

Running Head: INVESTIGATION INTO PROCESS AND FACTORS INFLUENCING
HIGH SCHOOL STUDENTS' CAREER CHOICES

**Investigation into process and factors influencing high school students' career
choices**

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Submitted in partial fulfillment of the requirements for the degree of
Master of Science
in
Educational Leadership

Nazarbayev University Graduate School of Education

June, 2017

Word count: 17 601

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Acknowledgments

Foremost, I would like to express my sincere gratitude to my advisor Professor Mir Afzal for the continuous support of my M.Sc. study and research, for his patience, motivation, enthusiasm, and immense knowledge. His guidance helped me in all the time of research and writing of this thesis.

My sincere thanks also go to Dr. Jason Sparks for his encouragement, insightful comments, and hard questions.

Last but not the least; I would like to thank my family: my wife Dana Taukeyeva, my children Alua Bidanova and Alimansur Dzhakhib for their understanding, patience, support and encouragement, without which, I could not have completed this thesis.

Investigation into process and factors influencing high school students' career choices

Abstract

Education-job mismatch is one of key problems for education system, labour market and economy as a whole in Kazakhstan. Analytics in educational field state that only 12% of fresh university graduates are employed according to their university degree in Kazakhstan. It is important to understand the reasons behind ineffective career decisions by students. The education system in Kazakhstan requires that students make career decisions upon graduation from high schools. Therefore this study explores the process of career decision making and the factors that influence high school students' career choices, and the hardships and uncertainties that the students face in making decisions about their careers. Using qualitative research methods, in-depth interviews were conducted with 18 high school students and 4 freshman university students. The qualitative method coupled with career decision-making theory has resulted in a study that gives a voice to the key participants in the career decision making process, the students themselves. The findings highlight four major factors that prevent students from making effective career decisions. First, high school students are not matured enough, nor are they prepared for taking informed decisions about their careers. Second, in-state dominated tertiary education system requires students to make career decisions too early. Third, higher education state grant allocation system shifts students' focus from choosing the subjects / future career they really like to choosing a subject for which they can easily win a grant / scholarship. Last, collectivist culture and parental expectations further aggravate the problem of winning grants for students. This study makes a number of recommendations for education policymakers, practitioners, parents and students. It may also fill the gap of absence of literature on career decision making problems in Kazakhstani context.

Key words: career guidance, career choice, high school students, factors.

**Исследование процесса и факторов, влияющих на выбор профессий учащихся
старшей школы**

Аннотация

Несоответствие профессии по образованию и по трудоустройству является одной из ключевых проблем для системы образования, рынка труда и экономики в целом в Казахстане. Аналитики в сфере образования утверждают, что всего 12% новых выпускников университетов работают по степени своего университетского образования в Казахстане. Важно понимать причины неэффективности решений касательно профессии. Система образования в Казахстане требует, чтобы учащиеся принимали решения о профессии после окончания старшей школы. Поэтому в этом исследовании рассматривается процесс принятия решений о профессии и факторы, влияющие на выбор профессии старшеклассников, а также трудности и неопределенности, с которыми сталкиваются учащиеся при принятии решений о своей карьере. Используя качественные методы исследования, были проведены углубленные интервью с 18 школьниками и 4 студентами-первокурсниками. Качественный метод в сочетании с теорией принятия решений о профессии дали возможность услышать голос ключевых участников процесса принятия решений о профессии, самих учеников. Было выявлено четыре основных фактора, которые мешают учащимся принимать эффективные решения о карьере. Во-первых, ученики средней школы недостаточно взрослые, и не готовы принимать обоснованные решения о своей профессии. Во-вторых, система высшего образования требует от студентов принятия решений о профессии слишком рано. В-третьих, система распределения грантов высшего образования смещает ориентацию студентов с выбора предметов / будущей карьеры, которые они действительно предпочитают, на профессии, по которым они могут легко выиграть грант / стипендию. Наконец,

коллективистская культура и родительские ожидания еще больше усугубляют проблему получения грантов студентам. Это исследование дает ряд рекомендаций законодателям, практикам, родителям и студентам. Исследование может также заполнить пробел в отсутствии литературы по проблемам принятия решений о профессии в контексте Казахстана.

Ключевые слова: выбор профессии, профориентация, факторы, выпускники.

**Жоғары сынып оқушыларының мамандық таңдау процесі мен оларға
әсер етуші факторларды зерттеу**

Аңдатпа

Диплом бойынша мамандық пен жұмыс мамандығының сәйкессіздігі Қазақстанның білім жүйесінің, жұмыс нарығының және жалпы экономикасының өзекті мәселелерінің бірі болып табылады. Сарапшылардың айтуынша Қазақстанда жаңа піскен университет түлектерінің тек 12% ғана өздерінің университетте оқыған мамандығы бойынша жұмыспен қамтылған. Мамандық таңдауға байланысты шешімдердің тиімсіздігінің себептерін түсіну маңызды болып табылады. Қазақстанда білім беру жүйесі студенттердің мектепті бітіргеннен кейін мамандық бойынша шешім қабылдауын талап етеді. Сондықтан бұл зерттеу мамандық бойынша шешім қабылдау процесін, шешім қабылдауға әсер ететін факторларды, және оқушылардың алдында кездесетін қиындықтар мен қобалжуларды зерттейді. Сапалық зерттеу әдістерін пайдалану арқылы, 18 жоғары сынып оқушыларымен және 4 бірінші курс университет студенттерімен тереңдетілген сұхбат өткізілді. Сапалық әдіс пен мамандық таңдау теориясын ұштастыру процесстің негізгі қатысушыларының, студенттердің дауысын естуге мүмкіндік береді. Дұрыс мамандық таңдауға кері әсер етуші төрт негізгі фактор айқындалды. Біріншіден,

жоғары сынып оқушылары жеткілікті пісіп жетілмеген және олар мамандық туралы шешім қабылдау үшін дайын емес. Екіншіден, жоғары білім беру жүйесі студенттерден мамандыққа байланысты шешімді тым ерте талап етеді. Үшіншіден, мемлекеттік грант бөлу жүйесі оқушылардың фокусын шын мәнінде қалайтын мамандықтардан оңай грант / стипендия ұтып алу мүмкіндігі бар мамандықтарға жылжытады. Төртіншіден, ұжымдық мәдениет пен ата-ананың грантқа үміті студенттер үшін грант ұту мәселесін одан әрі қиындатады. Бұл зерттеу заң қабылдаушы және атқарушы органдарға, ата-аналар мен оқушыларға бірқатар ұсыныстар жасайды. Ол сондай-ақ, Қазақстандық контексте мамандық таңдау мәселелеріне байланысты әдебиет болмау алшақтығын толтыру мүмкін.

Кілт сөздер: кәсіби бағдар, мамандық таңдау, факторлар, бітіруші түлектер.

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Chapter One: Introduction and background of the study

1.1 Introduction

This chapter starts by providing background information relevant to the research study, followed by brief discussion on the researcher's personal motivation for conducting the study on the topic of career counselling. It also presents the research problem, research purpose, research questions and the significance of the study. Structure of the thesis is presented at the end of the chapter.

1.2 Background of the Study

Kazakh nation experienced numerous challenges within the 20th century: Being under colonial rule of imperialist Russia with all its repressions and other destructive political and economic outcomes; Forced entrance into USSR with collectivization and starvation; Participation in the World War II as the part of Soviet Union; Painful collapse of USSR and ongoing shift from Socialist to Capitalist economic system. Implications of this long-lasting turmoil are measured in tens of millions of human lives. Economic stagnation, mass unemployment, uncertainty about future development are some of the outcomes of system change in the post-Soviet Kazakhstan. Under new circumstances of post-industrial informational revolution the path to economic development of Kazakhstan lies through the symbiosis of monetary investments, development of education and science, growth of industry, and presence of motivation to do all of these as a unifying factor. Seeking for international cooperation and popularizing Kazakhstan as a favorable investment destination are in competency of the Ministry for Investment and Development of the Republic of Kazakhstan and interested businesses. Development of education and growth of industry are joint responsibilities of national Ministries for Investment and Development and Education and Science.

An education is a tool that leads a society for progress and development. Particularly, level of income and job and life satisfaction are predetermined by level of education of an individual. Moreover, individuals may want to involve into activities that benefit whole society. The role of government, on the other hand, is to promote education in order to develop national economy, ensure low unemployment rate, and produce high value-added products and services.

A situation of education and job mismatch when university graduates cannot find jobs, or when the jobs they find do not match the knowledge and skills acquired at higher education institutions (HEI) is becoming a major issue. Such condition fosters lose-lose outcome for both economy and individual citizens. This phenomenon is named mal-employment (Fogg & Harrington, 2011). As the productivity of such mal-employed workers decreases, so decreases their level of pay (Allen & Van der Velden, 2001; Di Pietro & Urwin, 2006; Zhu, 2012). This, in turn, negatively affects job and life satisfaction of workers (Wolniak & Pascarella, 2005). The outcome of such a system is low value-added, ineffective, underdeveloped national economy. For example, the highest percentage of university graduates who found job according to their profession is in healthcare and social services sector and accounts for 18% (Shakirova, 2016). According to the same study only 2% of those who finished with the professions in agriculture, forestry and fishery were employed according to their diploma.

Hughes & Kar (2004) believe that the main goal of education is providing young students with tools and knowledge to pragmatically plan their future. Schneider and Stevenson (1999) found that many teenagers are “motivated but directionless” (p.56). These young people are ambitious and willing to pursue academic and professional careers; yet, they lack clear understanding and plan to achieve goals set. Research in the

United States shows that every third newly accepted higher education student drops out within first two years without earning any degree ((NCES), 2001). Shakirova (2016) found similar numbers for Kazakhstan reporting that around 30% of economics major students dropped out from university not finishing it in 2014.

High school is a time when tomorrow's academicians, work professionals, businessmen make their critical decisions about future careers. There is, certainly, wide range of factors influencing and shaping such decisions by high school students. The central phenomenon of this research was to explore and understand the process of career decision making and factors influencing high school students' career decisions in Kazakhstani context. This research study investigated factors that motivate or discourage grade 11 students to make particular career choices in the context of two types of publicly-funded schools, a specialized and a mainstream school in Kazakhstan.

1.3 Personal Motivation for Research

An old Kazakh saying suggests that there are two significant decisions to be made by any individual: the first is spouse, and the second is profession. Indeed, both the choices, if done thoughtfully, will benefit the individual throughout his/her lifetime. Another great man in the history of technology and progress, Steve Jobs, in his commencement speech to Stanford University graduates recommended to "...find what you love" and "If you haven't found it yet, keep looking. Don't settle." ("Text of Steve Jobs' Commencement Address, 2005:p. 15). He also touches upon the importance of finding a place for an individual where he/she will be productive, effective, and happy.

I am not sure if I have found myself and ready to settle. Perhaps it is the feeling that bothers many others in my country. Remembering myself approaching the question of career decision at high school I now feel awkward and ashamed. I started my bachelor

degree at Suleyman Demirel University in Almaty majoring in interpreting and translation. Looking back I understand that I have never imagined myself in the role of an interpreter or translator, yet, I have studied it for two years. I know now that this is not something I would like to do today. The driving force behind my decision was that I knew English language and had good chances to receive full scholarship in professions that required English as a major subject. Thus, I could either become a teacher of English language or interpreter/translator. Becoming interpreter sounded more prestigious and I went for it. I studied for two years and have an unfinished degree in it.

Then the government introduced the 'Bolashak' scholarship program which allowed Kazakhstani students to follow bachelor, masters and doctoral degrees abroad. I tried my chances and won a scholarship to study my bachelor degree in Canada. Being in the state of euphoria I was not very concerned with decision of major I would follow in Canada. Besides, the program administrators had the department to deal with candidate allocation. I ended up studying Sociology at the Memorial University of Newfoundland, Canada. After a year of studies I finally sobered up and applied to change to Dalhousie University and pursued a degree in social sciences with double major in International development studies and economics. This, perhaps, was the first time I conscientiously decided what I want to study. I must say that it caused waste of a lot of money and time, enormous emotional stress for me and my parents, and discouragement. That was a long journey.

In 2014-2015, I held a position of career counselor at one of the Nazarbayev Intellectual Schools in Kazakhstan. During that year I noticed that many high school students were going through similar processes of indecisiveness, uncertainty, and stress due to the competition for getting into certain 'prestigious' or highly paid jobs, rather than

choosing the ones that best suit their skills and interests.. Having experienced all bitterness of making wrong choices, it is my deep interest to thoroughly investigate the issue of career decisions made by students and provide necessary recommendations for all stakeholders. The first and most important research done on this topic is studying career decision making process that students go through and the factors influencing high school students' career choices.

1.4 Research Problem

The mismatch between education and job can be very devastating for both economy and individual life and job satisfaction. Educating individuals who are well-informed and confident about their future careers will positively address this problem. However there is scarcity of research studies to inform policy and practice about career decision making by students. Therefore, most academic, policy making and policy implementing institutions in Kazakhstan lack deeper understanding of how and why students' make particular career decisions, experience deficiency of understanding of the problems that students go through in the process of choosing careers, and, consequently, unable to provide support for high school students in career choices. Hence, this study aimed to explore factors influencing students' career choices.

1.5 Research Purpose

The career decision is not an easy process. Moreover, higher education is an expensive and time consuming privilege for many individuals. Certainly, there are specific, personal reasons behind career decision of any individual high school student. The purpose of this qualitative research was to explore the process of career decision making, to understand variety of factors influencing high school students' career choices, as well as, to investigate the hardships and uncertainties that they face in the process. Another aim of

the research was to investigate the school graduates' level of satisfaction with their career choices. By exploring and analyzing the issues of students' career choices, the study delivers recommendations for policy and practice in the context of Kazakhstan.

1.6 Research Questions

The following research questions guided and shaped the process of the research:

Main Research Question:

How do high school students arrive at their career choices and what challenges they face in the process of decision making at one publicly-funded specialized school and one public-funded mainstream school in Kazakhstan?

Subsidiary Questions:

1. What factors influence students' career choices at the two types of schools?
2. What hardships and uncertainties students of both types of schools face in the process of career decision making?
3. What kind of support do students need in the process of career decision making?
4. How satisfied are graduates of both types of schools with their career decisions?

1.7 Significance of the Study

Due to lack of in-depth research on the topic of career decision making process in the context of Kazakhstan, this study may fill the gap in the existing literature. Additionally, Ministry of Education and Science and Ministry for Investments and Development of the Republic of Kazakhstan may potentially benefit by receiving particular recommendations relevant to the field. Particularly, it is recommended for the two ministries to collaborate on developing and implementing course on career decision

making in high schools across the country. In addition, there are recommendations for the MoES to reconsider the process of career decision making for high school students. The study is also significant for High schools in the country as it suggests finding new ways of cooperation with parents' community on the issue of career guidance. High school students and their parents can benefit from the research by adapting more thoughtful and informative approach to the issue of career planning.

1.8 Thesis Structure

This thesis consists of six chapters. In addition to that, Bibliography and Appendices sections are provided at the end.

Chapter 1, "Introduction", discusses background information and rationale for the study. Next, it presents the research problem, research purpose, guiding research questions and significance of the study.

Chapter 2 presents review of literature related to the topic from both national and international context. Three major aspects are addressed in order to thoroughly review existing knowledge regarding the issue of career decision making. First, Student's approaches to career decision making, second, career decision making difficulties experienced by students, and finally, cultural and gender aspects with regard to decisions of professions.

Chapter 3 discusses the research design and methods employed in this study providing reasoning and justification for their use. Next, the sampling strategies are discussed in detail. Then data collection and data analysis techniques together with research limitations are investigated.

Chapter 4 presents the main and interesting findings of the study about career decision making difficulties of students and factors that influence their choices.

Chapter 5 discusses and interprets results presented in Findings chapter. In-depth analysis of the information is provided to learn lessons from the study.

Chapter 6 provides a summary of the conclusions drawn and recommendations made based on the study's findings.

Chapter Two: Literature Review

2.1 Introduction

Kazakhstan has initiated reforms in various aspects of education system, however, the topic of career decision making has been neglected since the collapse of Soviet Union. There is a lack of literature, especially in developing countries including Kazakhstan, on the process of career decision making by high school students, difficulties they face, level of their satisfaction and readiness to make one of important choices. This study explores the process of career decision making, factors influencing high school students' career choices, and the hardships and uncertainties that they face in the process. Thereby, this research may fill the gap of lack of literature on topic of career choice by high school students.

This chapter reviews the literature related to the topic from international context. Four major aspects are addressed in order to thoroughly review existing knowledge regarding the issue of career decision making. First, career decisions in the existing job market is reviewed to set the context. Then literature related to student's approaches to career decision making is reviewed to understand student profiles and characteristics as decision makers. Next, available studies on career decision making difficulties are discussed. Finally, literature related to cultural and gender aspects is discussed with regard to decisions of professions.

2.2 Career Decisions and Job Market

There is no clear understanding within Kazakhstan about the scope and consequences of education-job mismatch. Neither there is substantial academic research conducted intended to explore the factors that influence high school students' career choices and difficulties they experience during the process of decision making in

Kazakhstani context. Therefore the current literature review will, first, focus on education (field of study) and job mismatch in Kazakhstan, and, second, will concentrate on national and international literature exploring factors influencing students' career choices.

Level of wages of working population tends to decrease because of education-job mismatch within an economy (Allen & Van der Velden, 2001; Robst, 2007; Wolniak & Pascarella, 2005; Di Pietro & Urwin, 2006; Fogg, & Harrington, 2011; Zhu, 2012). Robst (2007) findings suggest that there is substantial difference between earnings of mismatched workers and workers who perfectly matched their education degrees with the jobs they do. Education-job mismatch data is closely connected with decreased job satisfaction (Farooq & Ahmed, 2007; Wolniak & Pascarella, 2005; Allen & Van der Velden, 2001). According to findings of Wolniak & Pascarella (2005) job satisfaction is inevitably influenced by the income level factor. As a result, the efficiency of economic system declines substantially.

There was a severe youth unemployment rate in Kazakhstan and in many transition post-soviet economies throughout 1990's (Baskakova, 2007; 'Shakirova, 2016). The situation improved and according to Shakirova (2016), there were only 4% unemployed youth aged 15-28 in Kazakhstan in 2014. Nonetheless, the situation of youth employment remains vital in Kazakhstan. Baskakova (2007) and Shakirova (2016) point out that problem now lies not in the context of quantity, but quality of employment. Most of employers in the job market require working experience, which, university graduates, in most cases, do not have. Only 16% of job providers are ready to employ workers without work experience (Shakirova, 2016). The question of match between education and job remains topical in Kazakhstani context. The natural aspiration to earn money and absence of required work experience in the field pushes fresh university graduates to seek job opportunities in different spheres (Baskakova, 2007; Shakirova, 2016). Only 12% or 5 595

of 47 331 fresh university graduates who found job in 2014 were employed in the field in which they had received their university degree (Shakirova, 2016). Rest of the graduates ended up doing jobs which were not closely related to their university degrees. Baskakova (2007) suggests that unstable economic situation within Kazakhstan is the reason for such situation to prevail. No matter what the reasons might be, the bitter reality is that education-job mismatch touches 8 out of 10 university graduates in Kazakhstan.

Baskakova (2007) presents statistics that clearly display sharp increase of higher education enrolment ratio in Kazakhstan. However, according to her, the main reason for such increase in numbers of enrolled students is not driven by market demand for such specialists, but, rather, from students' and parents' beliefs that university degree guarantees high-salary and interesting occupation. In the Soviet era, the central government, as part of its planned economy, would determine the number of specialists to be trained in each field. The transition to free market economy allowed vocational and higher education institutions to decide about the number of specialists to be educated in any professional field (Baskakova, 2007). In Kazakhstan, in new economic circumstances professions as lawyer, economist, accountant, etc., became trendy and attracted thousands of high school graduates without consulting the real market needs (Baskakova, 2007). There was no trustworthy information about real market needs because neither the government nor the businesses knew about future plans to restructure the economy (Baskakova, 2007). As a result, Kazakhstani job market was flooded with specialists in economics, law, accounting and other trendy professions who later faced serious problems in finding jobs. Interestingly, Shakirova's (2016) study reveals that every third economics and ecology major student and every fifth architect would have never chosen the profession if they had another chance to decide what to study. However, in the recent years students began to

show more interest in technological spheres such engineering and agriculture. Parallel to that Kazakhstan's economies started to show recovery (Baskakova, 2007). It is of great interest to explore factors that influence high school students' career choices and uncertainties and hardships they face in the process in such a historic time.

2.3 Students' Approaches to Career Decision Making

To investigate the process of career decision making by high school students it is important to understand how students approach this process. It is estimated that 50% to 60% of students who entered university decided about their profession change their major half-way (Astin, 1977; Burns & Kishler, 1972; Gordon, 1976; Hoffman & Grande, 1977).

Yet, there are those who never do that despite understanding the mistake conducted because of parental or societal pressures. A concept of identity foreclosure was developed by Erikson (1959). According to it, students make decisions before they discover their own inclinations, values and needs. Students start making career decisions before they are mature enough and have gone through developmental stages associated with choosing a profession.

Perry (1970) found that throughout four years of university, students undergo intellectual and ethical development that is crucial to proper career decision. His four stages that students experience on their cognitive development are discussed below. The first one is dualism and during it students perceive simplistic approach to thinking. Here students take counselors' or parents' authority for granted and follow the advice as a law or rule. During next stage of Multiplicity students take more responsibility for their career and learning. Here students stop taking for granted counselors' or other authorities' advices as a single correct answer to their career decisions. Following stage of Relativism enables them the skill of synthesizing decisions and students understand that they are in charge of

their own life. The final stage of commitment is not experienced by all students during university years. This stage assumes that individuals continuously integrate new knowledge and experience to their decision making process. When comparing career decision making difficulties of high school students to university students. Mau (2004) found that the latter ones experience significantly fewer difficulties than the former ones and referred to this as career maturity.

Another focus on decision making views a decision as a conclusion reached after considerations (Soanes and Stevenson, 2006). There are variety of forms of decision making (Patton 2003; Beach and Connolly 2005; Reay, David, and Ball 2005; Bazerman and Moore 2009). In practice these range from 'rational' approach, which involves setting goals, collection of information, generation of various options, and making a decision after evaluation of those options, to 'intuitive' approach, whereby unconscious analysis and 'feel' for the right decision dominates (Kahneman, 2011).

Rational approach is a very important one and highly valued in education system, professional workplaces, and society in general (Greenbank, 2014). Universities, for example, believe that judgements should be arrived at only after steps of rigorous collection, analysis and evaluation of information. This is referred by them as rational decision making process (Greenbank, 2014). Moon (2008) believes that engaging in systematic inquiry and an in-depth analysis of evidence are necessary elements if best decisions to be made. Moon (2008) also sees close connection between rational thinking and critical thinking and other experts believe that higher education institutions (HEIs) aspire to develop these skills in students (Kember 2001; Brennan et al. 2010; Arum and Roksa 2011).

Intuitive decision making is not necessarily worse than rational one. Some researchers argue that intuitive decision making can be very effective under condition that those who make decision possess substantial experience relevant to the field (Simon 1987; Henry 2001; Sadler-Smith and Shefy 2004; Phillips, Klein, and Sieck 2004). Clearly, high school students do not possess experience or information of graduate labour markets to make accurate intuitive decisions about future professions.

Career professionals also advocate for rational approach to career decision making (Hodkinson 1998). Similarly, governments and educational policymakers assume that students adopt the rational approach when making educational and career decisions (BIS 2009; BIS 2011). However, study by Greenbank (2014) found that students do not approach career decision making in rational way. Rather, students adopt more intuitive approach relying on their 'feelings' about future degree or profession and this argument is supported by other researchers as well (Gladwell 2005; Ariely 2009; Bazerman and Moore 2009; Kahneman 2011). Thus, most students very rarely undertake a thorough investigation of various career options available to them, nor they seek advice from career advisors or people who have experience in the field. Greenbank (2014) identifies that there is "a tendency for students to be present- rather than future-orientated... and overconfidence in the effectiveness of informally collected information and intuition in their decision making" (p.14).

Final year students of high schools are not ready to make career decision. One of Greenbank's (2014) research participants, Denise, answering the question about how she arrived at the decision to study the degree she was currently doing, replied:

The teachers tell you doing a degree is good, you'll get better jobs if you do a degree.

But you know you're expected to decide what [degree] to do but you don't know about jobs and things, what jobs can you do with the different degrees.

You just don't know (p. 7).

Vast majority of students of higher education institution acknowledge that they should have approached career decision with more care and seriousness. However, another finding suggests that students "...found this very difficult, because at this stage in their lives, most had little or no idea what they ultimately wanted to do" (Greenbank, 2014, p. 7). These findings suggest that final year high school students are not ready or mature enough to produce informed and rational decision regarding their future careers.

Escalation of commitment is another term used in career decision making topic. It is a tendency for people to become locked in to a particular course of action (Staw, 1981, 578). Greenbank (2014) states that many students at the age of 15 or 16 believe they are locked into a particular course of action. This belief might come from particular subjects that they have studied during school time. Because students are unable to engage in career decision making, they find themselves in a situation of escalation of commitment towards particular subjects and degrees that follow from studying those subjects (Doolan et al, 2010).

Interestingly, not only students locked into particular course of action, they also failed to conduct thorough research about career paths available for them. In many cases students lack sufficient understanding about career they are pursuing. Study by Greenbank (2014) found that students often choose a certain profession "because they felt it would be a good career and were good with numbers, but had little idea about the profession itself" (p.9).

Another option to approach career decision making is relying on fate. Rotter (1990) refers to this as an External locus of control situation. The belief of such students rests on the idea that they have little or no control over their life and their decisions are based on fate. One illustration of such case is this reply of a student: "I think you can try to make your own opportunities and chances but I think it happens best when things just happen. I feel that something will come up" (Greenbank, 2014, p. 10). This shows that students believe they don't have control over their future and to focus on present rather than on future.

Thus, Perry's four stages of development suggest that students' are not able to make sound and informed decisions prior to late university time. Rational approach to career decision making, which is highly valued and promoted by academic and professional communities (Greenbank, 2014) is rarely adopted and used by high school students (Kahneman, 2011). Intuitive decisions are not necessarily worse than rational ones; however, in case of high school students, it is not a suitable approach because students are not experienced and informed enough to make correct intuitive decisions (Simon 1987; Henry 2001; Sadler-Smith and Shefy 2004; Phillips, Klein, and Sieck 2004). They make better decision when approach to career choice in rational and informed way. Research suggests that final year high school students are more present oriented, rather than future oriented, and thus, find it very difficult to make career decisions because they don't possess clear idea about what they want to be (Greenbank, 2014, p. 7). Some students also depend on fate when deciding about professions, others find themselves locked to particular course of action because they started studying certain subjects during high school.

2.4 Career Decision Making Difficulties

Much research has been undertaken to investigate difficulties that are faced by students in the process of career decision making. The psychodynamic approach by Bordin and Kopplin (1973) emphasized individuals' internal problems that negatively affect career decision process. The developmental approach (Osipow & Fitzgerald, 1996) highlights that problems in career decision making parallel with various stages of career development. Crites (1978) argues for maturity of students as a predictor of problems with career decision making. Researchers assume that individuals might have single or number of difficulties and divided difficulties into various categories and structured them (Gati, Krausz, and Osipow, 1996). This structure was named Taxonomy of difficulties in career decision making. To create it researchers collaborated with 200 career counselors and 10 expert career counseling psychologists (Gati, Krausz, and Osipow, 1996). The taxonomy is hierarchical and consists of major categories and various subcategories in order to give structured approach to the problems faced by career decision makers.

The first major category has four subcategories; it deals with difficulties that precede engagement in making career decisions and named as 'Lack of Readiness'. According to the authors students who experience difficulties of this category lack motivation "to engage in career decision making process" and are indecisive "concerning all types of decision making" (Gati, Krausz, and Osipow, 1996, p. 3). In addition to that, in this category, students might also experience difficulties associated with "dysfunctional myths (e.g., irrational expectations) about the process of career decision making and lack of knowledge about the steps involved in this process" (Gati, Krausz, and Osipow, 1996, p. 3). "Lack of information about self, lack of information about occupations, and lack of information about ways of obtaining additional information" fell under second major category of labeled as 'Lack of Information' (Gati, Krausz, and Osipow, 1996, p. 3). The

third major category named as 'Inconsistent Information' included "unreliable information, internal conflicts and external conflicts" (Gati, Krausz, and Osipow, 1996, p. 3).

Likewise, there is also a differential approach to investigation of difficulties faced by various students in career decision making process. According to it there are several types of undecided individuals regarding this process (Betz, 1992; Fuqua, Blum, & Hartman, 1988; Gordon, 1995, 1998; Holland & Holland, 1977; Osipow & Fitzgerald, 1996; Phillips, 1992). Many researchers came to compromise that there are two major categories of indecision. First type corresponds to indecision which precedes the detailed and thorough research about career options by students. It is named 'Developmental Indecision', referred to as a normal phase and that it can be managed by bringing students' focus to the issue and providing necessary support (Super, 1957; Tiedeman & O'Hara, 1963). The second type of indecision results from students' indecisive nature and named 'Chronic Indecision'. For such type of individuals not only the career related decisions are hard, but other decisions from various areas of life either (Betz, 1992; Crites, 1981; Osipow, 1999).

The chronic indecision is usually related with dysfunctional psychological characteristics. Fuqua and Hartman (1983) associate it with high level of anxiety, external locus of control, and weak sense of identity. Similarly, Crites (1981) connects it with lack of confidence and low self-esteem and difficulties in psychological separation from parents. A quantitative research with 230 participants conducted by Rojewski (1994) in United States' rural area revealed that approximately 25% of students were chronically indecisive. The group of developmentally indecisive accounted for around 38% of participants. The rest of participants were characterized as decisive.

It is also important to mention that the study by Rojewski (1994) also tested if gender, racial, and socio-economic status of participants are factors that affect level of decidedness of participants. The study found that these factors are not significant in determining classification by indecision type.

Another important aspect to focus on is that individuals who are undecided are not homogenous, but rather demonstrate different forms of indecision (Wanberg & Muchinsky, 1992). According to Crites (1969) there are three groups of students; students who are unable to decide among multiple professions; students who are unable to discriminate among available opportunities; and students not interested in any career. Particularly, quantitative study that was conducted in Switzerland among 8th grade students discovered that they find challenging limiting the alternatives of choice (Gottfredson, 1981). Another study conducted by Swiss researcher revealed that factors as non-Swiss nationality and presence of neuroticism increase the chances of indecisiveness, whereas, factors as school commitment and self-esteem increase the ability of students to be decisive regarding career choice (Marcionetti, 2014).

Various approaches were developed to understand difficulties that individuals go through in the process of career decision making. Taxonomy of difficulties was developed by Gati, Krausz, and Osipow (1996) trying to adopt multifaceted approach to address the problem. Another approach developed is differential approach that differentiated between developmental and chronic indecisiveness of students in career decision making. Another studies revealed that indecisive students are not homogenous, but rather experience different forms of indecision. Such studies have not been conducted in Kazakhstani context and this study may contribute to literature within Kazakhstan and Central Asia.

2.5 Culture and Gender in Career Decision Making

Individualism-collectivism framework is the most simple and useful tool to investigate cultural aspects in cross-cultural research (Triandis et al, 1986; Gudykunst & Ting-Toomey, 1988; Triandis et al, 1990). In collectivistic societies individual goals are given lesser importance than group goals and self is more committed to the group (Triandis et al, 1988). As the authors claim individual's behavior is constantly evaluated from perspective of benefit to group members who are considered important like family or relatives. In individualistic societies individual's goals are placed higher than group's goals (Triandis et al, 1988). Individuals are more concerned with personal rather than group's needs, interests and goals. The authors also believe that there is higher level of competition in individualistic societies than in collectivistic ones. According to Hofstede (1980, 1983), North America, western and northern Europe and Australia are mainly individualistic societies, whereas Asia, South America and Africa are collectivistic ones. Location in Central Asia and many other aspects put Kazakhstan into category of more collectivistic than individualistic culture. Because of this it is important to understand how these characteristic affects the topic of career decision making within Kazakhstan. Moreover, ignoring cultural aspect might result on serious limitations within career decision making topic (Gul et al, 1992).

Auyeung and Sands (1997) in their study about cultural differences about career decision making comparing Australian, Hong Kong, and Taiwanese university students grouped 12 career-choice factors of Paolillo and Estes (1982) into three categories developed by Wepman and Heine (1963); significant others entity includes "parental, teachers' and peers' influence and association with others in the field; materials entity comprises availability of employment, prestige and social status, earning potential, cost of education and years of study considerations; and the beliefs entity comprises job

satisfaction, aptitude for subject matter and previous work experience” (Auyeung & Sands, 1997, p. 3). Using this tripartite approach it is interesting to investigate how cultural aspects guide students' career decision making process in Kazakhstan.

Ayeung and Sands (1997) revealed that entity significant others influence Chinese and Taiwanese students considerably stronger than their Australian counterparts.

International studies suggest that female students face more career decision making difficulties than male students. Luzzo and McWhirter's (2001) research discovered that females experienced significantly more career problems than male students. Similarly, Mau (2000) believes that women in Asia enjoy lower social status; work on lower positions that men do and, thus, feel incompetent when making career decisions. Zhou and Santos (2007) studying career decision making difficulties among British and Chinese international students also concluded that females are significantly less confident about their career decision than males. These findings, however, are relevant both for Chinese and British students. It is also important to research gender differences in career decision making in Kazakhstani context.

Thus, theoretical aspects of individualism-collectivism framework seem to be useful to predict career decision making styles and problems within different cultures. This is reflected in issue related to career decision making. Representatives of collectivist societies tend to depend more on parents, relatives and teachers when considering career decision and experience more problems with career decision making. Gender is also a significant factor in career decision making process. Female students tend to show less confidence about their choices of profession.

2.6 Summary

To sum up, I reviewed the literature about career decision making in this chapter. More specifically, I discussed literature about students' profiles and various approaches they adopt in career decision making. I touched upon literature that covered the problems faced by students with regard to choice of professions. It is important to mention that all literature discussed was relevant to experience of other countries, such as USA, China, UK, Australia and others.

Next chapter "Methodology" will discuss the research design and methodology used to conduct the study.

Chapter Three: Methodology

3.1 Introduction

In this chapter, I discuss the qualitative research design and methodology employed in this study, followed by the rationale and justifications for choosing the qualitative research design. Next, I explain the research sample and sampling techniques, data collection and analysis methods, ethical considerations, and limitations of the study.

3.2 Research Design

Inductive qualitative research approach was employed in this study because it aimed to explore factors that influence high school students in the process of career decision making and understand why and how students arrive at certain decisions and what challenges they face in the process. Thus, the intention was to investigate depth, rather, than breadth of the issue. Rubin and Rubin (2012) point out that qualitative research is a research design which allows to focus on depth of an issue and enables researcher to understand “specific situations, individuals, groups, or moments in time that are important and revealing” (p.2). The same authors continue to assert that “when context and richness are important, when you need to know what something feels like or how it works from the inside, when you are looking at something unusual or unique, naturalistic research tools are more appropriate”(p.3). Thus, the constructivist paradigm which allows for multiple truths was used for the purpose of this research. Similarly, Creswell (2014) emphasizes that “qualitative research is best to address a *research problem* in which you do not know the variables and need to explore” (p.30). Given the absence of research in Kazakhstani context of why and how students arrive at certain career decisions and what are potential obstacles they face in the process, it was suitable to employ qualitative research methodology to explore the issue.

3.2.1 Qualitative Description

As a theoretical design of the research I have used fundamental qualitative description design. Sandeloswki (2000) suggests that it is "...one of the most frequently employed methodologic approaches in the practice disciplines" (p. 335). According to Sandelowski (2000) phenomenological, ethnographic, or narrative design researchers usually use their own interpretation of data gathered, whereas, fundamental qualitative description entails presentation of data without bias. The same author also argues that this research design is "least theoretical of the spectrum of qualitative approaches, in that researchers conducting such studies are the least encumbered by pre-existing theoretical and philosophical commitments" (p. 337). These considerations encouraged me to use fundamental qualitative descriptive design for the purpose of this research.

3.3 Sample, Site, Participants

3.3.1 Sample

According to Creswell (2014) in qualitative research the aim is not to generalize results, but, rather, to build an in-depth exploration of the main research question. Therefore for this research I have used purposeful or intentional selection of research participants and sites. My main logic in selecting participants rested on the idea of 'information richness' of participants (Creswell, 2014). According to Creswell (2014), "maximal variation sampling is a purposeful sampling strategy where researcher decides about cases or individuals that differ on some characteristics or trait" to study (pp. 229-230). Therefore maximal variation sampling techniques were most suitable for this research. It was very important to include gender aspect when planning samples. Thus, I ensured that representatives of both genders are fairly represented in the research. Another aspect considered was nationality or cultural differences feature. Therefore, I attempted to

selected representatives from not only Kazakh nation, but also from other minorities. However, some difficulties with selection of minorities were encountered in the process. Due to fact that only Kazakh language of instruction is offered in publicly-funded mainstream school, all of students in the school are Kazakh nationality students. Thus it was not possible to reach minorities in the mainstream school. However, publicly-funded specialized school offers both Kazakh and Russian language of instruction to their students. Thus, there were some minority group participants from this school. The central aspect of maximum variation I have attempted to differentiate on was academic performance of students. However, in spite of my request to the school administration to select students from various groups in terms of academic achievement, they still suggested their strongest students for the research. Nevertheless, because of better personal connections with the specialized school administration, I managed to select students from different categories of academic achievement in this school.

3.3.2 Research Site

This research sought to explore career decision making process at two different types of schools in Kazakhstan: publicly-funded specialized school and publicly-funded mainstream school. In addition to that, I interviewed graduates from these schools that are currently pursuing higher education degrees at Kazakhstani universities. It was important to explore their experiences in order to answer certain research questions of this study. The publicly-funded specialized school students are generally considered to be more able students because they are accepted to the school on competitive basis. Specialized schools and mainstream schools are also differentiated on basis of curriculums they offer. A city in south of Kazakhstan was selected as a research site because of its convenience as it is the place of my permanent location. I am aware that local culture might be the influencing

factor; however, I decided to choose this city because I know it, have lived there, and thus aware of the local culture and other dynamics.

3.3.3 Participants

I purposefully selected two categories of participants for this study: current grade 11 students from both types of publicly-funded schools, and former students/graduates from both schools. The total number of participants consisted of 22 people. I conducted individual interviews with 8 current high school students and 4 graduates. These participants were representatives of both mainstream and specialized schools. Moreover, I conducted a focus group interview at each of the school with 5 student participants. Thus, I interviewed 22 participants. Table 1 below provides details about the participants:

Table 1: Research participants

Type of interview	Type of Participants	Number of participants	Number of interviews
Individual interview	Grade 11 students from the specialized school	4	4
	Grade 11 students from the mainstream school	4	4
	Graduate students from the specialized school	2	2
	Graduate students from the mainstream school	2	2

Focus group interview	Grade 11 students from the specialized school	5	1
	Grade 11 students from the mainstream school	5	1
Total		22	14

The reason I have selected current high school students is because they are the ones who face the challenge of career decision making at the present. I chose to select the former students/graduates of these schools because they have gone through the whole process of career decision making and have experienced all steps of this process unlike current students. Another reason for involving the former students / graduates is due to the fact that they were likely be able to answer interview questions which seeks to understand the satisfaction level of students with their career choices already made.

3.4 Data Collection

In this research I employed twelve individual and two focus group interviews as instruments of data collection.

As Creswell (2014) indicates it is important to "...ask participants in a study to share ideas and build general themes based on those ideas" (p. 144). As research, I have used open-ended stance in order to allow for change of research questions based on the answers I would get from the participants, because inductive qualitative study stays open to emerging ideas in the research process (Creswell, 2014). Likewise, I did not stick to given set of questions or asked them in a particular order to ensure that interviews flow and

reflect participants' experiences (Rubinand Rubin, 2012). Two types of in-depth qualitative interviews were used to collect data: individual semi-structured interviews and focus group interviews. Semi-structured interview is a research tool that enables researcher to understand in-depth views of participants and exploring their experience relevant to research subject (Berg & Lune, 2012). Moreover, Hitchcock and Hughes (1993) claim,

The semi-structured interview is a much more flexible version of the structured interview. It is the one which tends to be most favored by educational researchers since it allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee's response (p. 83).

Therefore I also conducted two focus group interviews with students of two types of schools that are of interest in this research. Paying attention to Creswell's (2014) position that "focus groups are advantageous when the interaction among interviewees will likely yield the best information and when interviewees are similar to and cooperative with each other", I requested that participants of focus groups were class-mates who knew each other for extended period of time (p.240). Indeed, this ensured the friendly and cooperative atmosphere during the focus group interviews. The decision to conduct focus group interviews was important because it allowed to get in-depth data "about how people think about an issue – their reasoning about why things are as they are, why they hold the views they do" (Laws, Harper, & Marcus, 2003, p. 299).

Interview questions asked during individual interviews are listed in Appendix A. Interview questions asked in focus groups are listed in Appendix B. Interview questions asked to school graduates are listed in Appendix C. However, these were only guiding

questions during interviews, and, at cases when additional probing was needed or interesting topics developed, I asked necessary questions not listed in the appendices.

Due to the fact that research included participants with two languages of instruction, interviews were conducted in Kazakh and Russian.

All interviews were recorded on voice recorder on my smart phone. Participants were informed that interviews would be recorded beforehand. In order to eliminate possible technical issues I also took paper notes of all interviews.

3.5 Data Analysis

Qualitative content analysis is the most suitable for of data analysis to be used for qualitative descriptive research (Sandelowski, 2000). It is “a dynamic form of analysis of verbal and visual data that is oriented toward summarizing the informational contents of the data” (Altheide, Morgan as cited in Sandelowski, 2000, p. 338). While conducting inductive constructivist research it is important to stay open for changes that might arise during the research process based on participants' responses. Therefore qualitative content analysis was suitable tool for current research study. Sandelowski (2000) points out that qualitative content analysis is a “reflexive and interactive as researchers continuously modify their treatment of data to accommodate new data and new insights about those data” (p. 338). Coding and data organization followed most prevalent to least prevalent theme as it best fitted the logic of data treatment in this research.

After permission of participants and/or their legal guards were granted I have used voice recorder to record interviews. Each interview was saved as a separate audio file. Then I transcribed interviews to the text. The interviews were conducted in Kazakh and Russian languages depending on language preferences of participants. This required translating interviews into English language. Data analysis was done through coding

information into different text segments. The research questions of current study guided the development of codes. Codes were then organized into groups based on similarities, relationships, connections, and patterns. The groups of codes were then developed into themes and categories for further analysis. Following these procedures facilitated to explore the issue of career decision making process that high school students go through in one publicly-funded specialized school and one publicly-funded mainstream school in Kazakhstan.

3.6 Ethics of the Study

Before going to field to gather data it was necessary to receive an approval from the Nazarbayev University Graduate School of Education Research Committee. It ensured that everything I have planned was according to ethical standards. After receiving approval from NUGSE, I approached the administration of the two schools for their permission to conduct the study at their schools. As Bell (2010) suggests it is necessary to provide the participants and gate keepers, school principals or vice-principals in this case, with the information about my study and its purpose. I have had personal contacts with members of administrative teams of both schools, thus, the process of getting permission to school as a research site went smoothly. The school administration of the specialized school allowed me to select participants according to maximal variation sampling technique. However, the school administration of the mainstream school selected participants for me, most of who were most achieving students. I, then, met with participants, shared with them the purpose and other details about the study, and invited them to voluntarily participate in the study. Every participant or guardian was given a copy of the consent form (Appendix 4) in which it was mentioned that the participants had the right to reject invitation to participate. It was also explained to participants that they were able to withdraw from the research whenever

they decide to. However, all of candidates accepted the invitation, signed the consent forms, and finished interviews as planned. The participant permission to record audio data was also asked before interviews started. It was important to eliminate all sort of risk to participants that might arise in the study. Therefore, I protected the research sites and participant identities by using pseudonyms instead of their real names to ensure anonymity. The codes and other relevant research information were stored on my laptop/notebook which was protected by password known only to me. The hard data (documents and interview transcripts) were stored in safe cabinets and nobody other than me and my supervisor had access to it.

3.7 Limitations of the Study

This study was limited to several issues: First, underrepresentation of minorities stemmed from the fact that Kazakh was the only available language of instruction in the mainstream school. Thus, participants from this school were mainly representatives of Kazakh nationality. However, this was moderated by the fact that there were representatives of minorities in the specialized school.

Second, the mainstream school was represented with only strongest students because the administration selected only strongest students to represent their school.

Third, the study was conducted in one southern city, which might not be generalizable to whole Kazakhstan. This is another limitation of the study.

Last, both schools were represented by grade 11 students. However, 11th grade is not the final year in the specialized school unlike in the mainstream school. This might be limitation to the study because the specialized school students had extra year to go before they had to make their career decisions.

3.8 Summary

This chapter discussed the methods employed in this study providing reasoning and justification for their use. Next, the sampling strategies were discussed in detail. Then data collection and data analysis techniques together with research limitations were investigated. The following “Findings” chapter will be used to present study results.

Chapter Four: Findings

4.1 Introduction

This chapter presents the main findings that were discovered during the research. The findings presented here are organized in response to the main research question that this study sought to address “How do high school students arrive at their career choices and what challenges they face in the process of decision making at one publicly-funded specialized school and one public-funded mainstream school in Kazakhstan?” Therefore, I first look at how age and academic subjects influence students’ career decisions. Then I discuss the influences of parents and lack of information on students’ career choices. Next, I present how State grants / scholarships and parental expectations influence career decisions. Last, I explain what kind of assistance high school students need for more informed career decisions. It is important to mention that all names used in this research study are pseudonyms.

4.2 Age, Maturity and Subjects in Career Decision Making

The interviews with the first-year university students sought to understand student satisfaction with career choices they made and the process they went or going through regarding career decision making. Most of research participants state that they understand that decision about a career is a vital one and it predetermines the success or failure in their careers. Reconsidering their approach to career decision making during school, students acknowledge they should have taken more responsibility about their choices of profession. However, it was very difficult for them then, because they lacked information about career options, work experience, life experience, and required intellectual and ethical development necessary to make the decision. Additionally, students have not developed own values and needs, and not mature enough to adopt comprehensive approach to

decision making. These and other problematic aspects regarding career decision making are exemplified in Balnur's, the current undergraduate freshman student, responses:

Precisely, not enough: not enough experience, not enough information. It does not matter how much you talk to adolescents, they are still juvenile and accept things like this. They are still immature. Most of them think like "I want 'grant (full scholarship from government of Kazakhstan)', I want good university, I need to meet parents' expectations and prevent them from feeling ashamed because of me". After all of these concerns finish, you start thinking like "I am the owner of this way; do I really want it?"

Many research participants claimed that a school time is not a time when they are able to systematically and rationally approach career decision. It is important to understand if students approach career decision making with all seriousness that it requires, if they feel degree of responsibility related to the issue. For instance, Diana, a first year university student, stated that while at school and even after two years of being out of school, when thinking about profession, she still thinks about difficulty of subjects she has to take to get a degree:

In my opinion, this understanding comes at third or fourth year in university. I now, being two years in university, do not have such an understanding. Even now I mainly think about subjects. Organic chemistry is difficult, or I won't do economics because there is a lot of mathematics. It is not like: It will be helpful in my future life or it is better if I study physics even though I will struggle with it. No matter what, now we think about difficulties with subjects. At school, students decide about subjects, and later on these subjects determine professions. Regarding experience, I think

it is absolutely absent. And profession...others affect it, not your personal deep thinking about it.

Diana also revealed that the only profession that she knows for degree holders like hers is "Diplomatic official". This reply by Diana demonstrates that students do not adopt rational approach to career decision making. Their main factor in the choice of profession is difficulty or easiness of subjects they have to take to receive degree. Diana also admits that after two years of university (foundation program and 1st year) she has not adopted serious and responsible thinking about career decision making. This suggests that at high school she also lacked such understanding.

Another important aspect is that high school students lack life and work experience that is necessary to adopt rational decision making about career. Her response to the question about her future career options provides an example of this lack of work and life experience, as well as rational, serious and responsible approach to decision making. When Balnur was asked what she was thinking about while at high school regarding her future profession she said: "About finishing all courses with good marks. If you want to think about profession, you don't have information and experience and other things to do that."

Here also the student mentions lack of experience and information to make thought out choice about profession and focus on courses and subjects rather than career decision and who she wants to be in the future. In response to another question related to the level of responsibility about own profession while at high school and university, a student stated "At university. Here you become responsible for your own career. And this responsibility creates necessary condition to make personal, correct and reasonable choice".

The student's response suggests that at high school there are no external and internal triggers necessary for students to take responsibility about their career in their own hands.

They possess, rather, simplistic approach to thinking and in many cases accept parents' or others' authority and would follow advice as a law or rule. Answering another question about what she thinks about her maturity degree at high school, Balnur replied, "I was thinking like a child...It all looked like a dream or something. Talking about her future career, she said,

For example, I thought I will become a surgeon; I also wanted to go abroad for studies, but also wanted to graduate early and build a strong career by the time I am 30. I build utopian future for myself. But I should have considered other factors, better assess my capabilities and studied career requirements. I also should have assessed my health issues then. And later my health got worse; I am not sure anymore if I will cope to finish degree in medicine; and my dream of going abroad for studies prospects are also under threat. I should have planned everything beforehand and created a full picture of future study and work related issues, but what I did... I gathered small pieces of mosaic that I liked without having a full view... and now I am lost and unsure.

By stating this, Balnur refers to an absence of information about future degree and career related issues. The education system in Kazakhstan requires students to make career decision in the last year of high school. To investigate deeper these issues participants were asked additional questions regarding their perceptions of career at high school. Another student answering question about influence of foundation and freshman programs on student's thinking about future in more concrete, specific, distinct, and worldly way said "Yes...yes...this is it; the word "worldly" exactly describes my feelings. It is very correct.

The dreaminess is going away at university.” To the question about how time at university affects students to think about future career more realistically the same student replied:

Yes, definitely it affects. Finishing courses, adding more years to your life, you start thinking about it more seriously. For example, at high school you don't think if there are jobs in Kazakhstan in that profession, what are the opportunities there, what are expectations about growth of that field. You think like: this is my dream. You see it in movies or other places...and you like it...but there are no jobs in that profession. And when you are in university you see that there are no opportunities in the profession you chose.

Student admits that while at high school she was not able to think about her profession in distinct and worldly manner. She had clear idea who she wanted to be but very limited understanding about the way she had to go through, about the time limits and international education opportunities available for her. However, the stage of her development and maturity were not enough to think about it before she met challenges at university. Particularly, students claimed that they have not thought about job market and opportunities before coming to university. In addition to that, like most of students claimed, they focus more on subjects they have to study at high school and university for a degree rather than what profession they want to do.

4.3 Parents, Lack of Experience and Information in Career Decision Making

The two aspects of career decision making are evident in Diana's reply:

I have started thinking about my profession and who I want to become only after coming to Nazarbayev University. Before that my parents guided me

about what profession I should choose. So, as they wanted I decided to do medicine.

INTERVIEWER: Why haven't you thought about it before?

INTERVIEWEE: I still haven't decided who I will become. But I don't want to study for 11 years (referring to degree in medicine).

INTERVIEWER: So, why didn't you start thinking about it while at high school?

INTERVIEWEE: At school in grade 9 we had to decide what subjects we take, chemistry and biology or physics and informatics. Then for two year I studied chemistry and biology and not physics and informatics. Thus, I had good chances with chemistry and biology only. Then my subjects decided my profession. But now I don't want to do medicine and thinking about what I should do instead. I need to go to profession where there are many job opportunities.

Thus, a joint factor of parents and preselected school subjects made a choice for her. Particularly, Diana fell into trap of "Escalation of commitment". But now she decided not to follow profession she does not want to do. Her worldliness and maturity are exemplified in her approach through job opportunities in various professions. Yet, in other section of interview she admitted that she is still making choices about credits to take based on easiness or difficulty of subjects. Another student from specialized school, Marzhan, described the process of career decision making for her in the following way:

I don't know about others, but this process is very difficult for me. I think so because adolescent period is a time when a person tries to find self, tries to

try different roles or masks, and it is very hard to make decision about future at this age. It also happens with me that one day I want to be everyone, but the other day I don't want to do any profession...and then I don't know what profession to do...and I think many adolescents feel the same.

On probing about what might be the causes for this kind of indecisiveness, she mentioned that "uncertainty" and relatively 'young age' were the reasons. She also mentioned that if she had to make her career decision a few years later, she would have made an informed decision as she stated, "Yes, because that time I would have been more stable person and know what I want and who I am".

It looks like the education system pushes them to choose profession while students have not developed their values, interests and needs. Moreover, there are no practical tools which they can use and take on various roles before they decide about what profession they want to do. Another student from specialized group, Aibek, illustrates such a situation too: "You can sit on a sofa at home, change TV channels, and accidentally stumble upon TV1000 movies channel...and watch a movie, and this movie might touch you...and this trifle might change all of your life and your attitude to it. One hero might inspire you and that's it. It may affect your choice of profession."

This certainly does not go in line with rational approach to decision making which is encouraged by education system. Students make decisions about professions based on feelings or intuition. Thus, they lack maturity level to make career decision. Additionally, students do not possess experience and information about graduate labour market. This is reflected in the answer of another student from specialized school, Oleg. He was asked the question if he needs additional time to come up with career decision:

I think, yes, I need more time because this summer I want to try find a job. For example, a part time job in any firm. I want to see what it is to work. Because adults talk about work...those who are 20-22 years old say that they are tired of work, there is no time to go for entertainment and leisure time. That is why it is necessary to prepare myself first, at least find simple job, and then think about profession I want to do.

Students struggle with identifying their problem, but they cannot identify their problem because they are not in the age and developmental stage to be able to do that. Oleg formulates his struggle correctly; he has very little knowledge about job market, about job related thinking, about finding self, priorities, and values. He refers to experience that he lacks before he can make a decision. Students want to adopt rational approach, yet, they lack information and experience required for this rational decision. To similar question Marzhan also replied: "I think I do not need time because I know myself and I can definitely say that with just time I won't be able to understand anything. Just thinking extra time I won't be able to decide. I need to see something. I need to do something."

Students formulate as best as they can this eagerness to do logical or rational decisions about career. But rational decision making means that there is enough information and relevant experience to make choices. An example of this is illustrated in the following extract from my conversation with a student:

INTERVIEWER: Have you changed your career decision before and do you think you will change it again?

INTERVIEWEE: Yes, because earlier I used to see everything from different angle. But because I meet new people all the time, I understand that I have

to be like them. But at the same time I also understand that I will meet even more people in the future and will need to change my decision again.

Although she mentions that she does not need extra time, her reply suggests that she does not need extra time in high school where she cannot face labour market challenges and other challenges that adults face. Her reply illustrates that she needs more experience and conversations with people of various profession before she makes the final decision. Thus, most high school students lack career maturity which comes as they progress from high school to several years of higher education. An answer of another participant, Zhanar, from specialized school clearly expresses main difficulty that students face in career decision making:

In my opinion, the complexity is that, whatever you say, you are still just a kid. And you have not run into difficulties of adult life, and you don't know what is expecting you. And this uncertainty kills you... and you think what is right and wrong. And this thinking takes a lot of time.

Thus, the uncertainty based on lack of information and experience prevents students from making rational and thought out decisions about profession. All of these refer to developmental indecision where students lack necessary parts to make choice.

Another view about why students might feel indecisive is because they are not ready yet. They are kids with different interests and, thus, would not place required seriousness and thinking to career decision. An illustration of that is in excerpt of conversation with a graduate of mainstream school, Zhandos:

INTERVIEWER: Why students can't decide which degree to follow?

INTERVIEWEE: It is the age when people are just happy. They don't think about things they don't like and don't want to think. Or they just run away from reality and live in illusions. A person does not think thoroughly about future.

INTERVIEWER: As I understand you want to say that the age is not suitable to make career decision?

INTERVIEWEE: For most. I would say around 80% of those who I asked.

According to these finding students at this age are present-oriented, rather than future-oriented. They are focused on today and do not feel need to think about future yet. This applies to a big number of students who are supposed to make career decisions.

4.4 UNT, State Grants, and Parental Expectations in Career Decision Making

Other vital factor that affects students' career decision making is the Unified National Testing (UNT) system and State grants allocation process that are set in Kazakhstan. To a larger extent it touches graduates of mainstream schools. Students from mainstream schools are very concerned with wrong choice of profession which is exemplified in the following response:

We see our brothers who made wrong choice. For example, some have not chosen their profession themselves, but have graduated with that profession, and now working in different sphere. Therefore we must be very accurate when choosing our profession.

This answer shows the importance that students place on career decisions. However, in many cases best students seek to win state grants (scholarships) to study at university. Winning scholarship implies hard work on school subjects that are required to choose

professions. A demonstration of that is given in the following extract from an interview with a student:

Another factor that affects career decision is that our parents tell us that during their time they managed to study for free. Likewise, now we change professions depending on the amount of grants allocated for them. For example, there are very few free places for the profession of a lawyer. Everyone knows it. Depending on that students want to show to their parents... "I also can be like you, I will be like you"... so students want to win grant on their own, and might choose different profession than what they want.

On probing further, the student explained:

For example, if you choose physics now there are plenty of professions with grants allocated for them. If there are many professions then there are many grants. For instance, my parents also tell me that both my father and mother earn free education. Therefore I must win free education and will try to do this.

Allocation of grants for various professions is in competency of Ministry of education and science of Republic of Kazakhstan. The logic behind such allocation is the intention to develop certain manufacturing and technological spheres in Kazakhstan. As students claim the majority of grants are allocated to professions that require knowledge and interest in physics. Professions that require other school subjects do not get equivalent number of grants. As the student claimed, for example, you have very low chances studying law with state grant. However, the extract from conversation provides other important information. Students' parents also pressure them to earn state grants for free higher education. Parents

might do it verbally or non-verbally, but students feel the pressure and responsibility to win grant for free higher education. In responding to a question about whether students would change their choice of profession only to secure grants, a group of mainstream school students replied:

Yes, because we don't know...everyone has family and financial issues...many want to make their parents feel happy...want to make it easier for parents. In fact it is a big alleviation. So, for parents...to help own family... students might fall on to trap to following grants. I saw it in my life. I used to go to courses (additional lessons where students prepare for UNT). Most students there were from villages and therefore they were from families with poor financial situation. Most of them picked physics as major subject for UNT. All they used to say is "I need to win grant and that is it". The most important thing is winning grant. This is their goal. "I will be a teacher or somebody else...most important I will be here" I think such a choice is because of family financial situation. There I saw that financial statuses affecting the choice of profession.

From the focus group interview with students, it was learnt that many students, and most responsible, smart, and caring ones, work hard to earn state grant, and in doing so risk to choose profession they know nothing about. They even do not consider the choice of profession; they consider if there are grants for it. Students are worried about their families; they understand the hard situation they are at. They see how their parents will struggle if they don't receive grant and therefore make career decisions under pressure. Thus some students make career decisions based on family financial situation. Others are pressured by families and relatives to win state grants:

I think this winning grant issue is only needed to other relatives or parents' friends. Tomorrow they will say "his daughter won grant or she couldn't"... therefore I feel like I am not doing it even for my parents, I am doing it for others. I don't want to push myself to win grant like this for somebody else.

Student's ability to win grant is a factor that affects parents' reputation. If a student fails to earn state grant, then his/her parent reputation will implode. However, grants are not distributed equally among professions. For example, with physics as a major subject there are many professions with grants. For lawyer or manager professions there are very few or none. Likewise, another participant student highlighted that "I will go for any profession I have enough test score for. The most important is not to be burden to my parents". From such replies it is evident that students hesitate to place additional financial pressure on their parents by paying tuition fees and other university costs. Therefore many of them do choose professions that they are able to receive state grant for.

4.5 Assist that Students Need in Career Decision Making

In many cases students lack information, understanding and experience about professions that exist. They do not possess deep understanding about what holders of various professions do at their job places. One participant highlighting support that their school provided about career decision making said: "School organized guidance tests and invited psychologists to conduct one-on-one discussions. I can say that it helped me to choose profession". Therefore career guidance and school counselor's support are vital for students career decision making. Another interview participant said:

16-17 years old is not enough to make decision...we surf internet, ask parents and friends, want to find professions that are close to us...or we pay attention to income of the profession...this is how we make career decision.

However, we do not know if the profession is hard or easy...what are advantages and drawbacks of the profession...therefore we could go to universities or workplaces, learn it at place, talk to people of the profession...I think these things must be done before making a career decision. I think we need to learn all of these before 18 or 20 years old.

This quote highlights students' struggle with career decision making. It emphasizes that they do not understand the essence of professions. They just know the popular name of profession which sounds trendy and cool, nevertheless, lack understanding about what it means to be the holder of a certain profession. Another student clearly showed the problem:

“Today we know only exterior of a profession, but not interior. If we saw interior we could have distinguished positive and negative aspects of it. Knowing this we would be better equipped to make correct choice of it and set goals for future”.

Thus students lack information and experience relevant to do thought out decisions and have more certainty about future prospects.

Zhandos emphasizes psychology as an important factor that influences career decisions. However, because students do not receive quality psychological services at school they are very weak in this aspect. Zhandos points to the problem that students do not know their character, their skills and abilities, their interests in life. Therefore they are unable to be effective in career decision making. A group of students from mainstream school also points out that psychological services at school are at very low level and of little use to students. Usually the personnel at psychological services either unqualified or busy doing other school work. Zhandos' advice to high school students was “to

individually do psychological and career guidance tests online. It will help them identify their hidden skills and wants. This might help in career decisions”, he said. Another point that he makes is relevant to investigating professions. He suggested:

First thing that high school student must do is for whole year visiting various professions just as a trainee. A week or at least a couple of days might be enough. For example, some want to study at school of Ministry of Internal Affairs. They should go and see how policemen patrol streets. Such simple thing would have been very helpful for many school graduates in career decision making.

Indeed, quite simple and useful. Just arrange for yourself practice at various work places and it will be very helpful to identify the professions that suite you. Another student from specialized school said: “I think that there should be presentations where presenters would be professionals of their job and they can say to us what profession we should follow and how to succeed in it. Also there should be career advisors and people who have life and career experiences.”

4.6 Summary

This chapter focused on main research findings. The issues of age, maturity and academic subjects and their influence on career choices were presented. Lack of students' experience and information in order to conduct career decisions were also presented. State grants distribution system and its effect on choice of professions were showed. The issues that students need assistance with were suggested at the end.

Next chapter will focus on conducting analysis and discussion of findings discovered during this research work.

Chapter Five: Discussion

5.1 Introduction

In previous chapter I presented findings of this research. I looked at challenges that students face when making career decisions and factors that affect their choices. Maturity level, lack of information and experience about professions, parental expectations, and distribution of State grants were identified as important factors influencing students' career decisions. This chapter discusses and analyzes the findings in light of literature. It consists of five sections. First, I explain the transition from high school to higher education in Kazakhstan and what students go through during that time. Second, I discuss how age and maturity level affect career decision making. Next, the influence of academic subjects on career decision making is discussed and analyzed. Finally, I discuss how UNT and state grant distribution affects career decision making process in Kazakhstan.

5.2 Higher Education Systems in Terms of Career Decision Making

There are two major types of in-state dominated tertiary education systems in terms of career decision making process. First type, mainly used in the United States and some other countries, requires that high school students decide school or direction within a higher education institution upon acceptance to it. Thus, high school graduates apply to university programs which allow for selection of various classes and credits within several schools at a higher education institution (Bartolj and Polanec, 2012). In such a system choice of a major is made usually when enrolling to the third year of university. There are two important advantages of adopting such a system. First, it allows for extra time, which is quite important at this stage. An individual who is twenty years old is not the same to the one who is seventeen or eighteen in terms of career decision making. Second, students get valuable higher education experience and life experience out of school and home. This

experience is vital. In terms of Kazakh collectivist culture it is even more important to have this extra years and experience under new circumstances. There students become more self-confident, develop personal values and interests, accept responsibility for self. Second type of tertiary education system is when students declare their major when filling application to higher education institution. Thus, from the first day at university students have preselected program which they have to follow and graduate with specific major. Such system is used in most former Soviet countries, Belgium and some others (Germeijs et al, 2012). Kazakhstan also received it as a legacy of Soviet system. Main disadvantage of such a system is that high school graduates, as discussed in the previous chapter, have to declare their major before they are accepted to university. In many cases they might be immature and unprepared for making career decisions.

In addition to that, Kazakhstan developed the UNT as a system to distribute State grants for tertiary education in Kazakhstani universities. Students who score highest on UNT are eligible for free education for the course of a program. Most talented, responsible, and caring students from all Kazakhstan race for the state grants which account for 10-15% of all university enrollees. However, state grants are not evenly distributed among all programs and disciplines. According to governmental demand some professions / disciplines receive more state grant places, others get none. To decide for their majors, students have to pick one or two school subjects. For example, to enroll into engineering program in a university, students have to write test in physics subject. To study law at university students need to demonstrate their abilities in world history on UNT. Thus, high school graduates in Kazakhstan have to declare their major upon graduating from school and it goes through the process of taking UNT in subjects which allow them to go for a major decided.

5.3 Immaturity and Lack of Readiness

The study findings showed that high school students do not possess necessary skills and experience to make informed career decisions. Most of research participants stated that they understand that decision about a career is a vital one and it predetermines the success or failure in their careers. However, they also admitted that it was very difficult for them then, because they lacked information about career options, work experience, life experience, and required intellectual development necessary to make the decision. In addition to that, most students have not developed own values and needs in order to adopt comprehensive approach to career decision making. All of these point to immaturity of high school students to make career decisions. Most participants in this study were asked questions and further probed if they thought that high school students were matured enough to make career decisions and the common answer is that they are not.

Erikson (1959) developed the concept of identity foreclosure. According to it, individuals are supposed to make decision before reaching developmental stage required for it. Similarly, high school students mostly are not ready to involve into informed career decision making due to young age, lack of life and job related experience and other aspects. Findings of this research also correspond to Perry's (1970) results. He found that throughout four years of university students go through several stages of intellectual and ethical development that substantially improve students' skills of informed career decision making. According to him, during first stage of 'Dualism' students adopt simplistic approach to thinking. They tend to accept and follow advice of older people as those were life rules. It corresponds to first year higher education and high school students' level. My observations and interviews revealed exactly the same attitude of high school students to the issue of career decision making. Moreover, students stated that at a high school time

they are not able to systematically and rationally approach the issue of career decision making. Only during second and third years of university students become aware that they are in charge of their own life and start making decisions on and for their own (Perry, 1970). Mau (2004) also found that university level students face significantly less career related difficulties and referred to such notion as career maturity. Thus, many researchers found that age and higher education experience are significant factors that affect students' ability of career decision making.

The study also demonstrated that when at high school, students do not take full responsibility towards their future career. The student's response suggests that at high school there are no external and internal triggers necessary for students to take responsibility about their career in their own hands. They possess, rather, simplistic approach to thinking and in many cases accept parents' or others' authority and would follow their advice as a law or rule. However, leaving school, meeting new peers and university professors, taking courses, entering atmosphere of last stage before real adult professional life influence students to become more responsible about their own future, and thus, own careers. According to research findings, high school students have various goals and motivations to enter higher education. Most important of those are to secure free education through scholarships, meet parental expectations about selected professions and locations of studies. However, students at this age are not ready to take responsibly about their own future depending on their own interests and values, and developing their own careers.. This finding is also supported by Perry's (1970) research which suggests that only in the fourth year of higher education students understand that they are in charge of their own life and career. Greenbank (2014) research identified that students in many cases are present oriented rather than future oriented. Therefore they deal with current issues, but not

future issues. They are focused on today and do not feel need to think about future yet. This applies to a big number of students who are supposed to make career decisions.

5.4 Career Choice Because of Academic Subjects

The study findings show that a school time is not a time when high school students are able to systematically and rationally approach their career decision. Many participants claimed that they approach career decision based on subjects they have to take to get a degree. For instance, some leave economics major because they find easier path which allows them escape challenging math classes, or biological engineering degree is not worthwhile because it requires organic chemistry class. These are findings from interviews with Nazarbayev University students who are able to pick subjects.

High school students who prepare for UNT to win State grants also pick subjects that they study to take the national test. In order to study law at higher education institution students need to take UNT in the world history. Students who wish to become information technology majors need to take UNT in physics. There is definitely logic behind the required subjects to study for a certain degree at university. However, it should be vice versa – first, students need to identify, hone their choice and understand degree they want to receive, then it will lead to the subject they have to take to follow the degree. In the current situation students just decide about subjects they want to do depending on how difficult or easy a subject is, and after that they look for majors they can select with the given subject.

The above phenomenon is usually referred to as “Escalation of commitment” (Doolan et al, 2010). Students become locked into particular course of action because they have studied the subject for extended period of time they feel that they have to take the subject on UNT and follow with majors that it offers. Greenbank (2014) states that many

students at the age of 15 or 16 believe they are locked into a particular course of action. This belief might come from particular subjects that they have studied during school time. Because students are unable to engage in career decision making, they find themselves in a situation of escalation of commitment towards particular subjects and degrees that follow from studying those subjects (Doolan et al, 2010).

5.5 UNT, State Grants, and Parental Expectations

Preparation for UNT and receiving state grant for higher education are two questions that worry most of the mainstream school students. The explanation for that is that specialized school students do not have to take UNT. Their UNT scores are assigned to them based on their school year marks and external examination results. Thus, if students of mainstream schools receive grade 5 out of 5 at school for a subject, then he/she is automatically given maximum score of 25 for the subject in UNT. Therefore receiving good score in UNT is rather extended problem of high school time for specialized school students. They study well and then don't worry about the results. Mainstream school students, on the other hand, prepare for UNT during high school time and take test in one day. Therefore they feel more stressed and higher responsibility. Interview questions with students of both types of schools included questions about UNT and problems with it. None of specialized school students placed UNT as problematic factor, whereas, almost all mainstream school students gave UNT a high level of importance.

Second reason why UNT is less important for specialized school students might be that most graduates of specialized school usually continue their education at Nazarbayev University or abroad. State grants that are decided through UNT allow students to study at governmental and private higher education institutions within Kazakhstan except Nazarbayev University and some others. Very few of graduates of specialized schools

study at governmental or private universities in Kazakhstan. Graduates of mainstream schools, on the other hand, mostly go to higher education institutions within Kazakhstan. They focus less on Nazarbayev University and international opportunities. Therefore mainstream students are mostly dependent on UNT and winning state grants whereas specialized school students are not.

Another finding of the study is that parents affect students' career decisions. Even though most participants claim that their parents allow their children to choose profession on their own, parents still significantly influence students' career decisions. They do it indirectly, and in many cases unintentionally. As the study discovered, parents pressure students to win state grants. They usually let students know it by providing examples of selves or other influential persons for students. They say that these people won state grants during their time, so now it is also the student's responsibility to win grant and continue the tradition. It feels like a big tragedy for youngsters to let their parents down by failing to win a state grant. Because state grants are not equally available for all professions, students are pushed to choose professions that provide more grants. This means that students might go for professions they are not interested in. It is also important to take into account the finding that students of this age are not settled with their values, interests and needs. Absence of their own values and presence of strong parental influence to win grants is a strong factor for students to take certain course of action.

Another important factor that pushes for students to seek for state grants rather than effective career decision is culture. Collectivist societies such as Kazakh culture place lesser importance to individual goals and more to group goals (Triandis et al, 1988). The group goal in this context is family goal. Family needs that student wins a state grant and gets an opportunity for free education. This means that family won't have extra financial

pressure from a student anymore and will be able to meet other responsibilities such as supporting other kids. Given that individuals at this age have not formulated personal values, goals, realistic career interests they will tend to fall under parental influence to win grant, even in exchange for personal career goals that might be at the stage of development yet.

According to findings of the study most vulnerable groups for neglecting profession in race for state grants for higher education are students with low socio-economic background. In economic realm of Kazakhstan rural-urban income gap is significant (Country Partnership Strategy: Kazakhstan 2012–2016, 2016). Thus the issue of sacrificing effective choice of profession for opportunity to win state grant to higher education most significantly affects students from rural areas. According to the study findings most students from rural areas set their main goal as winning the state grant no matter to what profession. Their goal is to escape to the city. For that they need to have free education opportunity. This they can achieve through getting the state grant to whatever profession that is available. Even though getting state grant resolves current issue for students, after students develop their own values, interests, needs their career choice might arise as a problematic issue because it was not done properly. However, students are not to be blamed. They act and survive in the circumstances they are in. It is the education system and economic situation that created conditions for ineffective career choice for high school graduates from various backgrounds.

There is another cultural aspect that influences students' career decisions in Kazakhstan. According to the study findings relatives, family friends, and society as general place additional pressure on high school graduates to win free education. For parents it is very important not to be disgraced before their friends and peers for their

children. After UNT and distribution of state grants take place people start discussing and gossiping about whose kids scored high and low on UNT and who earned state grants and who could not. This is the time when parent want to hold head straight and be proud of their children and selves. Their children all understand this and try to act accordingly. Thus their main goal becomes to score higher on UNT and win state grant rather than to choose a profession they are interested in. Of course, if UNT score is high enough and there are some grants available for the profession that students want they have opportunity to meet both requirements; to win a state grant and study the profession they want. However, if a student scored low, then it is time to think about other professions that require lower UNT score to win state grant. In addition to that, it is safer to choose subject for UNT that allow for more professions that provide state grant opportunities. Those are subjects like physics and biology.

5.6 Summary

In this chapter I have discussed main findings from the research. With the support of literature I discussed the aspect of career decision making during the transition from high school to university in Kazakhstan. As findings show, the system of transition from high school to university is not very easy for students in terms of providing time and experience needed to make career choice. Next, I have discussed how immaturity and absence of responsibility affect career decision effectiveness in Kazakhstan. Both lead to ineffective career decision by students. Third, I analyzed what role academic subjects play in the choice of profession. Last, I have discussed how UNT and distribution of state grants system influence students career choices. In fact, the system creates a path that leads to ineffective career decisions by students. Particularly, current system puts pressure on students from low socio-economic backgrounds to choose professions they can hope for

grants. Systematic ineffective career decisions for large number of people inevitable lead to low specialization and poor economic performance for a country as general.

Chapter Six: Conclusions and Implications

6.1 Introduction

This chapter summarizes the findings of this study and suggests implications for stakeholders. The purpose of this qualitative research was to explore the process of career decision making, to understand variety of factors influencing high school students' career choices, as well as, to investigate the hardships and uncertainties that they face in the process. In addition to that the study focused on ability and readiness of high school graduates to make career decisions. Particular attention was given to the system of transition from high school to university in Kazakhstan and career decision making difficulties that arise in the process.

The chapter consists of three sections. The first section touches upon the four research sub questions. It provides conclusion to findings and discussion of findings and contributes to literature. The second section describes the study's policy implications for two ministries of Education and Science and for Investment and Development. It also provides practical implications for high school administrations, parents and students. The third section suggests implications for the researcher and areas for further research.

6.2 Revisiting the Research Question

What factors influence students' career choices at the two types of schools? What hardships and uncertainties students of both types of schools face in the process of career decision making?

There are various factors that influence students' career decisions. However, this research focused on problematic aspects and sought to understand what factors prevent students from making effective career decisions in context of Kazakhstan. Thus, there are

four main factors that prevent high school graduates from making effective career decisions: 1. In-state dominated tertiary education system in terms of career decision making process; 2. Immaturity and lack of readiness for taking responsibility for own personal career; 3. Higher education state grants allocations system; 4. Collectivist culture and parental expectations with regard to winning state grants.

In Kazakhstan in-state dominated tertiary education system is constructed in such a way that high school graduates have to declare their university major upon finishing high school. Later there is very little opportunity for students to change major eliminating negative financial or time related consequences. Thus, from the first day at university students have preselected program which they have to follow and graduate with specific major that they have declared upon graduating from high school.

Adolescents who are 16-18 years old in the realm of Kazakhstani collectivist society mostly are not prepared to make career decisions. In many cases they are immature and lack work experience, life experience, required necessary level of intellectual development and feeling of responsibility for personal career and future. In addition to that, most students have not developed own values and needs in order to adopt comprehensive approach to career decision making. They are still kids. It is irrational to demand from students to make important life decision at this time. Yet, this is the case in current situation.

State grant are allocated upon the governmental order to prepare certain number of professionals in different fields. It is understandable and logical from the position of government which tries to diversify economy, develop certain industries. Therefore government needs specialist in those spheres. However, such approach has its drawbacks. Students seek for grants and doing so they neglect effective career decision making and go

for professions they can earn grant. In fact, the very aim to develop diversified economy suffers because specialists who are prepared are not really into the profession they are studying. Their aim is to study for free.

Kazakhstani collectivist culture and parental expectations even aggravate the problem of state grants. Students at the age of 16-18 are maximalists. They hold to the idea that they have to alleviate financial pressure on parents and make the decision to no matter what win the grant. Parents also promote that by saying that during their time they managed to study for free. However, parents do not take into account the difference in the Soviet system and current system in number of grants and system of their allocation. They just demand from their children the state grant. Society also plays its role through discussions and gossips about whose children could win grants and whose could not. Then, the only way for students is find easy way to win grant. Choice of profession is second or third priority. Given that students usually do not adopt personal values, interests and needs until then, chances that students study the profession they really want are very low. These are main factor that prevent students from effective career decision making.

All of these aspects of career decision making as lack of readiness, parental influence, grant allocation and culture lead to one major consequence; students make ineffective career decision which do not reflect their own interests, values, beliefs, abilities and skills. One negative outcome is that there is high rate of university drop outs. Shakirova (2016) reports that in Kazakhstan around 30% of economics major students dropped out from university not earning any degree in 2014. Another negative outcome is that very few university graduates are employed according to their university degree. The highest percentage of graduates who were employed according to their university diploma was in healthcare sector and it accounted for only 18% of all graduates in the sphere. It is a

big question for the government and economy where do other 82% of healthcare graduates find jobs and become helpful to selves and to the country. Thus, ineffective career decisions lead to lose-lose situation both for individuals and national economy.

6.2.2 How satisfied are graduates of both types of schools with their career decisions?

The findings suggested that graduates of both types of schools are not satisfied with their career decisions. Specialized school graduates who attend Nazarbayev University right now still have not decided about their profession. Nazarbayev University is one of few higher education institutions in Kazakhstan that allows for declaration of major as late as at the end of year two of bachelor's program. However, these students when graduating from high school thought they knew what profession they were going to do. Nevertheless, after coming to Nazarbayev University, gaining certain academic and life experience, getting older and wiser, they now do not know what particular profession they are going to pursue. They are just experiencing the normal career decision making process apart from personal and parental pressure to win grant, apart from premature thinking about future and career. They are involving in the process of taking personal responsibility for their career and for future life. This inevitably leads them to rigorous thinking, contemplation and deliberation about their career decision making. Yet, a very small number of Kazakhstani students has the opportunity to go through such comprehensive decision making process. Most have to continue with the decision they have made when the priority was to win grant, but not to find own path in life. Thus, I can conclude that school graduates are not satisfied with their career decision made at school. Internationally, it is estimated that 50% to 60% of students who entered university decided about their profession change their

major half-way (Astin, 1977; Burns & Kishler, 1972; Gordon, 1976; Hoffman & Grande, 1977).

6.2.3 What kind of support do students need in the process of career decision making?

In many cases students lack information, understanding and experience about professions that exist in Kazakhstan and elsewhere in the world. They do not possess deep understanding about what holders of various professions do at their job places. To address these issues students need career guidance programs. Students suggest organizing visits to production cycles, to factories, to offices and many other work places. They seek talking to various professionals to understand and know more about certain professions and then think if this is what they want to do in future. They understand that all of these must be done before the system requires from them the final decision about profession.

Another suggestion by students was that they need help from psychologists. Students lack understanding of self, of personal character, interests, abilities and skills. Understanding these would help them to make effective career decisions. However, these services are not provided to high school students as schools, particularly the mainstream schools, do not have career counselors.

6.3 Implications of the Study

The findings of the study have implications for policy and practice of various stakeholders in Kazakhstan, namely the Ministry of Education and Science, Ministry for Investment and Development, and schools. More practical implications are addressed to high schools, parents and students. The study also has implications for the researcher and areas for further research.

6.3.1 Implications for the Ministry of Education and Science and Ministry for Investment and Development

The results of the study suggest that the two ministries collaborate in developing and implementing country wide career guidance program for high school students. The program must focus on providing high school students with theoretical and practical tools of career decision making. Apart from developing a new course of career guidance at school there must also be connection with regional businesses and research centers to organize not only visits, but also practical events for students with various organizations. The role of MID is precisely to attract businesses and organizations to participate in the career guidance programs for high school students. If students will be able to experience and talk to various profession holders, by the end of high school it would positively affect the effective career decision making.

The study results also suggest that Ministry of Education and Science initiates reform in the system of secondary and higher education and make career counseling as a continuous process rather than an intermittent one. The reform should aim to provide extension for students with career decision until later time. One possible solution is to adopt system implemented in United States whereby students are accepted to higher education institutions without declaring their major at once, but rather are allowed to study for up to two years, taking various courses before they have to declare their final major. This approach provides time necessary for students to develop necessary personal values, interests, needs and experience. This experience is vital because it allows students to be more independent from families, focus on their own, rather than family needs and interests.

The system must also eliminate distribution of State grants based on governmental order whereby some professions get more grant places whereas other professions get none.

This would take away the priority to win grants only and shift students' attention to career exploration issues. Thus it would create conditions for students to make more effective career decisions system wide.

6.3.2 Implications for High Schools, Parents and Students

The study results suggest that on local level, high schools should organize career guidance programs for students. Parents, their workplaces and personal connections can be useful source in helping organize visits to business sites. Similarly, schools are also vital in communicating to parents the idea that effective career decision is much more important than winning grants because consequences of this decision will follow students for life time.

If we manage to eliminate the pressure of winning state grants, and create conditions whereby students make career decisions after developing personal values, needs and career interests, students would be able to make more effective career decisions.

6.3.3 Implications for the Researcher

This study was my first experience of conducting systematic research. This experience helped me build understanding of how to conduct a research. I was happy to listen to different people and bring their voices and views in to this research.

In addition to that conducting the study helped me build my research skills. My practice of a teacher of Economics and Global perspectives and project work will reflect and improve from my experience of writing the thesis. Thus, my experience of conducting research will benefit to my students. Now I am equipped with all tools needed to conduct research in education field. These skills are tools that can take wherever my curiosity decides.

6.3.4 Area for Further Research

A lot of literature on career decision making process originates from western countries such as USA, UK, Canada, and Switzerland. However, there remains a large gap in the field of in-depth studies about career decision making in developing countries, including Kazakhstan. To better explore this issue further research should focus on people who are employed not according to diploma major and try to find out if ineffective career decisions were causes of such outcomes. Another suggestion is to conduct longitudinal study of people who chose various professions and see how their career develops. Such studies would help to discover how career decisions affect individuals and their careers. Yet another study could be to conduct a quantitative study with a larger sample of schools spread over different regions in Kazakhstan to further explore the factors influencing students' career decisions and the challenges students face in making informed decisions about their careers.

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Appendices

Appendix A:

INFORMED CONSENT FORM FOR A STUDENT

**Title: “Investigation into processes and factors influencing high school students’
career choices”**

Dear Participant,

My name is Olzhas Bidanov and I am a Master student at Nazarbayev University Graduate School of Education in Astana. As part of my Master Program, I am conducting a study on the process of career decision making by high school students at two public-funded schools in Kazakhstan.

You are invited to participate in this study which aims to explore, describe and analyze “How do high school students arrive at their career choices, what challenges they face in the process and what factors affect their career decisions at two publicly-funded schools in Kazakhstan”. Furthermore, the study aims to contribute to the literature on career planning and decision making in Kazakhstani context. You were selected as a possible participant in this study because your participation will potentially contribute to in-depth understanding of the process of career decision making by high school students of publicly-funded schools in Kazakhstan.

Please, read below information carefully, and feel free to ask questions about anything unclear before making your decision whether or not to take part in the study.

- You have a right to participate or not to participate in this study. In case you decide to be a part of this study you will still enjoy the freedom not to answer particular questions if you do not want to. Moreover, you are free to stop interview at any time or for any reason. The interview will last for approximately 45 minutes.

- Everything you will say during the interview will be kept confidential. Neither the name of the school nor information about the research participants will be mentioned in any part of the study.
- I will use a Dictaphone in order to record the interview. Later I will use the recording to analyze your responses. However, first, I will need your permission to use the Dictaphone. Moreover, you will have the right to revoke the recording and end the interview at any time.

All interview data will be saved at a secure place. After the research project will be completed, the tapes with recordings will be deleted. The project is expected to be finished by July, 2017.

Risks and benefits:

I can assure you with confidence that your participation in the study will have no known risk for you. I am committed to fully comply with the NUGSE ethical guidelines to ensure anonymity, privacy and confidentiality of information received from the participants. However, your participation will contribute to the study in terms of increasing the understanding of the process of career decision making by high school students: factors influencing career choices, hardships and challenges that students face in the process.

If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact Master's Thesis Supervisor for this student work, professor Mir Afzal Tajik, afzal.mir@nu.edu.kz or +7 747 5276816.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a

participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359.

You can also write an email to the NUGSE Research Committee at
gse_researchcommittee@nu.edu.kz

Please check all that apply and sign this consent form if you agree to participate in this study.

RE: "Investigation into processes and factors influencing high school students' career choices"

I have carefully read the information provided.

I give permission for the interview to be recorded.

I give permission for the following information to be included in publications resulting from this study:

my name my title direct quotes from this interview

I understand the procedures described above. My questions have been answered to my satisfaction, and with full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Signature: _____

Date: _____

Researcher signature: _____ Date: _____

The extra copy of this signed and dated consent form is for you to keep.

According to the law of the Republic of Kazakhstan an individual under the age of 18 is considered a child. Any participant falling into that category should be given the Parental Consent Form and have it signed by at least one of his/her parent(s) or guardian(s).

Appendix B:

INFORMED CONSENT FORM FOR PRINCIPAL

**Title: “Investigation into processes and factors influencing high school students’
career choices”**

Dear Principal,

DESCRIPTION:

First of all, let me introduce myself. My name is Olzhas Bidanov and I am a Master student at Nazarbayev University Graduate School of Education in Astana. As part of my Master Program, I am conducting a study on the process of career decision making by high school students at two publicly-funded schools in Kazakhstan. The purpose of my research is to explore the process of career decision making, understand variety of factors influencing high school students’ career choices, as well as, to investigate the hardships and uncertainties that they face in the process at the two publicly funded schools, one of which is yours.

I would like to request you to kindly allow me to conduct my research study in your esteemed school. Before you decide whether to allow me or not, may I please invite you to read the information about the study and let me know if you come up with any questions or concerns. Please take time to decide whether or not to allow me to conduct the research project at your esteemed school. I assure you that my researcher study does not intend to evaluate or judge the work of the school administration, the only purpose is to gain in-depth knowledge about how students arrive at their career decisions, what factors influence their decisions and what challenges they face in the process in your school.

TIME INVOLVEMENT:

For the present research I need to interview three students of Grade 11 in order to gain in-depth understanding of the process of student career decision making at your school. The interviews will be hold in one-on-one manner and will last for approximately 45 minutes. Another type of interview I will conduct is focus-group interview with 4 to 5 students in a group at one time which will last for around 60 minutes. The researcher needs one quiet classroom so that it is possible to conduct an interview and record answers without being distracted by others.

RISKS AND BENEFITS:

There is no known risk for most of the participants; however, there might be minor psychological risks for students since these participants study at this schools and tend to be most vulnerable to criticism, penalty and psychological pressure from the school administration in case the information they provide is leaked or identified. In order to prevent such risks from happening, the researcher will fully comply with the NUGSE ethical guidelines to ensure anonymity, privacy and confidentiality of information received from the participants.

Participants will be informed about the purpose of the interview which is to explore the process of career decision making that students go through and factors influencing their career choices. It is important to ensure that no data is leaked to school administration or to other school representatives because they might show pressure on students who are indecisive about their career choices as they might see it as a factor that undermines school prestige. The anonymity, using pseudonyms, and safe storing of data gathered by the researcher will ensure from such information leakages. Similarly, no information will be provided to participants' parents as in some cases parents might be against their offspring decisions and therefore show pressure on the formers.

The ultimate goal of the study is to positively influence the economy through improving the education job mismatch. This will benefit to the national economy and society. Ministry of Education and Science and Ministry for Investments and Development of the Republic of Kazakhstan will potentially benefit by receiving particular recommendations relevant to the field of career planning.

Overall, the selected schools and the participants may benefit from the study in terms of further improving the career planning and the way it is conducted. However, I cannot guarantee that participants will receive any particular benefits from taking part in this research project.

PARTICIPANT'S RIGHTS:

If you have read this form and have decided to assist in this project, please, understand **participation of students is voluntary** and they have the **right to withdraw the consent or discontinue participation at any time without penalty**. Students have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals.

CONTACT INFORMATION:

Questions: If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact the Master's Thesis Supervisor for this student work, professor Mir Afzal Tajik, afzal.mir@nu.edu.kz

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359. You can also write an email to the NUGSE Research Committee at gse_researchcommittee@nu.edu.kz

Please sign this consent form if you agree to participate in this study.

RE: "Investigation into processes and factors influencing high school students' career choices"

- I have carefully read the information provided;
- I have been given full information regarding the purpose and procedures of the study;
- I am aware that participants' interviews will be recorded;
- I understand how the data collected will be used, and that any confidential information will be seen only by the researcher and research supervisor and will not be revealed to anyone else;
- I understand that participants are free to withdraw from the study at any time without giving a reason;
- With full knowledge of all foregoing, I agree, of my own free will, to assist in this study.

Signature: _____ Date: _____

Researcher's signature: _____ Date: _____

The extra copy of this signed and dated consent form is for you to keep.

Appendix C:

CONSENT FORM FOR STUDENT'S PARENTS

**Title: "Investigation into processes and factors influencing high school students'
career choices"**

Dear Parent,

My name is Olzhas Bidanov and I am a Master student at Nazarbayev University Graduate School of Education in Astana. As part of my Master Program, I am conducting a study on the process of career decision making by high school students at two public-funded schools in Kazakhstan.

Your child is invited to participate in this study which aims to explore, describe and analyze "How do high school students arrive at their career choices, what challenges they face in the process and what factors affect their career decisions at two publicly-funded schools in Kazakhstan". Furthermore, the study aims to contribute to the literature on career planning and decision making in Kazakhstani context. Your child was selected as a possible participant in this study because his/her participation will potentially contribute to in-depth understanding of the process of career decision making by high school students of public-funded schools in Kazakhstan.

Please, read below information carefully, and feel free to ask questions about anything unclear before making your decision whether or not to take part in the study.

- You son/daughter has the right to participate or not to participate in this study. In case you decide for him/her to be part of this study, he/she will still enjoy the freedom not to answer particular questions if he/she does not want to. Moreover, he/she will be able to stop interview at any time or for any reason. The interview will last for approximately 45 minutes;

- Everything he/she will say during the interview will be kept confidential. Neither the name of the school nor information about the research participants will be mentioned in the study;
- I will use a Dictaphone in order to record the interview. Later I will use the recording to analyze your son's/daughter's responses. However, first, I will need your permission to use the Dictaphone. Moreover, your son/daughter will have the right to revoke the recording and end the interview at any time;
- Your child's participation in the study will not have any negative consequences for his studies, performance, and relationships at the school;
- All interview data will be saved at secure place. After the research project will be completed the tapes with recordings will be deleted. The project is expected to be finished by July, 2017.

Risks and benefits:

Your child's participation in the study entails no known risk for him/her. I will fully comply with the NUGSE ethical guidelines to ensure anonymity, privacy and confidentiality of information received from the participants. However, your child's participation will contribute to the study in terms of increasing the understanding of the process of career decision making by high school students: factors influencing career choices, hardships and challenges that students face in the process.

If you have any questions, concerns or complaints about this research, its procedures, risks and benefits, contact Master's Thesis Supervisor for this student work, professor Mir Afzal Tajik, afzal.mir@nu.edu.kz

If you or your child are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your child's rights as a participant, please contact the NUGSE Research Committee to speak to someone independent of the research team at +7 7172 709359.

You can also write an email to the NUGSE Research Committee at gse_researchcommittee@nu.edu.kz

Please check all that apply and sign this consent form if you give permission to your child to participate in this study.

RE: "Investigation into processes and factors influencing high school students' career choices"

I have carefully read the information provided.

I give permission for the interview to be recorded.

I give permission for the following information to be included in publications resulting from this study:

my child's name my child's title direct quotes from this interview

I understand the procedures described above. My questions have been answered to my satisfaction, and with full knowledge of all foregoing, I agree, of my own free will, that my child participates in this study.

Signature: _____ Date: _____

Researcher signature: _____ Date: _____

The extra copy of this signed and dated consent form is for you to keep.

According to the law of the Republic of Kazakhstan an individual under the age of 18 is considered a child. Any participant falling into that category should be given the Parental Consent Form and have it signed by at least one of his/her parent(s) or guardian(s).

Appendix D:

STUDENT ASSENT FORM

**Title: "Investigation into processes and factors influencing high school students'
career choices"**

Dear Participant,

My name is Olzhas Bidanov and I am a Master student at Nazarbayev University Graduate School of Education in Astana. As part of my Master Program, I am conducting a study on the process of career decision making by high school students at two public-funded schools in Kazakhstan.

You are invited to participate in this study which aims to explore, describe and analyze "How do high school students arrive at their career choices, what challenges they face in the process and what factors affect their career decisions at two public-funded schools in Kazakhstan". Furthermore, the study aims to contribute to the literature on career planning and decision making in Kazakhstani context. You were selected as a possible participant in this study because your participation will potentially contribute to in-depth understanding of the process of career decision making by high school students of public-funded schools in Kazakhstan.

This project will be completed by July, 2017. All interview recordings will be stored in a secure work space until that date. The tapes will be destroyed after the research is over.

Risks and benefits:

Your participation in the study entails no known risk for you. I will fully comply with the NUGSE ethical guidelines to ensure anonymity, privacy and confidentiality of information received from the participants. However, your participation will contribute to

the study in terms of increasing the understanding of the process of career decision making by high school students: factors influencing career choices, hardships and challenges that students face in the process.

When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study.

You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay too. Your parents know about the study too.

If you decide you want to be in this study, please sign your name.

Signature: _____ Date: _____

Researcher signature: _____ Date: _____

The extra copy of this signed and dated assent form is for you to keep.

According to the law of the Republic of Kazakhstan an individual under the age of 18 is considered a child. Any participant falling into that category should be given the Parental Consent Form and have it signed by at least one of his/her parent(s) or guardian(s).

Appendix E:
Interview Protocol

Interview Script:

My name is Olzhas Bidanov and I am a Master student at Nazarbayev University Graduate School of Education in Astana. As part of my Master Program, I am conducting a study about the process of career decision making at two public-funded schools in Shymkent. I am glad to have you as an interviewee and to see you eager to contribute to the research. To remind, the aim of the research is to explore the process of career decision making, understand variety of factors influencing high school students' career choices, as well as, to investigate the hardships and uncertainties that they face in the process. Thank you for dedicating your time and coming to the interview. The interview will last for about 45 minutes. Please, feel free to answer my questions openly without any hesitation and concern about the anonymity of the information you provide as all of your responses will be secure and your name will be anonymous. If you feel uncomfortable with any question or feel pressure, please, do not hesitate to stop at any time.

Interview questions with current students

1. Do you think making a career decision is an important choice? Why/why not?
2. How does the process of deciding your career go for you?
3. Is it an easy process?
4. Have you made your choice of career? If yes, then:
 - a. What is the profession that you chose? Why did you choose this profession?

- b. When did you make this decision?
 - c. What are the factors that influenced you to make the choice?
 - d. To what extent are you confident and satisfied with your decision? On scale from 0 to 10, what is your level of confidence about your choice?
 - e. Do your parents support your decision? What is their opinion about your choice?
 - f. Have you changed your career decision before and do you think you will change it again? Why/why not?
5. Have you made the final choice of your career? If not, then:
 - a. Why haven't you made a choice about your future profession?
 - b. What are the factors that prevent you from making a decision?
 - c. Was there a time that you wanted to become a member of some profession but then changed your mind? If yes, why did you change your mind?
 - d. Do your parents provide you support in your position?
6. Have you consulted anyone to make career choice? Who and why?
7. How would you describe the role of your teachers and school in helping you make an informed decision about your career?
8. What kind of obstacles and challenges do you face in making your decision?
9. Do you think you need support in choosing your profession? If yes, who do you think can provide you support?
10. What kind of support do you need?

11. What kind of things would have helped students in career decisions?

Interview questions with former students/graduates

1. Do you think making a career decision is an important choice? Why/why not?
2. How did the process of deciding your career go for you?
3. Was it an easy process for you?
4. What is the profession that you chose? Why did you choose this profession?
5. When did you choose this profession?
6. What were the factors that influenced your choice?
7. Did your parents support your decision? What is their opinion about your choice?
8. How would you describe the role of your teachers and school in helping you make an informed decision about your career?
9. What kind of support would have helped you in your decision while at high school?
10. To what extent are you confident and satisfied with your decision? On scale from 0 to 10, what is your level of confidence about your choice?
11. Have you changed your career decision before and do you think you will change it in future? Why/why not?
12. Does what you currently study at your higher education or vocational institution reflect and satisfy your career choice?
13. Would you change your profession if you have an opportunity to do so?

14. What is your advice for current high school students in making their career decisions?

Interview Script:

Thank you again for spending these 45 minutes with me. Your contribution is highly appreciated. Please, be informed that I will send you my transcript with your responses where you may do any changes in case there has been any misinterpretation.