t-values for all the variables are lower than 0.05, we conclude that there is statistically linear relationship between the independent variables and the dependent variable. However, to know if the relationship is positive or negative, we need to look at the sign of the “B” under “Unstandardized Coefficients”.

- “The major I chose provide better career development in the future” has a positive impact = 0.213 which shows a positive linear relationship with “I am pleased with my choice of major”.
- “My parents guided me in solving my financial problems” has a positive impact = 0.121 which shows a positive linear relationship with “I am pleased with my choice of major”.
- “My school grades limited my options” has a negative impact = - 0.109 which shows a negative linear relationship with “I am pleased with my choice of major”.
- “I chose my major based on salary expectations” has a negative impact = - 0.127 which shows a negative linear relationship with “I am pleased with my choice of major”.
- “At my school, I was introduced to the various university cultures: open doors, campus visits...” has a positive impact = 0.97 which shows a positive linear relationship with “I am pleased with my choice of major”.

- “I had a certain career in mind” has a positive impact = 0.98 which shows a positive linear relationship with “I am pleased with my choice of major”.
- “My parents were emotionally supportive to me: encourage, believe in me, worry with me...” has a positive impact = 0.119 which shows a positive linear relationship with “I am pleased with my choice of major”.





The histogram shows a bell-shaped curve which is a normal distribution and the normal plot of the residuals shows the points close to the diagonal line. They both show that the dependent variable “I am pleased with my choice of major” is valid.

All the independent variables regressed against “I am pleased with my choice of university”.

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed
1	My parents guided me in solving my financial problems	.
2	The major I chose provide better career development in the future	.
3	My school grades limited my options	.
4	University's social networking pages were helpful for my choice	.

a. Dependent Variable: I am pleased with my choice of university

Model Summary^e

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.227 ^a	.051	.049	.989
2	.282 ^b	.079	.075	.975
3	.318 ^c	.101	.094	.965
4	.334 ^d	.111	.102	.961

d. Predictors: (Constant), My parents guided me in solving my financial problems, The major I chose provide better career development in the future, My school grades limited my options, University's social networking pages were helpful for my choice

e. Dependent Variable: I am pleased with my choice of university

In regression 1, 5.1% of the total variance in “I am pleased with my choice of major” which is the dependent factor is explained by “My parents guided me in solving my financial problems”.

“The major I chose provide better career development in the future” is added leading to 7.9%.

“My school grades limited my options” is added leading to 10.1%. “University’s social

networking pages were helpful for my choice” is added leading to increase in the total variance to 11.1%.

Regression Model 4 includes the best subset of independent variable explaining 11.1% of the total variance in the dependent variable “students are satisfied with their choice of major”.

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
4 Regression	45.045	4	11.261	12.201	.000 ^e
Residual	359.039	389	.923		
Total	404.084	393			

e. Predictors: (Constant), My parents guided me in solving my financial problems, The major I chose provide better career development in the future, My school grades limited my options, University's social networking pages were helpful for my choice

The probability of the F statistic (12.201) for the regression model 4 is 0.000 which is less than 0.05 hence we accept the alternative hypothesis which is that those independent factors affect the students' satisfaction with their choice of university, that is the regression model 4 is statistically significant in predicting the dependent variable. The factors (independent variables) that significantly affect the dependent variable “I am pleased with my choice of university” are:

- The major I chose provide better career development in the future
- My parents guided me in solving my financial problems
- My school grades limited my options
- University's social networking pages were helpful for my choice

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
4					
(Constant)	2.677	.297		9.013	.000
My parents guided me in solving my financial problems	.231	.049	.225	4.702	.000
The major I chose provide better career development in the future	.111	.034	.157	3.278	.001
My school grades limited my options	-.125	.042	-.143	-2.990	.003
University's social networking pages were helpful for my choice	.098	.045	.103	2.158	.032

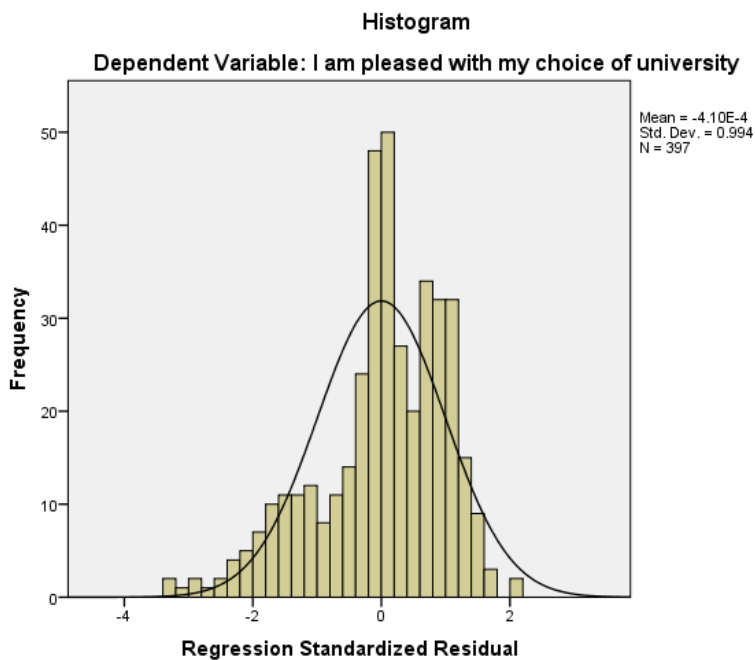
a. Dependent Variable: I am pleased with my choice of university

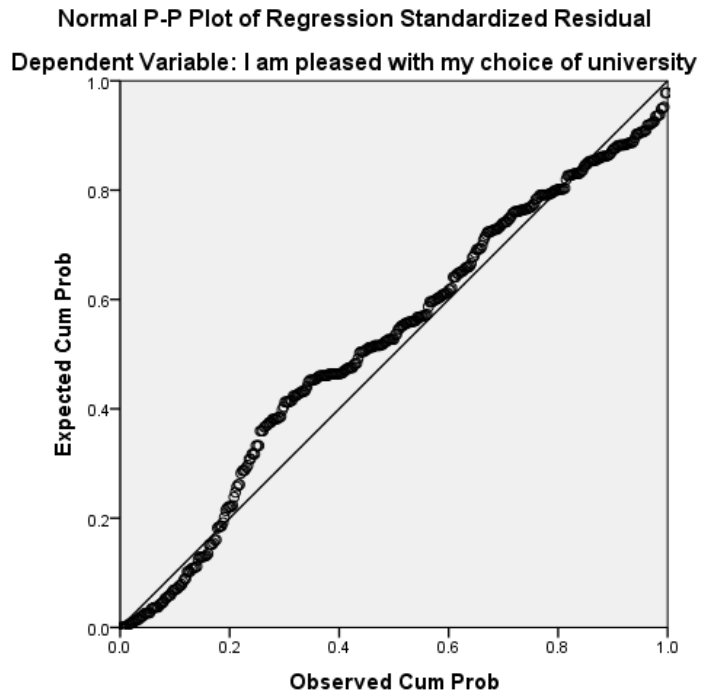
We can represent the equation as:

I am pleased with my choice of university = 2.677 + 0.231 (My parents guided me in solving my financial problems) + 0.111 (The major I chose provide better career development in the future) – 0.125 (My school grades limited my options) + 0.098 (University's social networking pages were helpful for my choice)

Since the significance of the t-values for all the variables are lower than 0.05, we conclude that there is statistically linear relationship between the independent variables and the dependent variable. However, to know if the relationship is positive or negative, we need to look at the sign of the “B” under “Unstandardized Coefficients”.

- “My parents guided me in solving my financial problems” has a positive impact = 0.231 which shows a positive linear relationship with “I am pleased with my choice of major”.
- “The major I chose provide better career development in the future” has a positive impact = 0.111 which shows a positive linear relationship with “I am pleased with my choice of major”.
- “My school grades limited my options” has a negative impact = -0.125 which shows a negative linear relationship with “I am pleased with my choice of major”.
- “University’s social networking pages were helpful for my choice” has a positive impact = 0.098 which shows a positive linear relationship with “I am pleased with my choice of major”.





The histogram shows a bell-shaped curve which is a normal distribution and the normal plot of the residuals shows the points close to the diagonal line. They both show that the dependent variable “I am pleased with my choice of university” is valid.

4.5 INDEPENDENT-SAMPLES T TEST

The independent-samples t-test, also called the student's t-test, is an inferential statistical test that determines whether there is a statistically significant difference between the means of two independent groups. The assumptions used to run the student's t-test are the assumption of the normality of the dependent variable and the assumption of homogeneity (equality) of variance. The assumption of equal variances is tested by Levene's Test for Equality of Variances. If the significance for Levene's test is greater than 0.05 then the two group variances can be treated as equal and the test is used to rest the equality of means.

If the significance for Levene's test is equal or below 0.05, the assumption of homogeneity of the variances is rejected and the "Equal variances Not Assumed" is used to test the equality of means. In both cases, the basic criterion for statistical significant difference between the two population means is a "2-tailed significance" less than 0.05, where we reject the null hypothesis that the two population means are equal and accept the alternative hypothesis that two population means are not equal.

First, the independent t-test was performed to see whether gender differ when students choose their university and major.

Group Statistics					
	My Gender	N	Mean	Std. Deviation	Std. Error Mean
I am pleased with my choice of major	Male	135	3.92	1.086	.093
	Female	261	3.85	1.019	.063
I am pleased with my choice of university	Male	135	4.01	.914	.079
	Female	261	3.92	1.062	.066

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
I am pleased with my choice of major	Equal variances assumed	.264	.608	.650	394	.516
	Equal variances not assumed			.636	256.338	.525
I am pleased with my choice of university	Equal variances assumed	4.279	.039	.886	394	.376
	Equal variances not assumed			.929	308.866	.353

The Levene's test for "I am pleased with my choice of major" is 0.608 which is greater than 0.05 hence equal variances assumed. The t statistics is 0.516 which is greater than 0.05 hence we reject the hypothesis that there is a difference in students' satisfaction with their choice of major according to students' gender. **Therefore, there is no difference between a male and female in being satisfied with their choice of major.**

The Levene's test for "I am pleased with my choice of university" is 0.039 which is less than 0.05 hence equal variances not assumed. The t statistics is 0.353 which is greater than 0.05 hence we reject the hypothesis that there is a difference in students' satisfaction with their choice of university according to students' gender. **Therefore, there is no difference between a male and female in being satisfied with their choice of university.**

Second, the independent t-test was performed to see whether student's community differ when students choose their university and major.

Group Statistics

	My community:	N	Mean	Std. Deviation	Std. Error Mean
I am pleased with my choice of major	Urban	289	3.91	1.037	.061
	Rural	105	3.77	1.058	.103
I am pleased with my choice of university	Urban	289	3.97	1.012	.060
	Rural	105	3.91	1.030	.100

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
I am pleased with my choice of major	Equal variances assumed	1.308	.253	1.167	392	.244
	Equal variances not assumed			1.155	181.216	.249
I am pleased with my choice of university	Equal variances assumed	.348	.556	.471	392	.638
	Equal variances not assumed			.467	181.688	.641

The Levene's test for "I am pleased with my choice of major" is 0.253 which is greater than 0.05 hence equal variances assumed. The t statistics is 0.244 which is greater than 0.05 hence we reject the hypothesis that there is a difference in students' satisfaction with their choice of major according to students' community. **Therefore, there is no difference between students living in rural areas and students living in urban areas in their satisfaction with choosing their major.**

The Levene's test for "I am pleased with my choice of university" is 0.556 which is greater than 0.05 hence equal variances assumed. The t statistics is 0.638 which is greater than 0.05 hence we reject the hypothesis that there is a difference in students' satisfaction with their choice of

university according to students' community. **Therefore, there is no difference between students living in rural areas and students living in urban areas in their satisfaction with choosing their university.**

4.6 ONE-WAY ANOVA

The One-Way Analysis of Variance (ANOVA) is used to determine whether there are any significant differences between the means of at least three independent groups.

In this study, One-Way ANOVA was performed to test whether there are statistically significant differences in the students' satisfaction with their choice of major and students' satisfaction with their choice of university among the four level of parents' education.

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
I am pleased with my choice of major	1.270	3	393	.284
I am pleased with my choice of university	1.949	3	393	.121

The Levene's statistics is 0.284 and 0.121 which is greater than 0.05 hence there is no violation of the assumption of homogeneity of variances and ANOVA test is used.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I am pleased with my choice of major	Between Groups	12.927	3	4.309	4.063	.007
	Within Groups	416.776	393	1.060		
	Total	429.703	396			
I am pleased with my choice of university	Between Groups	14.835	3	4.945	4.967	.002
	Within Groups	391.255	393	.996		
	Total	406.091	396			

The ratio of F statistics of "I am pleased with my choice of major" is 0.007 which is less than 0.05 hence we reject the null hypothesis and state that there is a difference in being pleased with the choice of major between different levels of parents' education.

The ratio of F statistics of “I am pleased with my choice of university” is 0.002 which is less than 0.05 hence we reject the null hypothesis and state that there is a difference in being pleased with the choice of university between different levels of parents’ education.

Multiple Comparisons

LSD

Dependent Variable	(I) My parent's level of education:	(J) My parent's level of education:	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
I am pleased with my choice of major	No High School	High School	-.067	.171	.696	-.40	.27
		University	-.206	.168	.221	-.54	.12
		Higher Studies	-.632*	.211	.003	-1.05	-.22
	High School	No High School	.067	.171	.696	-.27	.40
		University	-.139	.119	.241	-.37	.09
		Higher Studies	-.566*	.175	.001	-.91	-.22
	University	No High School	.206	.168	.221	-.12	.54
		High School	.139	.119	.241	-.09	.37
		Higher Studies	-.426*	.172	.014	-.76	-.09
	Higher Studies	No High School	.632*	.211	.003	.22	1.05
		High School	.566*	.175	.001	.22	.91
		University	.426*	.172	.014	.09	.76
I am pleased with my choice of university	No High School	High School	-.178	.165	.282	-.50	.15
		University	-.384*	.163	.019	-.70	-.06
		Higher Studies	-.695*	.205	.001	-1.10	-.29
	High School	No High School	.178	.165	.282	-.15	.50
		University	-.207	.115	.073	-.43	.02
		Higher Studies	-.517*	.169	.002	-.85	-.18
	University	No High School	.384*	.163	.019	.06	.70
		High School	.207	.115	.073	-.02	.43
		Higher Studies	-.310	.167	.064	-.64	.02
	Higher Studies	No High School	.695*	.205	.001	.29	1.10
		High School	.517*	.169	.002	.18	.85
		University	.310	.167	.064	-.02	.64

*. The mean difference is significant at the 0.05 level.

In “I am pleased with my choice of major”, we will compare each level of education to the three other levels.

There is a difference showing between parents with No High school level of education and parents with Higher studies shown as $-.632^*$ under the mean difference with a significant level 0.003 less than 0.05 and **therefore we reject the null and show that there is a difference**

- There is a difference showing between parents with High school level of education and parents with Higher studies shown as $-.566^*$ with a significant level 0.001 less than 0.05 and **therefore we reject the null and show that there is a difference**
- There is a difference showing between parents with University level of education and parents with Higher studies shown as $-.426^*$ with a significant level 0.014 less than 0.05 and **therefore we reject the null and show that there is a difference**
- There is a difference showing between parents with Higher studies level of education and parents with
 - NO High school shown as $.632^*$
 - High School shown as $.566^*$
 - University shown as $.426^*$

We can conclude that all parents with higher studies are different from those parents with lower level of education (No High School, High School, and University) in their affecting the student’s choice of major and having students being pleased in their choice of major. While

parents with No High School, High School, and University level of education do not show any difference between them in affecting the students' choice of major and being pleased.

In "I am pleased with my choice of university", we will compare each level of education to the three other levels.

- There is a difference showing between parents with No High school level of education and parents with
 - Higher studies shown as $-.517^*$ with a significant level 0.019 less than 0.05 and **therefore we reject the null and show that there is a difference**
 - University shown as $-.384^*$ with a significant level 0.001 less than 0.05 and therefore **we reject the null and show that there is a difference**
- There is a difference showing between parents with High school level of education and parents with Higher studies shown as $-.517^*$ with a significant level 0.002 less than 0.05 and **therefore we reject the null and show that there is a difference**
- There is a difference showing between parents with University level of education and parents with No High School shown as $.384^*$ with a significant level 0.019 less than 0.05 and **therefore we reject the null and show that there is a difference**
- There is a difference showing between parents with Higher studies level of education and parents with
 - No High School shown as $.695^*$ with a significant level 0.001 less than 0.05 and **therefore we reject the null and show that there is a difference**

- High School shown as .517* with a significant level 0.002 less than 0.05 and therefore we reject the null and show that there is a difference

We can conclude that all parents with higher studies are different from those parents with lower level of education (No High School, and High School) in their affecting the student's choice of major and having students being pleased in their choice of major. While parents with No High School are different from those parents with higher studies and university level of education but not different from parents with high school in affecting the students' choice of university and being pleased with their choice of university.

CHAPTER FIVE

SUMMARY OF FINDINGS AND RECOMMENDATIONS

A. FINDINGS

The first set of hypotheses tested to know whether the independent variables affect the dependent variable i.e. students' satisfaction with their choice of major.

- School: students' preparation for university readiness

Finding 1:

"My school grades limited my options" has a negative impact = - 0.109

The more the students feel that their school grades limited their options, the less they feel they are pleased with their choice of major and university.

Recommendation:

School grades should be a serious target for the school, parents, and students who should aim for the best possible school grades. Teachers and parents should help students to reach this goal through learning strategies and close monitoring, and helping students understand that grades affect their acceptance in majors.

Finding 2:

"At my school, I was introduced to the various university cultures through open doors, campus visits..." has a positive impact = 0.97

The more the students get introduced to different university cultures through open doors and campus visits since school days, the more they will be able to choose an appropriate major and will be pleased with their choice of major.

Recommendation:

Schools should play a huge part in introducing students to the university culture, they should send students to visit different university campuses, should participate in different university open houses, and should attend presentations for universities' orientations so students would be familiar with the different universities and will gain knowledge about them as much as possible in order to take decisions and not to have culture shocks and not feel isolated.

- Family impact on students' decision for university and major

Finding 3:

"My parents guided me in solving my financial problems" has a positive impact = 0.121

The more the parents guide their children in solving any financial problem, the more the students will be able to choose a major disregarding any financial difficulty and will be pleased with their choice of major.

Recommendation:

Parents should provide financial socialization to their children, and teach them how to be responsible in financial behaviors. Parents should be both direct teachers and role models in the financial development of their children so they would be able to have the financial

analytical skills in order to take decisions to enter an affordable university for example or to be able to find solutions such as taking loans to enter the university they want.

Finding 4:

“My parents were emotionally supportive to me: encourage, believe in me, and worry with me”
has a positive impact = 0.119

The more the parents are emotionally supportive to their children: encourage, believe in them, worry with them, the more students will be positive and pleased about the major and university they will choose and they will feel they did the appropriate choice.

Recommendation:

Parents should be oriented through schools, NGOs, advertisements and other media to know how important it is to be emotionally supportive to their children because this would influence positively their children’s choice of major and university and other important decisions in life and would give them high self confidence and trust in what they are doing.

- Career prospects of students

Finding 5:

“I had a certain career in mind” has a positive impact = 0.98

The more the students perceive a certain career in their mind that they want to pursue, the more they notice that they have chosen the appropriate major and are pleased with their choice of major.

Recommendation:

Students should be guided about their future careers through career development services that schools should manage as a separate department.

Finding 6:

“The major I chose provides better career development in the future” has a positive impact = 0.213

The more the students perceive that the major they will choose will influence and provide better career development in the future, the more they will know what major to do and what university to attend that got this major and will be pleased with their choice of major and university.

Recommendation:

Students should be aware of the career development opportunities related to each major so they are able to choose a major and an appropriate university that has this major. This awareness should start again at school through the career development office to orient students in this area.

Finding 7:

“I chose my major based on salary expectations” has a negative impact = - 0.127

The more the students perceive a major based on salary expectations, the less they feel they are choosing an appropriate major or the less they will feel they are pleased with their choice of major.

Recommendation:

Students should be guided not to choose their majors based on salary expectations, but to do majors that they love to be able to improve and grow. This guidance should start with their school and parents by informing the students that if they make their choices based on salary expectations they may not be pleased with their choice.

The second set of hypotheses tested to know whether the independent variables affect the dependent variable i.e. students' satisfaction with their choice of university.

- Internet resources

Finding 8:

“University’s social networking pages were helpful for my choice” has a positive impact = 0.098

The more the students used the social network pages to gain knowledge about universities the more they will feel they chose the appropriate university and they will be pleased with their choice of university.

Recommendation:

All universities should be active on the social network because that is the trend and students spend most of their times nowadays on social media that is why it is very important for universities to guide students with information about registration, majors, admissions, financial aid and scholarships and their websites through social media.

INDEPENDENT VARIABLES THAT DID NOT AFFECT THE DEPENDENT VARIABLES:

Finding 9:

University attributes didn't have any impact on our dependent variables.

The literature was saying that university attributes are important factors that students look at but now this finding was surprising and shows a change. Perhaps students are taken with what they want to do and maybe following their friends and underestimating the importance of taking a degree from a certain university and underestimating how this affects their future career.

Recommendation:

Students in Lebanon might not know the importance of information about university attributes in affecting their choices and therefore universities must work harder by using different media to provide information about the importance of university attributes, such as accreditation (targeting students, parents, teachers and principals), quality of faculty, opportunities for financial aid and scholarships, and admission process standards to attract and please students in their choices.

Finding 10:

University's websites and ranking websites did not influence students' choices.

This is not surprising since all the information that students need to know from a university website, as well as university ranking websites are found on the social network university page. University's social networking has become the most powerful source of information for students, who spend a lot of their time on social media.

Recommendation:

Websites should be more interactive to attract student's interest and attention.

FINDINGS REGARDING THE SOCIO-ECONOMIC FACTORS

Finding 11:

There was no difference between males and females in their responses regarding their satisfaction with their choice of major and university.

This is perhaps because both males and females have the same expectations from higher education. The independent variables/sources of information are perceived the same way by both of them. Therefore, there is no difference in the responses of both females and males toward these independent variables.

Finding 12:

There was no difference between students coming from rural areas and students coming from urban areas in their satisfaction with their choice of major and university.

That is perhaps because nowadays a student's community does not affect his/her choices. In rural areas, students are more advanced due to several reasons such as globalization and internet that helped a lot in having a well-informed, advanced community.

Moreover, because with time the level of education of parents is getting higher, therefore they are more open to send their children to urban areas to continue their studies and do whatever they want to do.

Finding 13:

All parents with higher studies have been found to be different from those with lower level of education (No High School, High School, and University) in affecting the student's choice of major and having students being pleased in their choice of major. While parents with No High School, High School, and University level of education do not show any difference between them in affecting the students' choice of major.

Recommendation:

Parents with No High School, High School, and University educational levels should be guided through educational institutions to learn and direct their children regarding major choices that their children will have to make.

Finding 14:

All parents with higher studies have been found to be different from those with lower level of education (No High School, and High School) in affecting the student's choice of university.

While parents with No High School are different from those parents with higher studies and university level of education but not different from parents with high school in affecting the students' choice of university.

Parents with No High School level of education cannot help their children in deciding on the university they need to get enrolled to unlike parents with university and higher studies level of education because they lack the knowledge needed to guide their children.

Recommendation:

Therefore parents with no High School education, or parents with only High School education need more guidance and assistance through educational institutions in dealing with their children's choice of university.

B. LIMITATIONS OF THIS STUDY:

I could have a more comprehensive understanding of my topic if I had included the comparison of students coming from private or public schools, students in private or public universities, and students' class in the university. The differential responses would have shed more in-depth information about the topic.

CONCLUDING COMMENTS

The findings of this study, I hope, will contribute to the understanding of this topic by schools, educators, parents, and communities at large. This is particularly important in Lebanon, where there are no significant similar studies pertaining to the variables that influence the decision of students to enter university and choose their major.

This study will particularly help student recruiters such as myself. I have, for 3 years and a half working in the field of education and therefore I am trying to gain knowledge in this field as much as I can. In addition, I have been working as a student recruiter at Haigazian University for two years and my job it to visit schools all around Lebanon and help students (Grades 10, 11, and 12) to choose their major and university. I provide them with all the information they need to know about Haigazian University in terms of history, accreditation, majors, financial aid, scholarships, tuition fees, admissions procedure and social life. I have found out, after my extensive interaction with students from all around Lebanon, how hesitant, ignorant, and unsure they are of what they want to do in terms of university choice and major choice.

This study may also help NGOs such as the one called “Aspire” where the members have been inspired and wish to continuously inspire others. I, too, am a member of Aspire. We have been inspired by the true belief that we, as individuals in the society, can all contribute and play an influential role in stimulating positive change in our communities. As we ‘pay-it-forward’, the Aspire team aims to support, mentor, inform and inspire younger generations to make solid and quality decisions about their academic direction and career aspirations. The ripple effect of positive change results in sustainable development, inter-generational equity and enriched

youth. The solutions we are offering are: teaching research skills, using a universities' interactive database (that we have developed), offering financial support, and a mentorship program.

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