

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND
SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

ii

Exploring High School Career Counseling Experiences and Socioeconomic Influences on
College Major Satisfaction

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Dear Aruzhan Dildabay

This letter now confirms that your research project titled “Exploring High School Career Counseling Experiences of College Students” has been approved by the Graduate School of Education, pending the minor changes as specified by the reviewer with final official approval to be given by the advisor.

You may proceed with contacting your preferred research site and commencing your participant recruitment strategy.

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ABSTRACT

In Kazakhstan, the gap between private and public education has become increasingly evident, especially in the way students are assisted in planning their careers and school life. Private schools have expanded in the last few years and have acquired better resources such as good teachers, modern facilities, and career guidance services. At the same time, public schools lag behind. This thesis discusses how high school career counseling experiences, as well as socioeconomic status (SES), influence how satisfied they become with the college majors they finally chose to pursue.

The study was conducted through interviews of ten students: five from a private school and five from a public school. What was brought out from the interviews is a clear dichotomy. The private school graduates were more satisfied with what they had studied. Their schools offered official career guidance, and their families were most often situated to provide secondary support, either in the form of knowledgeable advice or access to activities outside of class. Public school graduates, on the other hand, reported receiving minimal guidance in high school and selecting their major based mainly on considerations of cost or a general sense of what might result in a stable job.

This research reminds us that career counseling needs to be made available to every school, not just those with means. Students should be able to find out what they are good at and enjoy doing no matter where they come from. Improving guidance services, especially in public schools, might be able to provide enough support so that more young people would feel comfortable and satisfied with the education they choose.

Keywords: career counseling, socioeconomic status, major satisfaction, high school guidance, educational inequality, private and public schools, Kazakhstan education

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АҢДАТПА

Қазақстанда жекеменшік және мемлекеттік білім беру арасындағы алшақтық барған сайын айқындалып келеді, әсіресе оқушыларға болашақ мамандығын таңдауда және мектеп өмірін жоспарлауда көрсетілетін көмекте. Соңғы жылдары жекеменшік мектептер саны көбейтіп, жақсы ресурстарға – білікті мұғалімдерге, заманауи жабдықтарға және кәсіби бағдар беру қызметтеріне – қол жеткізді. Ал мемлекеттік мектептер бұл жағынан артта қалып отыр. Бұл диссертацияда жоғары сыныптардағы кәсіби бағдар беру тәжірибесі мен оқушылардың әлеуметтік-экономикалық жағдайы олардың университеттегі мамандық таңдауы мен осы таңдауға қаншалықты қанағаттанатынына қалай әсер ететіні қарастырылады.

Зерттеу барысында он түлекпен сұхбат жүргізілді: бесеуі – жекеменшік мектептен, бесеуі – мемлекеттік мектептен. Сұхбат нәтижесінде айқын айырмашылық байқалды. Жекеменшік мектеп түлектері өз мамандық таңдауына көбірек қанағаттанған. Олардың мектептерінде ресми кәсіби бағдарлау қызметі болған, ал отбасылары қосымша қолдау көрсетіп отырған – не кәсіби кеңес беру арқылы, не сыныптан тыс іс-шараларға қол жеткізу арқылы. Ал мемлекеттік мектеп түлектері керісінше, мектепте кәсіби бағыт-бағдар берудің аз болғанын және мамандықты көбінесе оқу ақысының арзандығына немесе тұрақты жұмысқа алып келуі мүмкін деген жалпы түсінікке сүйене отырып таңдағандарын айтты.

Бұл зерттеу бізге кәсіби бағдар беру қызметтері тек мүмкіндігі бар мектептерде ғана емес, барлық мектептерде қолжетімді болуы керектігін еске салады. Әрбір оқушы өзінің қабілеті мен қызығушылығын тануға мүмкіндік алуы тиіс. Әсіресе мемлекеттік мектептерде кәсіби бағдар қызметін жақсарту – жастардың өз таңдауына сенімді әрі қанағаттанған болуына жол ашады.

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Түйінді сөздер: кәсіби бағдар беру, әлеуметтік-экономикалық жағдай,
мамандыққа қанағаттану, жоғары сыныптардағы бағыт-бағдар, білім беру теңсіздігі,
жекеменшік және мемлекеттік мектептер, Қазақстандағы білім беру

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АННОТАЦИЯ

В Казахстане разрыв между частным и государственным образованием становится все более очевидным, особенно в том, как ученикам помогают в планировании карьеры и школьной жизни. Частные школы расширились за последние несколько лет и приобрели лучшие ресурсы, такие как хорошие учителя, современное оборудование и услуги по профориентации. В то же время государственные школы отстают. В этой диссертации обсуждается, как опыт профориентации в старших классах, а также социально-экономический статус влияют на то, насколько они удовлетворены специальностями в университете, которые они в конечном итоге выбрали.

Исследование проводилось путем интервьюирования десяти учеников: пяти из частной школы и пяти из государственной школы. Из интервью была выявлена четкая дихотомия. Выпускники частных школ были более удовлетворены тем, что они изучали. Их школы предлагали официальную профориентацию, а их семьи чаще всего были готовы оказать вторичную поддержку либо в форме квалифицированных советов, либо доступа к мероприятиям вне класса. Выпускники государственных школ, с другой стороны, сообщили, что получали минимальное руководство в старших классах и выбирали свою специальность, основываясь в основном на соображениях стоимости или общем представлении о том, что может привести к стабильной работе.

Это исследование напоминает нам, что консультирование по вопросам карьеры должно быть доступно каждой школе, а не только тем, у кого есть средства. Учащиеся должны иметь возможность узнать, что у них хорошо получается и что им нравится делать, независимо от их социально-экономического статуса. Улучшение услуг по профориентации, особенно в государственных школах, может обеспечить

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достаточную поддержку, чтобы больше молодых людей чувствовали себя комфортно и были довольны выбранным ими образованием.

Ключевые слова: профориентация, социально-экономический статус, удовлетворенность специальностью, профориентация в старших классах, неравенство в образовании, частные и государственные школы, образование в Казахстане

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Chapter 1: Introduction

In this master's thesis, I aim to explore the influence of career counseling and guidance at the secondary school level on students' satisfaction with their academic choices in higher education. It will also be examined how socioeconomic factors influence these decisions and satisfaction levels. The introductory chapter highlights the importance of career guidance in facilitating the transition from school to higher education, particularly in Kazakhstan, where such programs were only introduced recently. By comparing the experiences of students who had access to career counseling and those who did not, the study seeks to uncover its impact and explore the broader factors affecting academic and career decisions. Additionally, statements of problem and purpose, research significance and questions are to be presented in this chapter.

Career counseling and guidance at a secondary school level is proven to be an essential part of the preparation process for higher education readiness. A common misconception around the phrase “college counseling” is present amongst the general public which frames it as an act of merely providing information and consulting students regarding possible career choices (Hirschi & Froidevaux, 2020). Hooley and Rice (2019), on the other hand, argues that career guidance has a much more complex and crucial role in people’s lives for the reason that the transition between education and employment is a challenging period that requires careful navigation.

In the context of this research study, career counseling is referred to as a process of guidance where a student is analyzed in order to match a career direction that harmonizes with his or her abilities and goals. Contemporary version of this service was phrased as “life design” by Nota and Rossier (2015) that constitutes an activity that helps to design a meaningful self-identity of students through career paths. This service has been introduced

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at Kazakhstan's school system in 2016 which makes it a relatively recent initiative the implications of which are yet to be explored (Syzykova, 2018).

The importance of choosing a suitable major at higher education institutions is proven to be crucial due to the contribution towards long-term satisfaction, optimized learning experience, and personal fulfillment (Maree & Fabio, 2018). Gati et al (2019) also advocates that the role of career guidance is paramount as it has a long-term impact on individuals' "sense of personal productivity" (p. 116) and realization of input to the community. Therefore, identifying the most suitable career trajectory is one of the major factors contributing to the life success of every individual.

This study aims to conduct a qualitative comparative study on undergraduate students to identify whether the presence of career guidance practices at a school program contributed to the satisfaction level towards participants' academic choices. Two groups of participants—those who received vocational counseling during high school and those who did not—were interviewed and assessed to identify differences and explore their college experiences related to their chosen academic major. Satisfaction level towards their academic choices were then compared to identify whether the presence of career counseling services during high school years affected students' overall contentment and alignment with their chosen fields of study in undergraduate education. Apart from analyzing participants' experiences with career counseling practices, their socioeconomic background is also to be taken into consideration when examining college major satisfaction levels.

Statement of the Problem

The problem that this research aims to explore is addressing potential negative consequences of undergraduate students' dissatisfaction in chosen college majors and delving into the underlying contributing factors such as socioeconomic status. Some of the

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detrimental outcomes considered in this thesis include the negative impact on various aspects of Kazakhstan's higher education system, student well-being, and the labor market.

Dissatisfaction with chosen academic paths may motivate students to change their majors and institutions. A poll conducted on 1671 Kazakhstani individuals aged 14 to 30 performed by Demoscope (2015) has revealed that 87% of respondents would change their major or profession, if they had a chance and suitable conditions. There may be several internal and external factors contributing to this significant portion of people expressing interest in switching career paths. Nevertheless, a lack of professional career counseling help during high school could be one of the negative influencing factors that leads to making a regretful choice of an academic major. Besides shifting from one specialization to another, discontent with academic choices may lead to students dropping out of school entirely. According to the official national statistics, there were nearly 70 thousand students who dropped out of universities and colleges in Kazakhstan during the 2023-2024 academic year (Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, 2024).

The research done on the negative impact of career dissatisfaction is to be critically analyzed in the literature review section, yet some of the expected outcomes can be essentially presumed. From the government's perspective, displeasure with one's academic major at a university results in a problem with a waste of resources. Students typically either drop out of school, shift majors internally, or change colleges entirely (Bäulke et al., 2022). This leads to universities losing resources on a student who will not generate any measurable output to have an effect on the school's graduation rate. As for the students' point of view, besides wasting time and resources, their mental health can suffer due to dissatisfaction with their chosen academic majors (Sheldon et al., 2021). Therefore, this

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problem of lack of satisfaction among undergraduate students needs to be addressed to explore its underlying causes and potentially link these issues to career counseling services as a solution.

Purpose Statement and Research Questions

The study aims to conduct a research study amongst public and private high school alumni to identify how the career guidance practices, or lack thereof, influenced their career choice satisfaction, as well as understand how socioeconomic background affected their career choice. The purpose of this research is to explore the lived experiences of students and study their satisfaction levels with chosen undergraduate degrees.

The central research question is as follows: “How does the presence or absence of high school career guidance influence students' satisfaction with their academic choices in undergraduate education?”

The sub-questions are provided below:

- How does socioeconomic background shape students' access to and experiences with career guidance services?
- How do external factors associated with socioeconomic background influence students' choice of undergraduate major?
- How does career guidance influence students' academic satisfaction across socioeconomic backgrounds?
- What suggestions for improvement in career guidance can students provide based on their experiences?

Significance of the Research

Given the notable gap in research that has been done on the role of career counseling in Kazakhstan's schools, exploring career guidance practices through research will help with the understanding of demand, success, and utilization of this pedagogical

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service (Sarzhanova et al., 2017). Other than that, a research done by Cimsir (2019) found that academic major satisfaction amongst college students is positively associated with life satisfaction. This highlights the significant importance of exploring the area of career counseling, as specialists need to be well-equipped to guide students toward the right career path. A survey done by Gallup research has identified the five major components of people's well-being are social, financial, community, physical, and career (Rath & Harter, 2010). This means that career is a vital part of humans' lives that can be considered as a predictor of happiness and success in life.

Summary

In summary, the introduction part has highlighted the crucial role of career counseling in preparing students for higher education and career success. It challenges the misconception that career guidance is merely informational, emphasizing its complex impact on students' academic choices and satisfaction. Other than that, socioeconomic background is also suspected to be a contributing factor for academic choices of students. The next chapter will review existing literature to explore the factors affecting career satisfaction and the potential improvements needed in career counseling practices.

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Chapter 2: Literature Review

This section provides a detailed literature review of existing research on the topics of career counseling, academic satisfaction level amongst students, and the impact of vocational guidance. Relevant research done previously was assessed and analyzed in terms of possible research gaps to be filled by this master's thesis.

Counseling's Influence on Student Career Choices

Counseling in college is quite essential in high school for guiding students regarding career choices and for assuring satisfaction in their careers. In relation to this, Nweze and Okolie (2014) have asserted in the study conducted that with the help of programs related to guidance and counseling, students are facilitated in choosing academic and career goals viewed as one of life's most complicated decisions. The findings of this study showed that a large proportion of Nigerian secondary school students reported inadequacy in the availability of counseling services. For instance, 77.22% said there was no formal counseling available to help them choose careers. Lack of guidance on career choices could result in uninformed decisions by the student that might affect his or her satisfaction with career path choice. Effective counseling, on the other hand, incorporates the students' talents with appropriate job opportunities and make a big difference in their future personal, social, and economic lives. This study, therefore, calls for structured and organized counseling services to guide students in making informed decisions regarding their academic and career futures amidst challenges such as lack of resources and specially trained counselors.

Counseling at high school levels plays a very influential role in shaping students' decisions concerning their career pathways. According to Sharif et al. (2019), by the time students choose study programs that would correspond to their future careers, they face a myriad of challenges. These choices depend on such influences as parents, tutors, future

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income, and expectations from society. This study shows that counseling within colleges can guide a student to pursue career choices in line with the intrinsic interests, along with the financial stability and social status externally. Without proper guidance, one may also not be able to find the viable routes of studying the course he or she has chosen and further may get dissatisfied with the academic and career outcome of the selected career option. The effective college counseling programs provide a structured way of helping students become aware of their strengths, explore career options, and then make appropriate decisions that lead to long-term satisfaction and success in their career.

Socioeconomic and Social Factors in Career Choices

Empirical literature around the concept of career guidance is focused on identifying the relationship between the quality, processes, and experiences of that service and other diverse variables. Dodd et al. (2022) conducted an empirical study focusing on the validation of a career readiness measure, targeting a large sample size of over 5000 secondary school students in England. The research aimed to explore the relationship between career guidance interventions and career readiness among these students. The study offered a psychometrically sound measure of career readiness, which can serve as a useful tool for evaluating career development programs and interventions. While the study provided valuable insights into career readiness assessment, it had limitations such as overlooking potential confounding variables like socioeconomic background and parental influence. The research done by Foskett and Johnston (2010), on the other hand, addressed the role of universities in career guidance and employability by providing valuable insights into the factors influencing educational and career decision-making. The study aimed to understand the socially situated nature of decision-making processes regarding education and careers, employing the conceptual framework of “networks of intimacy” (p. 224). The study highlighted the influence of social factors such as gender, life stage, social class, and

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family networks on career decisions. It emphasized the importance of considering broader societal contexts in career guidance and education policy. These studies show that while career counseling specialists advise in terms of making a decision, an ultimate choice is made by individuals themselves who may be influenced by other factors such as social aspects as well.

The social class that an individual belongs to is another factor that may play a key role in career counseling. A study done by Ahmed et al. (2017) revealed that students studying in the middle class were rarely involved with career counseling services, while schools from a higher social class provided career counseling to every student regularly. These findings represent that the socioeconomic background of students and the school that they attend have a great impact on their career choice outcomes.

The presence of social impact can both motivate and discourage individuals to make certain career-related decisions. When it comes to females working and studying in the IT sector, Malik and Al-Emran (2018) discovered that female IT specialists chose their career paths despite the prevalent societal prejudice that IT is not a suitable field for women. This means that in some cases, social factors may not necessarily exert influence on academic and career choices.

While social aspects are mainly formed by shared expectations and norms that shape behavior within a society, cultural factors and practices are mostly established by people's common beliefs and deep values. The role of culture, studied by Akosah-Twumasi et al. (2018), was analyzed by comparing career choices of students from collectivist and individualistic culture settings. Findings showed that the collectivistic cultural background of students influenced them to pursue a career under the influence of family expectations, while the individualistic setting of the latter allowed students to make personal interests the main deciding factor. Despite the fact that this study displays a

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certain fluidity and lack of precision in describing students' belonging to collectivist and individualistic cultural settings, classifying thusly was helped determine the varying influences of cultural contexts on career decision-making processes. These studies highlight that social and cultural background are crucial external factors that may affect the career-related decision-making processes.

Students' Engagement with Career Counseling Services

When it comes to the perception of career counseling by counselors themselves, Lara et al. (2011) discovered that there is a need for further investigation into student attitudes and the efficacy of counseling practices within educational contexts. Gabriel et al. (2014) further support this argument by determining that a concerning proportion of final-year students of the study remained unaware of available counseling activities. This highlights the necessity for enhancing awareness and engagement among students. However, the study lacked insights into the long-term impact of these services on career trajectories and professional growth.

Having career guidance and counseling services available to students may not always be enough to help them make better career decisions. A study done by Keshf and Khanum (2021) on undergraduate participants revealed that students are not utilizing career counseling-related services provided by their universities. The possible reason for this is that students were not exposed to a greater level of awareness of existing resources. Despite having all of the tools, such as career fairs, relevant courses, or counseling sessions, students were seldom told about these things. Such findings highlight the importance of going beyond the provision of career guidance services to promote their importance and existence through communication channels.

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Positive Impact from Career Counseling

Career counseling and special aid provided to students may be an additional booster for students to have a better experience with college applications and career satisfaction. Stipanovic et al. (2017) performed a study on 71 high school students who were required to complete an individual graduation plan and work with an assigned career counselor. Results showed that targeted vocational guidance improved participants' motivation and sense of preparedness for career and academic life at a university. Most importantly, students showcased an increased level of interest in subjects related to their chosen major. Researchers claim that having a special education program dedicated to career preparation is a more advanced tool that can be provided to students to help them make more conscious career decisions (Yoon et al., 2019). These findings demonstrate that having additional career development programs supported by a collaborative career specialist encourages students to express enthusiasm towards the theoretical and practical aspects of their future majors.

The assumed output expected from career counseling is its positive impact on employability and the labor market in general. A case study done by Staiculescu and Dobrea (2017) supports this idea that career counseling positively affects employability outcomes by analyzing the correlations between the labor market and specialized career counseling training received by undergraduate students. It was found that students benefited from psycho-pedagogy orientation and internships provided to them, which resulted in a higher employability rate of graduates. The limitation of this research is that it highlights the employability ratio as a success factor that was generated from career counseling services. In the scope of this master's thesis, it is essential to highlight that employability does not inherently lead to higher career satisfaction. Consequently, some

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existing literature may wrongly emphasize metrics like employability ratios, which do not fully capture the complexities of career satisfaction.

To test the effectiveness of career counseling on other subjective outputs, such as increased career satisfaction, a scale-based analysis needs to be done in order to find the relationship between career guidance services and feelings of clients. Littman-Ovadia et al. (2014) performed such a study on unemployed clients who received career counseling services in a span of 3 months. Respondents were asked to complete a scale on their perception of self-esteem and life satisfaction before and after career counseling interventions. Results showed that the reported responses increased, making their experience with vocational guidance a successful journey. The possible limitation of this research is that it only included unemployed participants, which means that future studies need to extend the sample size to include employed individuals to broaden the application of the results.

Detrimental Impact of Career Choice Dissatisfaction

One of the detrimental factors of dissatisfaction in academic choices and career indecision is the impact on students' well-being. It was established by Jaensch et al. (2015) that career indecision reduces the subjective well-being of students, which, as a result, affects life satisfaction. Career indecision, characterized by a lack of clarity in career trajectories, is proven to be negatively related to overall life satisfaction. This feeling of distress and uncertainty may consequently affect students' mental health. Byun and Park (2014) explored the correlation between major satisfaction and depression among college students in South Korea. The study revealed that academic major satisfaction was linked to lower depression levels, which highlights the need for further research to comprehensively analyze the long-term effects of inadequate career guidance on students' mental health. The

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findings show the importance of implementing programs to enhance major satisfaction and alleviate employment-related stress to mitigate depression risk among college students.

One of the other outcomes of academic major dissatisfaction among students is their willingness to switch majors during college. Over a third of American college students change their major during their undergraduate study at some point (Astorne-Figari & Speer, 2019). Liu et al. (2020) proposed that changing majors during college has a negative effect on program length, making the study load heavier due to excess credit accumulation. Switching majors often means that some of the courses students have already completed may not count towards their new major, potentially extending the time it takes to graduate. This could lead to students' and universities' waste of time, caused by a mismatch between a student and his desired academic major during the application stage. Apart from time being lost, financial burdens are also present because of changing majors. Ferrare and Lee (2014) advocate that there are additional associated expenses such as higher tuition fees, extra costs for textbooks, and housing costs due to a prolonged period of study. This misuse of financial resources and time could have been avoided with an academic choice that would satisfy a student in the first place.

Improvements and Innovations in High School Counseling Programs

New methodologies in high school counseling are innovatively changing the way students engage with their career emphasis and self-construction. More recently, new approaches to high school counseling programs have shifted focus to emphasize a narrative approach, such as Career Construction Counseling, as a method to assist students to re-story their career narratives and pursuing new possibilities for self-construction in the career role. Cardoso et al. (2014) posit CCC as a model that presents an inter-subjective dimension of career counseling, where counselors become co-constructors rather than experts, together with the student, through structured interviews, to explore and set goals

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for themselves. This approach allows students to explore new, more adaptive self-concepts so crucial for career decision making. Employment of innovative coding systems, such as the Innovative Moments Coding System, even further captures narrative changes and shows how students progressively move from problematic stories toward more empowered views of themselves. These narrative innovations with structured counseling interventions hold strong promises for reforming traditional high school counseling practices so as to keep pace with students' changing career needs and enhance their satisfaction with choices in their careers.

High school counseling programs have changed significantly because of changes in both career development theory and the workforce environment. Invention in high school counseling programs is an art and science highly essential in meeting the changing needs and requirements of students in transition to either post-secondary education or the job market. According to Kenny et al. (2018), relational perspectives are more influential in career counseling in the face of unpredictable job markets and rapidly changing career trajectories. Recently, relational methodologies have started to be applied in practice with high school counselors to enable students to ground their career choices in personal values, relationships, and social support systems, complementing purely academic interests. Such an approach would give the students a more holistic method of managing the unpredictability of modern career environments and promote long-term career satisfaction. Besides, innovative programs emphasize interpersonal skills, emotional intelligence, and adaptability, which are indispensable in the 21st-century job market.

Ethical and Professional Considerations of Career Counselors

Career counselors are specialists who assist individuals in choosing their career paths by analyzing their personal interests as well as aligning those with current and future trends in the job market (Nota et al., 2014). Counselors are expected to offer guidance that

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benefits clients personally while also recommending career paths that are in demand and potentially lucrative. However, there is a fine line between a counselor recommending a career trajectory and being coercive, which stands for the act of using a given authority to persuade another person to take specific action against their preferences (Crossman & Hardesty, 2018). It is important to understand the role of career counselors at schools to investigate whether their practices cross that line by unethically manipulating individuals to pursue a degree in a field that is beneficial to the economic situation of the country, yet not interesting to a student. An example of such behavior can be noticed from a research study done by Falco (2017) who wanted to address the concern of an expected deficit of STEM specialists in the United States by highlighting the beneficial role of career counselors at schools to solve this matter. Study suggests that counselors are able to intervene with students early on and indirectly encourage them to pursue a degree in STEM fields by promoting extracurricular activities such as field trips and thematic school events related to STEM. Even though the significance of this research is to attract students, especially underrepresented groups, to engage in STEM fields, it is important to acknowledge the actual role of a career counselor. Coercing students into specific fields by disregarding their personal interests and goals can be considered as an act of violation of autonomy. Other than that, professional integrity may be compromised if guidance is focused on directing students towards specific outcomes rather than supporting them in their own decision-making processes (Maree, 2016).

The issue of acknowledging professional responsibilities and roles of career counselors can be vaguely understood by schools which may result in unethical behavior as described in the example above. However, it is important to recognize that the ambiguity in vocational guidance specialists' duties is a problem that may lead to incorrect perceptions and outcomes. As argued by Blake (2020), role conflicts are detrimental to

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counselors' work as they negatively impact job performance by overlapping with similar educational professions and having "inadequate forms of performance evaluation" (p. 327). The confusion among counselors can lead to inconsistent practices in career guidance, ultimately reducing its effectiveness. Finally, having difficulties with prioritizing their daily tasks and struggles with understanding clear job responsibilities can cause counselors to lose trust in the eyes of their students and negatively affect satisfaction levels from services received. This issue needs to be addressed by school administration with reference to actual scientific and research-based descriptions of job responsibilities from a counseling, rather than an educational perspective.

Theoretical Framework

Aside from career guidance services received at high school, vocational guidance will always remain a lifelong journey, from a humanistic perspective (Savickas, 2015). Super (1957) supports this argument by developing a life-span theory that divides this continuous process of career development into five stages: Growth, Exploration, Establishment, Maintenance, and Disengagement. The Exploration stage occurs in the ages between 14 and 24, which includes high school students. Students are exploring different career paths and developing interests that career guidance services help to navigate. Super's life-span theory is adopted in this research as the first theoretical framework, which will assess the concept that the Exploration stage and perception of life roles are positively impacted, offering a comprehensive strategy for academic decision-making.

The second theoretical framework that this research is based on is Pierre Bourdieu's Theory of Social Reproduction (Bourdieu & Passeron, 1977). Bourdieu argues that education systems play an active role in legitimating existing social structures through mechanisms of reproduction of class-based distinctions. Students from higher socioeconomic status backgrounds are more inclined to gain increased access to cultural

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capital and parental support based on the criteria of the education system. These advantages are likely to appear as more informed decisions and opportunities that students from lower SES backgrounds might not have access to. In turn, unequal access to quality career guidance can perpetuate underlying disparities, which is affecting how students imagine their academic futures.

Conceptual Framework

The conceptual framework of this master's thesis analyzes the impact of high school career guidance, or lack thereof, on students' academic choices and satisfaction levels in undergraduate education. High school career guidance, which includes counseling sessions, workshops, and career fairs, is investigated based on students' perceptions of its quality and relevance. Mediating external factors such as socio-economic status and parental influence further shape how students make academic decisions for their future undergraduate study. The framework also considers the comparative satisfaction levels between students who received comprehensive career guidance and those who did not. Additionally, it includes feedback from students on how high school career guidance programs can be improved to better support academic decision-making. This holistic approach aims to provide a broad understanding of the relationship between career guidance and academic satisfaction. This conceptual framework highlights areas for potential enhancement in career guidance programs for local schools in Kazakhstan.

Research Gap to be Filled

Western publications related to the subject matter and career professionals recognize the importance of career counseling as it is the only intervention that deals with career guidance from an all-embracing standpoint (Pipkins et al., 2014). Kazakhstan, on the other hand, has just recently started implementing career counseling services at schools since 2016 (Syzykova, 2018). The practical implications of this service are that local

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public schools have the budget and standards to hire only a single part-time career counseling specialist for the entire school. Therefore, the importance of vocational guidance may not be obvious enough to the Ministry of Education of Kazakhstan, which could happen as a result of a research gap in the field in a local context.

Other than unawareness demonstrated by the government, the public also fails to recognize the profound impact of career counseling on students' lives. A study by Masdonati et al. (2014) identified that the Career Decision-Making Difficulties Questionnaire, a valuable tool for career counseling, revealed that one of the major challenges individuals face during career decision-making is a lack of information about the career counseling process. Not only that, but the study discovered that individuals do not know any methods for searching for relevant information. This means that the broader community may be unaware of the significance of career counseling due to inadequate informative resources and a lack of widespread research available to them.

This study aims to perform a qualitative research to demonstrate results that would fill this research gap and provide a scientific tool to raise awareness of the Ministry of Education to improve the career counseling practices in Kazakhstan's education system.

Summary

This chapter reviews the current literature on career counseling and academic satisfaction, identifying key research gaps and highlighting the influence of socioeconomic factors on career choices. It also explored the impact of career counseling on students' academic experiences and well-being, emphasizing the need for improved practices. The next chapter focuses on the methodology to be used to investigate these issues and address the identified research gaps.

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Chapter 3: Methodology

This study aims to answer a question “How does high school career guidance influence students' satisfaction with their academic choices in undergraduate education?” To respond to this central question, qualitative study will be employed throughout the research. In this section, the methodology of my research will be described by explaining research design, sampling strategy, data collection instruments, data analysis tools and ethical considerations.

Research Design

To assess the factors that affect the satisfaction with the major choice at colleges, a qualitative study is the most suitable approach to analyze this research question. Participants were invited to engage in semi-structured interviews to explore their current level of satisfaction concerning academic majors and future career plans. As was argued by Bobalca et al. (2014), a qualitative research method is the most appropriate for gathering and analyzing students' “opinions and motivations of choosing a program” (p. 896). It is worth noting that the research problem that emphasizes the lack of knowledge and understanding of the quality of career guidance services at schools requires an exploratory study because it is an underexplored area.

The impact that career guidance has on the outcomes and consequences is extremely individual, making it a significantly subjective case from one student to another. Selvi (2008) claims that since the differences between all students' experiences of a common phenomenon are necessary for individual development, the most suitable approach is a phenomenological one. It is possible to interpret schools as a formal educational setting where students are encouraged to have similar experiences, feelings, and behaviors. As it can lead to a loss of certain identity and individuality, it is important

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to acknowledge each student's distinctiveness using a phenomenological research design, rather than examining this phenomenon from an aggregate point of view.

Sampling Strategy

Two groups of participants were interviewed: those who received career guidance services in a secondary private school and those who studied at a public school and did not receive career counseling. When it comes to career guidance services available at local schools, secondary institutions in the public sector of Kazakhstan are usually limited to one part-time career counselor per school, which makes this pedagogical service less personal, and often virtually nonexistent. Private schools, on the other hand, have more resources to fund career counseling departments and hire several specialists. Those schools can provide individual vocational guidance experience, raise awareness of careers available to them by hosting fairs, site visits, and inviting speakers. Such a private school in Astana was chosen for the recruitment process of the second group of participants. The school has 6 full-time career counseling specialists who heavily emphasize the importance of vocational guidance by providing the most career-related resources to their students. Therefore, graduates of this school are more likely to have had richer experience with the assistance in choosing their future field of study. The reason for choosing undergraduate students is that during their postsecondary study, participants can reflect on their high school experience to their current academic study.

The number of participants is 10 in total: five graduates from a public school and 5 graduates from a private school. This is an optimal quantity of participants since interviews are manageable in terms of time and depth. With an equal representation from both public and private schools, the sample size is sufficient to gather diverse perspectives. The strategy of sampling procedures is convenience sampling. The reason is direct access by the researcher to the participants and their contact information. Other than that,

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convenience sampling is one of the most cost-effective and time-efficient of all the methods (Acharya et al., 2013).

Data Collection Forms

The chosen data collection instrument is an interview with open-ended questions about participants' satisfaction levels with their academic majors, as well as underlying external factors. Since phenomenological interviews focus on in-depth exploration of participants' experiences, semi-structured interviews provide a flexible framework that allows for deep probing into participants' lived experiences (Bevan, 2014). That is why this study aims to adopt a qualitative phenomenological descriptive study using semi-structured interviews. Interviews were done online via the Zoom platform since it is the most efficient way to conduct data collection procedures. Another reason for online interviews is that most of the participants are studying abroad during their undergraduate studies. Interview questions and protocols were prepared separately for two groups of students – the ones who received career guidance and the ones who did not.

Some of the key interview questions are provided as follows:

- How do you feel about your current academic choices, and what factors have influenced your level of satisfaction?
- How do you think your satisfaction with your academic choices might be different if you had or had not received career guidance in high school?
- For those who received comprehensive career guidance, do you feel it made a significant difference in your satisfaction compared to peers who did not receive such guidance?
- Were there other external factors, such as socioeconomic status, family impact, or others, that significantly influenced your academic choices?

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Data Analysis Procedures

During the interview itself, notes and memos were taken down to find meaningful data related to the central research question and problem. After conducting digital interviews, the recorded audio/video calls were reviewed one more time to become more familiar with them and be able to identify key themes. Then, transcribing took place as well as “Do It Yourself” double-checking to correct some of the possible mistakes. As was stated by Knott et al. (2022), the process of transcribing the interviews is beneficial to the researcher since it provides empirical and non-empirical evidence that can contribute to the results and conclusions. The interviews were conducted in the Russian language, therefore translated transcriptions were analyzed.

As the data collection came to an end, coding based on the interview transcriptions was performed. The purpose of coding is to assign a word/phrase to generalize and name specific verbal data (Saldana, 2017). When it comes to the coding techniques, descriptive coding was used for the data analysis procedures. This can be justified by the fact that descriptive coding allows a researcher to categorize a large set of data into groups and topics (Onwuegbuzie et al., 2016). Due to the interview being digital, process coding was not a suitable technique for coding due to the lack of face-to-face interaction with participants. Online interviews do not allow a researcher to interpret human reaction and interaction correctly.

Ethical Considerations

Some of the ethical challenges to consider during the research can be categorized into the stages of study. First, during the interviewee hiring process, there may be a risk that participants from the chosen private school will feel pressured to participate in the study due to their past relationship with the high school since the researcher is an employee of said institution. There may be a sense of loyalty or obligation to the school

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that will create an ethical issue. To avoid this, it would be a priority to ensure that they fully understand that participation is voluntary and provide information regarding the confidentiality measures to gain informed consent.

When it comes to the procedures during the interview itself, some power dynamics issues may arise. The validity and ethical integrity of participants' responses may be impacted because of imbalance of power between a researcher and interviewee, leading to skewed or biased answers (Kim, 2023). The issue with power dynamics is to be resolved by building rapport to promote a sense of equality, encouraging students' autonomy, and clarifying roles and expectations.

Positionality Statement

My positionality in this research study is an insider due to my past and current experiences. I am a career and college counselor at a chosen private school in Astana with an experience of over two years. In my professional experience, I have helped more than 30 students individually with their future career choices. Other than that, I am teaching a class "Career and college counseling" to high school students. This background in the industry makes me a specialist who already understands the common practices of career guidance services. Also, being an employee of the school, which represents my future half of the participants' alma mater, gives me an opportunity to understand their past academic environment better.

Bracketing, which is referred to as setting aside one's preconceptions, is going to be practiced by suspending judgement and maintaining validity (Chan et al., 2013). To avoid positionality issues, I plan to engage reflexively on my own biases that could have been formed as a result of my personal and professional connections.

As for the official ethical procedures, the completion of the required components is going to be treated seriously and done promptly. I have already completed a Basic Course

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of CITI training for “Students conducting no more than minimal risk research”. Before conducting the interviews, I also completed the Ethics Review and gained approval for conducting research from the NUGSE Ethics Approval Committee. Examples of letters to potential participants and an informed consent letters are included in the Appendices section.

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Chapter 4: Findings

The purpose of this study was to explore high school career counseling experiences and socioeconomic influences on college major satisfaction. This chapter presents the key findings from the thematic analysis of interviews conducted with ten participants—five graduates from a public school and five from a private school in Kazakhstan. The chosen public-school graduates faced no career counseling guidance at school, while the latter were provided with individual support and college admission assistance. The initial aim of this study was to understand how the availability or lack of professional career and college counseling in an educational setting may have reflected on students' experiences and satisfaction levels at a university. Yet, it is important to note that the chosen private school is amongst the top 5 most expensive private schools in Astana, thus making its students have a higher socioeconomic status. Therefore, positive or negative experiences associated with college major satisfaction and academic choices are not solely linked with career guidance in this study. On the other hand, several key external factors were also considered when conducting interviews and interpreting responses. Mainly, the analysis focuses on the role of high school career counseling experiences and the influence of socioeconomic factors on students' satisfaction with their college major choices.

The study aims to answer the question “How does the presence or absence of high school career guidance influence students' satisfaction with their academic choices in undergraduate education?”

The sub-questions are provided below:

- How does socioeconomic background shape students' access to and experiences with career guidance services?
- How do external factors associated with socioeconomic background influence students' choice of undergraduate major?

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- How does career guidance influence students' academic satisfaction across socioeconomic backgrounds?
- What suggestions for improvement in career guidance can students provide based on their experiences?

The dataset for this study consists of semi-structured online interviews with 10 high school graduates from Kazakhstan. Among them, five participants graduated from private schools and five from public schools. The group included six female and four male students, with ages ranging from 19 to 24. The interviews were conducted between November and December 2024. The data were organized using a coding scheme, which is included in the Appendix D section. The themes include the role of career guidance, the influence of socioeconomic factors, students' satisfaction with their college major, recommendations for improving career counseling, and student engagement in the career guidance process. These themes directly address the research questions by exploring how high school career guidance influences students' satisfaction with their college major choices, their perceptions of the quality and relevance of guidance received, and the extent to which it impacted their decision-making. Additionally, the themes highlight external factors like socioeconomic background, student engagement, and suggested improvements, providing a comprehensive understanding of the challenges and needs in career counseling.

How does the presence or absence of high school career guidance influence students' satisfaction with their academic choices in undergraduate education?

Role of Career Guidance

The theme "Role of Career Guidance" directly refers to the data derived from interviews that demonstrates students' experience at high schools during senior year, a crucial moment for career choice and college admissions. Availability and Quality of

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Guidance and Absence of Guidance are two main sub-themes for the codes, representing responses from private and public-school graduates, respectively. This is clearly divided into the thematic analysis to better see and highlight any disparities in lived experiences.

Availability and Quality of Guidance

What can be observed from private school alumni's responses is that there was a range of activities and resources available for their utilization throughout their high school years. They frequently highlighted the structured and consistent nature of career guidance activities. It all starts with raising students' awareness and spreading information about available career trajectories. One participant noted, *"The events that were held on this topic were frequent and informative, it gave us a clear picture of different career paths"*. This contrasts with public-school graduates, many of whom experienced sporadic and less comprehensive guidance. *"We had one or two sessions, but they didn't cover much. It felt more like a formality than actual help,"* reflected a public-school graduate.

Private-school graduates reported having access to career counselors who provided personalized advice. They shared that students were encouraged to attend weekly individual meetings with counselors to discuss plans, get guidance, and diversify their extracurricular activities. *"One-on-one conversations with career guidance specialists...were the most helpful,"* shared another private school graduate. One participant attributes some of his success to his counselor *"If it weren't for the work counselor did with me, I likely wouldn't have done it on my own."* Apart from helping students choose a major, the counselor's responsibility was to also assist students in college applications. *"They helped me with writing my personal statement, choosing a university...including my SAT results,"* one participant noted.

Beyond the individual support that participants received, in-class activities were also practiced at their institution. They reported having career counseling as a part of their

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school curriculum, where students had a chance to discuss vital career-related topics in group projects and discussions. As one participant noted *"We had fully structured career guidance lessons with a counselor. ... We described our unique traits."* It was also pointed out by participants that they were asked to complete diagnostic tests to identify their strengths and possible compatible career trajectories.

The quality of guidance also varied significantly. Private-school students benefited from workshops, guest lectures, and career fairs. It was observed from the responses that these schools often engaged in collaborating with outside professionals who regularly visited the school. *"Different people came and talked about where and how to apply, what to do. So, it was very useful for students planning to study abroad,"* mentioned a participant. Besides professionals, private schools' alumni were also invited as guest speakers who were asked to share their experiences and give feedback to fellow juniors. *"I remember graduates coming to present their fields of study. They explained and shared their experiences,"* noted a respondent. Public-school students often lacked such opportunities.

Absence of Guidance

When it comes to public-school graduates, they reported experiencing no professional career guidance in a school setting. *"There wasn't any specific career guidance to help us determine our future career or profession,"* one participant noted. Despite that, they received informal career counseling from subject teachers and administration, the quality of which is presumed low by several respondents. Some comments such as *"There wasn't enough involvement from professionals...Teachers themselves couldn't cover all the basics"* and *"There wasn't a specialized career counselor. It was just regular teachers or friends helping."* These opinions show that

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structured or personalized guidance aimed to aid decision-making was lacking. In contrast, private-school graduates often had access to dedicated counselors and structured programs.

It was also mentioned by respondents that public school teachers, without specific expertise, managed to ask students to complete career aptitude tests, which later gave generic and unhelpful results. The reasons for that were provided by participants who said *"I suspect that these tests were very outdated and super generic, free tests that always gave the same results"* and *"We were recommended to take a test independently to figure things out ourselves,"* meaning that students were left to interpret the results, however generic they might have turned out, by themselves. One respondent also mentioned that those tests were mostly given as an immediate pill to relieve their anxiety related to uncertainty. They said *"There were some tests, but I don't think they were effective. They seemed more like something to satisfy an immediate need, to calm us down."*

Having said that, public school teachers who gave career advice to students were unqualified to do so, and some respondents reported receiving unintentionally biased recommendations. As such, teaching, the major that one participant ended up pursuing, was promoted as follows *"We were only encouraged to think about one direction—teaching. They told us it was a good profession, but didn't explain its challenges."*

On top of receiving assistance from poorly qualified teachers and trying to figure out such complicated matters themselves, students pointed out the need to satisfy parents' expectations as well. *"We didn't receive much help with career guidance. I feel it was mostly individual efforts under parental pressure,"* noted one respondent.

Private-school graduates highlighted guest lecturer visits as a valuable experience, something that was virtually unattainable for alumni of state-funded schools. It was mentioned by public-school graduates that *"We weren't invited to anything, we didn't go on excursions, we didn't try internships"* and *"If I had experienced working for a*

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construction company earlier, I might have made a different choice." Another participant remarked *"It would've been great if someone had explained that changing careers is normal. Or if there had been internships or practical experiences in companies,"* significant impact of lacking guidance from an experienced professional, which contributed to their career indecision. These experiences reveal the gap in career exposure and the need for better guidance in state-funded schools.

How do external factors associated with socioeconomic background influence students' choice of undergraduate major?

Socioeconomic Influences

As was mentioned earlier, it is important to consider other contributing factors to major choice and satisfaction levels such as external environment. These may range from family impact to cultural expectations. Access to career counseling services was considered as a main factor that was analyzed at the initial stage of this study. However, socioeconomic status emerged as a crucial factor due to significant disparities between private and public-school graduates in this study. Therefore, a major part of the findings section will be focused on identifying whether interviewees reported any socioeconomic influences that affected their student experiences.

Financial Constraints

Financial limitations emerged as a significant factor affecting career decisions, particularly among public-school graduates. *"I chose physics and mathematics primarily because there was a scholarship, and I was admitted on that basis,"* mentioned one participant. This pragmatic approach often restricted students' ability to pursue passions or less financially secure fields. For the same reason, other participants noted that they had to choose fields with guaranteed stable income, regardless of their personal interest or passion. *"At that moment, around 2018, when they started raising teacher salaries, it was*

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always in the news” and *“That’s why I chose civil engineering, because construction was booming at the time,”* were some of the comments pointed out by respondents, who as a matter of a fact, eventually ended up disliking their chosen majors. Participants from lower socioeconomic backgrounds described how financial pressures influenced not only their choice of major but also their approach to education.

In contrast, private-school students often had more financial flexibility, allowing them to explore a wider range of academic interests. *“My parents’ higher education... is connected to the jobs they have now—jobs that are well-paid. Because of this, there’s less pressure on me to immediately start earning and financially contributing after my education,”* shared a private school graduate. This demonstrates that financial support from parents not only alleviated the participant’s immediate financial concerns but also gave them the freedom to concentrate on their education, explore a broader range of academic interests, and make career choices based on personal aspirations rather than economic necessity.

Social Exposure

Private-school students benefited from broader social exposure, including interactions with alumni, professionals, and international programs. This was elaborately pointed out when they were asked to describe what kind of support they received in high school. Another crucial factor in making a successful career choice is gaining experience through extracurricular activities beyond the standard curriculum. *“I attended... the school surgical club and the biological school at the Medical University of Astana,”* mentioned one private school alumni. Exposure to diverse role models and career paths played a crucial role in shaping students' aspirations. Public-school graduates, however, often lacked such role models.

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Social exposure also influenced students' soft skills and confidence levels. Private-school students frequently participated in debate clubs, international conferences, and leadership programs, which helped them develop critical thinking and communication skills. *"I participated in chemistry Olympiads and was good at biology, so I chose this profession based on that,"* shared a private school graduate. Engaging in such activities allowed students to test their strengths in competitive environments and gain early exposure to potential career fields.

The socioeconomic background influenced the breadth and depth of students' networks. Private-school students often had access to influential networks through family connections or school-affiliated programs. Conversely, public-school students often lacked these networks, limiting their exposure to diverse career pathways.

Family Impact

Family expectations significantly influenced career choices across both groups. *"My parents insisted that I go into medicine,"* shared a public school graduate. For some, this pressure led to a sense of obligation rather than passion, making them prioritize stability over personal interest in their career decisions. Conversely, private-school students described more open discussions about career options, albeit still under parental influence. For example, *"My dad's advice was focused on the future prospects and stability of the field,"* mentioned a private school graduate, showing that while their parents guided their choices, they were still given the flexibility to explore different career paths within those expectations.

Parents' emphasis on achieving high aspirations and setting long-term goals was evident in private school respondents' relationships with their children. *"My family has always motivated me to set high goals and work towards them,"* shared a private school

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graduate, explaining that their parents always pushed them to aim high and think about the future, which made them more confident in choosing a career they believed in.

The level of parental involvement often correlated with the parents' educational background. *"Both of my parents have higher education degrees; my dad even has three,"* said a private school graduate. In contrast, public-school students with less-educated parents sometimes lacked this form of guidance. *"No one pressured me—my parents didn't even know where I studied until my third year,"* explained a participant. Other comments from private-school graduates regarding parental education level were as follows: *"My parents' higher education directly influenced this"* and *"My parents are highly educated...They've already been through this process and know what needs to be done"*. This contrast shows how parents with higher education played a bigger role in guiding their children's career choices, using their own experiences to offer advice and support. On the other hand, students whose parents had less education often had to figure things out on their own, turning to teachers, friends, or the internet for guidance.

Apart from parents' educational background, their professional experience also played a crucial role in participants' career choices. Private school participant's comment *"Watching my father work throughout my life... made the choice obvious,"* explains how the father's profession provided practical exposure, contributing to the participant's decision. Two other respondents from the same group also reported their parents' careers to have an impact on their chosen field of study. *"Both my parents are mathematicians, and I decided to develop in that direction,"* said a participant who ended up pursuing a highly rigorous program in Artificial Intelligence. Another one who noted *"My grandparents are businesspeople...They always wanted me to follow in my mom's footsteps and become a doctor,"* also eventually chose to study biomedical engineering. These examples illustrate how family professions not only influenced career aspirations but also shaped the

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perceived value of certain fields to students from higher socioeconomic status. Whether through direct encouragement or exposure to a particular industry from an early age, participants often found their career choices aligning with their family's professional paths.

A clear pattern among some private school participants was the significant, unconditional support they received from their parents. This is reflected in one participant's comment: *"There was encouragement for professions my parents worked in, as they talked a lot about them. However, there were no restrictions in choosing a career."* This suggests that while parental influence was present, it was more about exposure and guidance rather than pressure. Many private-school students described a similar dynamic, where family discussions about careers were frequent, but the final decision was left to them. This is also the case for choosing a location of a future university for private-school students: *"They never pushed me—they always supported me, whether I wanted to study abroad or stay in Kazakhstan."* This flexibility allowed students to explore opportunities without feeling pressured to follow a predetermined path. Several participants emphasized that their parents provided guidance and shared their perspectives but ultimately respected their choices. As a result, private-school students often felt more confident in making independent decisions about their education and future careers, knowing they had their family's full support regardless of the path they chose.

Gender Bias

Although this thesis primarily focuses on socioeconomic status, the interviews revealed that gender-related factors also played a significant role in shaping some respondents' experiences and decisions. Gender expectations affected decision-making of three female and one male participants, interestingly equally among public and private school groups of respondents.

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In some cases, gender bias limited the range of options considered acceptable for female students. *"Some people questioned my choice, saying, 'Why are you picking this? It's so hard. You're a girl, and this is STEM,'"* said a female private school graduate. A public-school graduate, on the other hand, cited a comment received from someone saying that *"You're a girl, so it makes sense to go into teaching, it's a stable job with a salary."* These remarks demonstrate how societal expectations influenced career choices, often guiding female students toward traditionally accepted fields. While some challenged these stereotypes and pursued careers of their choosing, others acknowledged that such biases subtly shaped their decisions. The presence of gendered perceptions across both school types suggests that cultural norms, beyond socioeconomic background, play a significant role in career selection.

Gender-based inequalities were not only evident during the college major selection process but also continued to shape experiences in the workplace and presented additional barriers in various aspects of life. One male participant, who is pursuing a degree in medicine, for example, reported that cultural expectations placed additional pressures on men in the field of medicine due to them being traditionally seen as breadwinners. He said *"Meanwhile, your peers from other fields are getting married, earning money, and living independently. For medics, especially men, it's much harder."* This sentiment reflects the broader societal pressure on men to achieve financial stability early on, often making long and demanding educational paths like medicine feel even more burdensome. For female respondents, gender-related challenges were also evident. One interviewee, who is studying civil engineering and has already interned in the construction sector, shared her experience of encountering barriers due to her gender. She said, *"It was mostly due to the company culture—how women are treated, the lack of career growth, the overly rigid hierarchy."* These experiences reflect the ongoing gender disparities in traditionally male-

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dominated fields, where women frequently encounter obstacles that go beyond academic challenges, affecting their long-term career prospects.

Ultimately, these stories show that career choices are not just about socioeconomic status or financial stability—gender expectations quietly shape the paths people take as well. Some push back and carve their way, while others feel the weight of tradition steering them in a certain direction. It is a reminder that beyond academics and economics, cultural norms still have a strong hold on how careers unfold.

How does career guidance influence students' academic satisfaction across socioeconomic backgrounds?

Level of Satisfaction with College Major

The level of satisfaction with college majors varied among participants, with private-school graduates generally expressing greater contentment than their public-school counterparts. Many private-school students reported feeling confident in their academic choices.

Satisfied with College Major

All five students from higher socioeconomic backgrounds, thus private-school graduates, reported being generally satisfied with their college majors, citing several key reasons. These students often described their academic journeys as fulfilling and aligned with their personal interests and strengths. *"I am 100% confident that I will graduate and work in this field because I genuinely enjoy it,"* shared one private school graduate. They felt a strong connection to their chosen majors, saying their studies matched their interests, even when the workload was tough. Some admitted they had not expected the challenges, but their passion kept them going. *"Then I realized I really enjoy what I'm doing now. The environment is very supportive,"* one student shared. Another added, *"I'm satisfied because it's interesting, but I didn't expect it to be so hard."*

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Another private school respondent expressed that his satisfaction with his college major was deeply tied to a strong sense of purpose, which served as the foundation for his motivation. For him, studying medicine was not just about academic achievement but about finding meaning in his work. He explained, *"It gave me a sense of purpose. As I said before, answers to the 'why' questions. When you know your 'why,' it keeps you grounded, even in difficult times."* With fewer financial constraints and greater exposure to professional opportunities, he was able to prioritize passion and purpose over immediate job security.

Only one public school graduate admitted being satisfied with their chosen major yet attributed this outcome to mere luck. She said, *"It could also be luck... I might have convinced myself to love it."* She went on to explain that, despite her initial doubts, she gradually found aspects of her major that she enjoyed. However, she admitted that her decision had not been guided by structured career counseling but rather by a mix of external pressure and limited information.

Dissatisfied with College Major

Participants who lacked comprehensive career guidance often reported dissatisfaction with their college majors. *"During my studies, I realized I wasn't interested in it,"* shared a public-school graduate. This dissatisfaction stemmed from making uninformed decisions based on limited exposure to career options, societal expectations, and pressure from family or peers. Many participants admitted that they chose their majors based on vague perceptions of job stability or prestige rather than personal interest or aptitude. Another public-school alumni shared *"Honestly, they didn't align at all—maybe 2 out of 10,"* referring to university experience not being aligned to expectations. Disconnect between expectations and reality often led to feelings of frustration and a lack of motivation.

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Two public school respondents expressed deep regret and dissatisfaction with their chosen majors. One admitted, *"If I had the chance, I would have picked something creative,"* while another reflected, *"I felt like I had chosen a lower-tier path, even though I might have had the potential to do more."* Instead of following their interests, they felt influenced by external pressures, leading to a lingering sense of missed opportunities. This dissatisfaction reinforces the need for better support in helping students make informed academic decisions regardless of their socioeconomic background.

Since the public-school graduates in this study received no formal career guidance, it is likely that they had a limited understanding of their chosen career paths. This became clear when one participant, who pursued a degree in civil engineering, admitted, *"I didn't fully understand what I could become and, more importantly, what I'd be studying during my bachelor's degree."* Her experience reflects a broader issue—many students enter university with little knowledge of what their field truly entails. The same pattern emerged with another public school graduate, who shared, *"It's daily stress... there's no time for a break, no time for friends, no time for hobbies."* This suggests that she may not have fully understood the intensity and demands of her chosen field before committing to it.

What suggestions for improvement in career guidance can students provide based on their experiences?

Suggestions for Improvement in Career Guidance

Participants provided several suggestions to enhance the effectiveness of career guidance programs in high schools. Both public and private-school graduates emphasized the need for more personalized and comprehensive support.

Early and Continuous Guidance

Graduates emphasized the need for career counseling to start early and continue throughout high school. *"I'd recommend starting from 9th grade to help students explore*

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various specializations," noted a public school graduate. Continuous support would help students explore different paths and make well-considered decisions. Another respondent from the same group recommends starting it even earlier – *"Grade 7 is a good time... focus on developing skill sets closer to graduation."* Other public-school graduates also suggested schools utilize more modern career aptitude tests – *"We have more modern tests now, right? More tailored to teenagers."* Graduates agreed that career counseling should start early and continue throughout high school. Many felt that if they had this kind of support, they would have made more confident choices about their majors and future careers.

Personalized Counseling

All public-school graduates in the study emphasized the need for schools to hire more career guidance specialists. They believed that having dedicated professionals available would ensure that students receive personalized support, rather than making life-changing decisions with little to no guidance. One shared about the current situation of their alma mater *"I think there is only one counselor... they physically don't have time."* Even a private school student, who did not himself attend a state-funded high school, expressed his agitated feeling – *"Some schools only have one counselor for the entire student body, which is insufficient."*

Diversity of Professionals

The most common suggestion received from both groups of respondents is exposing students to real-world opportunities, whether through inviting more diverse guest speakers or incorporating practical experiences into career counseling programs. *"The gap in our school's career guidance was that there wasn't enough involvement from professionals in this area,"* proposed a public school graduate. Such experiences would help students better understand different career options and make informed choices.

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A private school graduate shared that while their school invited professionals for guest lectures, these sessions primarily focused on popular fields like business, leaving less exposure to other career paths. He said, *"Most of the people invited were businesspeople or creative individuals, but I don't recall many engineers."* This lack of diversity in career exposure extended beyond STEM fields, as interviews revealed similar gaps in the humanities and creative industries. Participants expressed a desire for more encouragement and opportunities in these areas, with one stating, *"For creative students like me, they could have encouraged activities like theater, drawing, or dance,"* while another added, *"It would've been great to have more guests from the humanities."* Two more respondents shared the same feeling, yet without addressing a specific area of expertise: *"It would've been great to have more interaction with people from different professions,"* one said, and *"Schools should provide opportunities to interact with professionals and participate in projects to better understand what a career entails,"* mentioned another. Expanding career exposure to include a broader spectrum of fields could help students make more informed and fulfilling career choices.

In addition to exposure to different professionals, interviewees emphasized the importance of gaining real-world experience through internships. One participant shared, *"It would've been great if there had been internships or practical experiences in companies."* They believed that hands-on practice would allow students to better understand their chosen field and determine if it truly aligns with their interests before committing to it.

Financial Guidance Programs

For students from lower socioeconomic backgrounds, access to information about financial support was especially crucial. A lack of awareness about scholarships, grants, and funding opportunities often prevented them from pursuing fields that required higher

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financial investment or studying abroad. It was pointed out by a public-school alumnus that *“Guidance about scholarships and career options should also be emphasized.”*

Without these resources, many felt limited in their options and unable to explore opportunities that could have been within reach with the right support. Therefore, this crucial recommendation should be given serious consideration by career guidance specialists, particularly in under-resourced schools.

Support for University Transition

Finally, some respondents felt that their school did not provide adequate guidance on transitioning from high school to university, leaving them unprepared for the academic and social challenges of college life. Both public and private-school students shared this sentiment, expressing that more guidance could have eased their transition. One student remarked, *“If they had explained the pros and cons of different universities or programs, it might have helped,”* while another admitted, *“Before coming, I had no real understanding of university life. It’s not anyone’s fault, but it’s something that really matters.”* Therefore, ensuring a smooth transition is also a vital factor for better student experience.

Student Engagement in Career Guidance

This theme focuses on a key aspect of student engagement: self-motivation. Interviews revealed that while private schools had the resources to offer personalized and professional career guidance, the effectiveness of these services ultimately depended on the students themselves. To fully benefit from the support available, students needed to take an active role in engaging with career guidance opportunities and exploring their options.

Self-Motivation

Self-motivation proved to be a crucial factor for some respondents. Two private-school graduates acknowledged this, stating, *“If the student doesn’t engage, there’s not*

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much the counselor can do," and "If someone doesn't want to engage, it's hard to make them." Their reflections raise awareness on individual responsibility, as career counselors can provide guidance and resources, but ultimately, students must take initiative in exploring their options and preparing for college life. One public school graduate, despite not having access to career counseling, acknowledged a similar perspective, stating, *"The responsibility also lay with me as an individual and with my parents."* This also contributes to the fact that even the best resources will not be able to make a difference if students fail to take the initiative to explore their options and take control of their own future.

Conclusion

In the end, the findings make one thing clear—: high school career guidance (or the lack of it) has a lasting impact on students' academic satisfaction. Public-school graduates often made choices based on limited information, leading to frustration and second-guessing, while private-school students had a better academic support system. Socioeconomic background added another layer, influencing not just career choices but also access to financial aid and opportunities. Through the board, participants agreed on one thing: career guidance needs to start earlier, be more comprehensive, and include real-world exposure like internships. What is important to remember is that private-school graduates had more resources, but without active engagement, even the best counseling may have little difference.

Ultimately, while schools and counselors play a role, students need to take ownership of their decisions—but they are unable to do that without the right support, whether from career counselors, well-informed parents, or a strong social network. While career counseling undoubtedly plays a crucial role, it is equally important to consider socioeconomic factors, as there is always a causal relationship between wealth and

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opportunity, since one's financial background often dictates access to resources, shaping their academic and career paths and ultimately influencing their satisfaction with their college major.

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Chapter 5: Discussion

The discussion chapter of this research study aims to interpret the derived findings through the lens of existing literature and theoretical framework. Data analysis results will be examined through earlier mentioned works in literature review, as well as in relation to any additional research studies on topics that were revealed throughout data collection procedure. The main research topic of this thesis is the experience of private and public school alumni at higher education institutions in regards to their chosen majors, experience with career counseling at high school, and satisfaction levels in selected academic fields. The focus is also shared with understanding students' socioeconomic background and its possible influence on university experiences.

The discussion begins with a brief abstract of key findings in order to identify the main trends that were revealed in the data. This is followed by a detailed interpretation of results, considering how different factors—such as the availability and perceived effectiveness of career counseling—impact students' academic satisfaction. This chapter is organized to directly answer each of the study's research questions, breaking down the findings and connecting them to relevant research for a deeper understanding. Data will be put in comparison with existing literature to analyze any possible verification of previous research performed, as well as contradictions, if any. The chapter then investigates the theoretical and practical implications of the study to recognize relevance for educators, policymakers, and career guidance specialists. Finally, the discussion addresses the limitations of the study and suggests directions for future research that could further expand on these findings.

By a review of these influences, this chapter aims to develop a greater appreciation for the role of career guidance in academic decision-making, and of external factors—most particularly socioeconomic ones—that affect students' attitudes and experiences.

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Summary of Key Findings

The present study compared the influence of guidance during high school careers with students' satisfaction with their undergraduate course of study. A few crucial trends were identified when analyzing the role of official career guidance and external factors on students' choices. The central research question is “How does high school career guidance influence students' satisfaction with their academic choices in undergraduate education?”

One of the most important findings derived from this study is that students who were provided with structured and individualized career advice during high school were more confident in their academic choices than students who had received limited or generic counseling. Private-school students had attended individualized career sessions or specialized workshops and reported that they were very well-prepared for their undergraduate degree. Students who had minimal career counseling, on the other hand, frequently doubted whether they had made the right decision about their major. This resulted in private school respondents' satisfaction in chosen college majors, while public-school graduates reported feeling unsatisfied in their university life.

Another significant finding is that socioeconomic background had a pivotal effect on the extent to which students were able to experience career guidance. Students from private schools who represent a higher socioeconomic status benefited from more career support, such as private career advice and out-of-school activities, while students whose backgrounds were lower-income made more use of school-based advice, which in some cases was incomplete. Public-school graduates reported that unqualified teachers and school administration tried to provide career guidance which lacked expertise and individual approach. This uneven access was found to result in differences in the self-confidence of students and overall satisfaction with study choices. Other than having better resources throughout their lives, private-school students were advantaged by having more

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aware and experienced parents beside them. While their parents, who are well educated and successful, helped students navigate the career choice process, parents of public-school students often lacked the personal experience needed to guide their children effectively.

Apart from formal career counseling, external forces such as parental pressures and cultural expectations also affected students' academic fulfillment. While some students were helped by career counseling to deal with these pressures, others indicated that their experiences did not fully take into account these external forces, so they were uncertain about their choices.

Taken in total, then, these findings suggest that academic satisfaction among students is not dependent solely on school career guidance—rather, it is a combination of counseling quality, socioeconomic status, and extrinsic factors that shape their experiences. The next section will explore the implications of these findings in comparison to existing research.

RQ 1: How does the presence or absence of high school career guidance influence students' satisfaction with their academic choices in undergraduate education?

Satisfaction Levels Between Private and Public-school graduates

Based on the results, the availability and quality of high school career guidance services were predominantly responsible for the satisfaction that graduates of private and public schools experienced with their choice of undergraduate academic major. With their accessibility to well-structured and holistic career counseling programs, private-school graduates reported higher degrees of satisfaction regarding their undergraduate major choices. Conversely, graduates of public schools who lacked formal career counseling complained about the satisfaction of their academic choices. The findings are in

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accordance with existing literature and concur with the notion that school-based introduction of career counseling has a profound impact on students' academic and career courses of action (Galliott & Graham, 2015; Hughes et al., 2016).

Private-school students refer to the uninterrupted guidance provided to them with a one-on-one career advising session and school-organized external events. These programs provided students with important information regarding careers and educational paths, therefore guaranteeing that they made informed choices. According to Hooley, Marriott, and Sampson (2011), good career advice enables students to gain confidence and knowledge in choosing a major that fits with their abilities and interests. Similarly, Watts and Sultana (2004) investigated the role of career activities in helping students develop realistic goals for their academic lives.

In private schooling, personalized service was instrumental in alleviating the worries behind decision-making. Students, who had been consoled with career counseling specialists, made decisions with relatively high confidence and lower levels of regret or dissatisfaction with their college studies. This matches career construction theory (Savickas, 2013), which states that an individual's career can be developed based on positive experiences and professional guidance. This means that career professional guidance and activities in the private school were instrumental in helping students fulfill their academic choices.

Absence of Formal Guidance in Public Schools

In contrast, public school alumni mentioned there were no active professional career counselors assisting them in their educational choice-making. Some schools, at best, would have involved their students in general career aptitude test-taking, which hardly served personalized advice; the well-intentioned teachers were not trained in offering professional career advice. Muneer and Khanum (2020) found that students without access

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to professional career guidance held greater potential for making poor academic decisions, which would later translate into dissatisfaction and a greater probability of changing their majors.

Furthermore, public-school students had no access to important career development events such as internships, college fairs, and opportunities to network with industry insiders, events which help develop career aspirations. The lack of these opportunities at public schools could therefore be one-long answer to the frustration the students expressed over their choice of college majors.

RQ 2: How does socioeconomic background shape students' access to and experiences with career guidance services?

The results show that access to career guidance services, in an organized fashion, was considerably lower for low socioeconomic group students, those attending public schools. Although some teachers did make some attempt at offering unofficial advice, their own experience with career counseling was restricted. Moreover, as some respondents pointed out, teacher recommendations biased the course towards teaching as a career, and this created ethical concerns regarding the neutrality of career guidance.

Students from higher socioeconomic statuses, who typically attended private schools, enjoyed access to career guidance programs, career days, and professional guidance. Public-school students enjoyed little or no access to such opportunities. This disparity supports a study by Mann and Huddleston (2017), who argue that career services are disproportionately allocated among students from higher socioeconomic statuses, furthering social inequalities.

Public-school students preferred to utilize general career aptitude tests, which were outdated and not customized. Evidence from Kashefpakdel and Percy (2017) shows that

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generalized career assessments do not provide meaningful career guidance, particularly for low externally exposed students to professional environments.

Although public school instructors tried to advise students on career choices, they were typically not professionally trained in career counseling. A Yates and Bruce (2017) study reinforces the point that teachers, as much as they would like to help students, require special training to provide good and impartial career advice. Moreover, the inclination by some instructors to encourage students into the teaching profession is an ethical one since it could minimize students' exposure to broader career opportunities.

RQ 3: How do external factors associated with socioeconomic background influence students' choice of undergraduate major?

This chapter examines how external pressures of socioeconomic status shape student choice in the selection of undergraduate majors. From the evidence presented in the study, external factors in the form of economic adversity, parental influence, and gendered social expectations were important determinants in the decision-making process. These pressures acted differently on students depending on whether they were higher or lower in socioeconomic status.

Financial Constraints in Major Selection

Financial constraints are a key determinant of lower socioeconomic students' career choice, with many individuals being compelled to place more importance on the stability of employment and short-term wages over personal interests or economic fulfillment in their careers. The pragmatic response in this instance arises mainly out of a need to reduce financial burdens and achieve economic stability. Literature indicates that economically disadvantaged students opt for the most lucrative short-term economic prospects at the expense of careers that have the most promising long-term prospects. Cotofan et al. (2023)

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demonstrated that economic need compels students to work in careers that meet short-term economic demands but which may hold little promise for advancement.

Income within families also plays an important role in determining career decision-making. Shumba and Naong (2013) mentioned that 69.2% of the students listed lack of sufficient family income as one of the significant obstacles to actualizing their desired careers. This economic factor often makes students study fields of study they perceive to be financially rewarding. Also, budget constraints might limit the entry of students to universities that will lead them to their career ambitions. Delavande and Zafar (2014) demonstrated that budget constraints can hinder students' choice of universities, hence selecting universities and courses on the basis of affordability rather than preference or suitability. These are also academic challenges enhanced by the burden of student debt. As stated by Martinez (2024), rising student debt involves making effective degree decisions, where it becomes important to opt for degrees offering the best careers and salaries to obtain and pay off student loans effectively.

Parental Expectations and Educational Attainment

Socioeconomically more stable respondents reported significant family influence in career decisions. Parents with higher education tend to offer well-informed career advice, even pushing their children toward ambitious and high-profile careers. The above result validates Long and Pang (2016), which established parental education and domestic educational materials as positive predictors of parental expectations that, in turn, predicted the educational attainment of Chinese adolescents. Conversely, a low SES participant was pressured by family to pursue a specific career path at the cost of her interest, and this rendered her unhappy. This scenario is a pointer to Workman's (2015) results, where exploratory students have been found to encounter a lot of parental control over their

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college choice, major selection, and career choice decision-making, which sometimes leads to conflicts between the wishes of parents and students' interests.

Gendered Social Expectations Across SES

One of the most salient themes to emerge from the data was gender-based influence, which was documented across SES groups uniformly. Both higher and lower socioeconomic students reported how conventional gender norms had shaped their views on what appropriate academic and career paths were. This is congruent with contemporary literature on how deeply ingrained gender norms may guide students in or out of specific fields regardless of SES (Mau, 2016; Legewie & DiPrete, 2014).

Female respondents reported being deterred from undertaking STEM subjects and directed towards more traditionally 'feminine' careers like teaching. For example, Piatek-Jimenez et al. (2018) determined that college students have some traditionally female or male personality characteristics that will be the source of underrepresentation of women in STEM. Professional settings also reflect gender prejudices. One of the women civil engineering students spoke of issues in the construction industry, where she reported feeling underrepresented. These subsequent career opportunities are stunted by creating gender disparity within the industry. Women are less likely to operate in a male-dominated field. Rosa et al. (2017) promote the need for mentors and role models for women in the Australian construction market to overcome challenges, recognizing that such entities help women to get promoted and stay employed. This issue is yet to be recognized and carefully studied in the Kazakhstani workplace context. Being discouraged subtly or overtly from pursuing STEM courses upholds Wang & Degol (2017), who argue that gender stereotypes continue to affect students' academic self-concept and major selection.

Male students, on the other hand, were also coerced. Since being one of the male students, following a lengthy career path as medicine reduced one participant's ability to

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become the expected "breadwinner" within a suitable time frame. There is still a culturally conditioned assumption that men are more inclined towards putting economic stability first compared to developing themselves (Cech, 2022).

RQ 4: How does career guidance influence students' academic satisfaction across socioeconomic backgrounds?

This section addresses the third research question through an exploration of the effect of career guidance on academic satisfaction among students with different socioeconomic statuses. Based on the participants' testimonies, the findings show vast differences in satisfaction with college majors based on generally related factors of prior exposure to quality guidance and SES. The latter parts of this section examine these patterns in greater depth by relating to the intersection of SES with the presence of career guidance and correspondence between the academic aspirations and academic experience of the students.

The Impact of Socioeconomic Status on Academic Satisfaction

These findings clearly indicate that students who are higher in socioeconomic class, i.e students who attended private schools, are more satisfied with college majors. Those students indicated higher awareness of the requirements of future careers and were more apt to report college experience as meaningful and satisfying.

These results are similar to other studies on the significant impact socioeconomic status plays in affecting learning outcomes and college readiness among students (Tan, 2024). High school students from families with higher income have better chances of receiving parental involvement and the opportunity for career discovery (Howard et al., 2021). Kamm et al. (2020) argue that such exposure equips the students with the ability to make more informed decisions, thereby connecting more satisfaction and persistence in academia.

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Among the graduate students who had been in public schools, who were predominantly lower socioeconomic students, none were as satisfied. Only one among these students expressed being satisfied with his or her major, which they had by accident rather than through a well-informed and planned decision. This goes in line with the study conducted by Bryan et al. (2018), who found students in lower-resourced high schools making college decisions based on information scarcity, a decision that will create a gap between what they expected and what they experienced.

The Role of Career Guidance in Shaping Academic Outcomes

One consistent theme found in respondents was formal career guidance or its absence. Private-school graduates described their academic major as guided and based on passion even in the context of mentioning academic difficulties. Public-school graduates were more likely to say decisions were made on unclear notions of prestige or superficial knowledge of areas in which these graduates wanted to end up working.

This inequality is evidence of the paramount role of career guidance in ensuring student satisfaction and long-term academic success. Recent studies have put increasing focus on the point that comprehensive career guidance, if put in place during an initial phase and reinforced on an ongoing basis, helps the students create realistic ambitions and choose paths that are compatible with their interests and abilities (Falco & Summers, 2019). Without it, as in the case of the majority of respondents in the public schools, the students are prone to disillusionment and academic disenchantment.

Growing evidence suggests that career planning intervention should be framed to be responsive to individual aspirations and situational realities (Lapan et al., 2017; Aidyn, 2015). For example, studies by Fletcher et al. (2015) revealed that high school students who engaged in systematic career exploration activities were much more likely to be certain regarding their majors.

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Misalignment Between Expectations and Academic Realities

Some of the public-school graduates experienced a disparity between what was expected and what actually was in their college majors. They said that they had not had much knowledge of what their experience would be like in college or what their career would be like upon graduation. This is supported in prior studies that conclude one reason that students are unhappy and likely to drop out is because of "uninformed choice" (Holmegaard et al., 2015). One such example was a public school alumnus who was studying civil engineering and had confessed to not knowing the academic requirements and career roles of the profession. Lack of advising students to make informed decisions leaves them vulnerable to choosing majors for the wrong reasons.

Conversely, however, the private school respondents were more resilient to academic adversity through their constant motivation and sense of purpose. This has some correspondence with the self-determination theory of Ryan and Deci (2017) that proposes that individuals who are self-determined in their motivation will be more likely to be satisfied and accomplished even in adverse academic situations.

RQ 5: What suggestions for improvement in career guidance can students provide based on their experiences?

Interview findings also identified areas in which career guidance programs for high school students might be enhanced. Public and private-school graduates described weaknesses in their school career guidance programs but also offered valuable advice to allow the programs to better fulfill their functions.

The most popular opinion among the participants was that career guidance has to begin early and on an ongoing basis in secondary school. This is a recommendation supported by current evidence advocating exposure to careers in an earlier stage to allow informed decision-making (Lindstrom, 2020). Starting career exploration in 7th or 9th

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grades allows students to begin to discover their interests and strengths well before the college major choice. Furthermore, ongoing support allows students to be in a position to be able to accommodate evolving academic and career interests with time, which is paramount to improve satisfaction with academic decisions.

One-on-one career counseling was another common suggestion. Public school alumni noted the insufficiency of the career counseling staff to provide individualized attention and expressed this in the absence of counselors to provide career guidance in their schools. This was in agreement with a study that placed focus on individualized counseling to help the career decisions of the learners (Dahlan et al., 2020). By giving individualized guidance to the students based on interests, strengths, and background, they are in a position to make informed and satisfactory career and academic decisions (Mau, 2016).

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Chapter 6: Conclusion

This study has explored a multi-dimensional effect of high school career counseling in Kazakhstani schools in terms of academic satisfaction, concluding with an urge for a reform in the administration of such services, specifically in the public school system. The study demonstrates career counseling in Kazakhstan as critically underdeveloped and inconsistent in the contexts of the public school system. Students for whom there was not effective career guidance expressed lower academic satisfaction in chosen majors and, in a few cases, academic choice regret. Students in private schools, where more structured, individual career counseling is provided, expressed outcomes that are more satisfactory. They were far more confident in academic decisions, and they expressed a higher sense of purpose.

This difference, however, is not only accounted for by the counseling services. This study also touched more deeply upon socioeconomic status as a determinant in the research of the students. According to Pierre Bourdieu's theoretical descriptions, it can be considered that the Kazakhstani school system, in a sense, serves as a social reproduction field. Students from higher SES, who predominantly study in private schools, are favored by not just better counseling services but also a chain of advantages: more involved and educated parents, extracurricular activities, professional teachers, and a wide social capital. These advantages tend to make them privileged even before the implementation of counseling services. Public-school students, who are generally considered to represent a lower SES, are faced with obstacles greater than a lack of quality counseling. The structural inequalities in the broader school context hinder them from making informed academic choices. Even if great career counseling existed, its effect could be muted by the constraints within their economic situations such as limited access to resources, underfunded schools, and reduced possibilities for academic discovery and growth. Such

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structural limits reinforce cycles of inequality, reproducing the same social stratifications

Bourdieu advocated against.

What this study actually reveals is not merely the shortcomings in career guidance services, but a deeper shortfall in opportunity. Career counseling is not a luxury, but a central service for helping students navigate complex school and labor markets. It can be truly effective, though, if it is delivered by trained practitioners designed to students' varied needs. It has to be part of a broad school reform initiative beginning in early childhood and proceeding through all schooling phases, which would be based on equity and social justice.

All in all, the results of this research turned out to be both political as well as practical. For the Kazakhstani Ministry of Education, it is vital to invest in professional training in career guidance for school guidance counselors, making it available in all schools. The research also implies a more fundamental change in the system of education itself. The schools are institutions in which all children, no matter their background, are offered an equal chance to excel and make smart decisions for their future. Without the system change, though, there will still exist such educational inequality. This study is hoped to offer policymakers, teachers, and school administrators a clear indication of the urgent need of student support structures.

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References

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: why and how of it? *Indian Journal of medical specialties*, 4(2), 330-333.
<http://dx.doi.org/10.7713/ijms.2013.0032>
- Ahmed, K. A., Sharif, N., & Ahmad, N. (2017). Factors influencing students' career choices: empirical evidence from business students. *Journal of Southeast Asian Research*, 1-15. <http://dx.doi.org/10.5171/2017.718849>
- Akosah-Twumasi, P., Emeto, T. I., Lindsay, D., Tsey, K., & Malau-Aduli, B. S. (2018). A systematic review of factors that influence youths career choices – the role of culture. *Frontiers in Education*, 3(58), 1-15.
<https://doi.org/10.3389/feduc.2018.00058>
- Astorne-Figari, C., & Speer, J. D. (2019). Are changes of major major changes? The roles of grades, gender, and preferences in college major switching. *Economics of Education Review*, 70, 75-93. <https://doi.org/10.1016/j.econedurev.2019.03.005>
- Aydin, O. T. (2015). University choice process: A literature review on models and factors affecting the process. *Yükseköğretim Dergisi*, 5(2), 103–111.
<https://doi.org/10.2399/yod.15.008>
- Bäulke, L., Grunschel, C., & Dresel, M. (2022). Student dropout at university: a phase-orientated view on quitting studies and changing majors. *European Journal of Psychology Education*, 37, 853–876. <https://doi.org/10.1007/s10212-021-00557-x>
- Blake, M. K. (2020). Other duties as assigned: The ambiguous role of the high school counselor. *Sociology of Education*, 93(4), 315-330.
<https://doi.org/10.1177/0038040720932563>

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Bobalca, C., Tugulea, O., & Bradu, C. (2014). How are the students selecting their

bachelor specialization? A qualitative approach. *Procedia Economics and Finance*, 15, 894-902. [https://doi.org/10.1016/S2212-5671\(14\)00553-X](https://doi.org/10.1016/S2212-5671(14)00553-X).

Bryan, J., Young, A., Griffin, D., & Holcomb-McCoy, C. (2018). Leadership practices

linked to involvement in school–family–community partnerships: A national study. *Professional School Counseling*, 21(1), 1–10.

<https://doi.org/10.1177/2156759X18761897>

Byun, E., & Park, S. (2014). Effects of major satisfaction and employment stress on

depression in college students. *Journal of the Korea Academia-Industrial cooperation Society*, 15(1), 323-330.

<http://dx.doi.org/10.5762/KAIS.2014.15.1.323>

Cardoso, P., Silva, J. R., Goncalves, M. M., & Duarte, M. E. (2014). Innovative moments

and change in Career Construction Counseling. *Journal of Vocational Behavior*, 84, 11-20. <https://doi.org/10.1016/j.jvb.2013.10.001>

Cech, E. A. (2022). The Trouble with Passion: How Searching for Fulfillment at Work

Fosters Inequality. *University of California Press*.

Cimsir, E. (2019). Insight, academic major satisfaction and life satisfaction among college

students majoring in education: Implications for career counseling. *Journal of Psychologists and Counselors in Schools*, 29(2), 206-218.

<http://dx.doi.org/10.1017/jgc.2019.15>

Crossman, K. A., & Hardesty, J. L. (2018). Placing coercive control at the center: What are

the processes of coercive control and what makes control coercive? *Psychology of Violence*, 8(2), 196–206. <https://doi.org/10.1037/vio0000094>

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Cotofan, M., Cassar, L., Dur, R., & Meier, S. (2023). Macroeconomic conditions when young shape job preferences for life. *The Review of Economics and Statistics*,

105(2), 467-473. https://doi.org/10.1162/rest_a_01057

Dahlan, H. M., Idris, M., & Susanto, H. (2020). Improve student career certainty using self-information: A career counseling in the school. *International Journal of*

Learning, Teaching and Educational Research, 19(12), 242–256.

<https://doi.org/10.26803/ijlter.19.12.14>

Delavande, A., & Zafar, B. (2019). University choice: The role of expected earnings, non-pecuniary outcomes, and financial constraints. *Journal of Political Economy*,

127(5), 2343–2393. <https://doi.org/10.1086/701808>

Demoscope. (2015). 87% of young Kazakhstanis would change their specialty if possible.

Retrieved from <https://demos.kz/87-molodyh-kazahstancsev-pri-vozmozhnosti-smenili-by-specialnost/>

Dodd, V., Hanson, J., & Hooley, T. (2022). Increasing students' career readiness through career guidance: measuring the impact with a validated measure. *British Journal of*

Guidance and Counseling, 50(2), 260-272.

<https://doi.org/10.1080/03069885.2021.1937515>

Falco, L. D. (2017). The school counselor and STEM career development. *Journal of*

Career Development, 44(4), 359-374. <https://doi.org/10.1177/089484531665644>

Falco, L. D., & Summers, J. J. (2019). Improving career decision self-efficacy in high

school students: A randomized controlled study. *Career Development Quarterly*,

67(3), 243–257. <https://doi.org/10.1177/0894845317721651>

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Ferrare, J. J., & Lee, Y. G. (2014). Should We Still be Talking About Leaving? A

comparative examination of social inequality in undergraduates' major switching patterns. *Wisconsin Center for Education Research*.

<http://www.wcer.wisc.edu/publications/workingPapers/papers.php>

Fletcher, E. C., Gordon, H. R. D., Asunda, P., & Zirkle, C. (2015). A 2015 status study of

career and technical education programs in the United States. *Career and Technical Education Research*, 40(3), 191–211.

<https://doi.org/10.5328/cter40.3.191>

Foskett, R., & Johnston, B. (2010). 'A uniform seemed the obvious thing': experiences of

careers guidance amongst potential HE participants. *Journal of Further and Higher Education*, 34(2), 223-238. <https://doi.org/10.1080/03098771003695486>

Gabriel, B., Anca, M., Neacsu, N. A., & Boscor, D. (2014). High school vocational

counseling role in leveraging students' professional inclinations. *Amfiteatru Economic*, 16(37), 1014-1025.

Galliot, N., & Graham, L. J. (2015). School based experiences as contributors to career

decision-making: Findings from a cross-sectional survey of high-school students. *Australian Educational Researcher*, 42(2), 179-199.

<https://doi.org/10.1007/s13384-015-0175-2>

Gati, I., Levin, N., & Landman-Tal, S. (2019). Decision-Making Models and Career

Guidance. In J. A. Athanasou, & H. N. Perera (Ed.), *International Handbook of Career Guidance* (2nd ed., pp. 115-145). Springer Nature.

https://doi.org/10.1007/978-3-030-25153-6_6

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Hirschi, A., & Froidevaux, A. (2020). Career counseling. In H. Gunz, M. Lazarova, & W. Mayrhofer (Ed.), *Routledge Companion to Career Studies* (1st ed., 331-345).

Routledge. <https://doi.org/10.4324/9781315674704-24>

Holmegaard, H. T., Madsen, L. M., & Ulriksen, L. (2015). To choose or not to choose science: Constructions of desirable identities among young people considering a STEM higher education program. *International Journal of Science Education*, 37(2), 270–291. <https://doi.org/10.1080/09500693.2012.749362>

Hooley, T., Marriott, J., & Sampson, J. P. (2011). Fostering college and career readiness: How career development activities in schools impact students' career certainty. *International Journal for Educational and Vocational Guidance*, 11(2), 95-110.

Hooley, T., & Rice, S. (2019). Ensuring quality in career guidance: a critical review.

British Journal of Guidance & Counseling, 47(4), 472-486.

<https://doi.org/10.1080/03069885.2018.1480012>

Howard, K. A. S., Carlstrom, A. H., Katz, A. D., Chew, A. Y., Ray, G. E., Laine, L. L., & Caulum, D. (2021). Career aspirations of youth: Untangling race/ethnicity and SES. *Journal of Career Assessment*, 29(1), 145–160.

<https://doi.org/10.1016/j.jvb.2010.12.002>

Hughes, D., Mann, A., Barnes, S-A., Baldauf, B., & McKeown, R. (2016). Careers education: International literature review. *Education and Employers Research*.

Jaensch, V. K., Hirschi, A., & Freund, P. A. (2015). Persistent career indecision over time: Links with personality, barriers, self-efficacy, and life satisfaction. *Journal of Vocational Behavior*, 91, 122-133. <https://doi.org/10.1016/j.jvb.2015.09.010>

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Kamm, C., Gebhardt, A., Gonon, P., Brühwiler, C., & Dernbach-Stolz, S. (2020).

Learners' perceptions of a career guidance curriculum in different school-based support systems in Switzerland. *Journal of Vocational Education & Training*, 72(3), 375–395. <https://doi.org/10.1080/13636820.2019.1610474>

Kashefpakdel, E. T., & Percy, C. (2017). Career education that works: An economic analysis using the British Cohort Study. *Journal of Education and Work*, 30(3), 217-234. <http://dx.doi.org/10.1080/13639080.2016.1177636>

Kenny, M. E., Blustein, D. L., & Meerkins, T. M. (2018). Integrating relational perspectives in career counseling practice. *The Career Development Quarterly*, 66(2), 135-147. <https://doi.org/10.1002/cdq.12128>

Keshf, Z., & Khanum, S. (2021). Career guidance and counseling needs in a developing country's context: a qualitative study. *Sage Open*, 11(3), 1-18. <https://doi.org/10.1177/21582440211040119>

Kim, G. (2023). Sociocultural contexts and power dynamics in research interviews: Methodological considerations in Confucian society. *Qualitative Research*, 23(6), 1556-1573. <https://doi.org/10.1177/14687941221110189>

Lapan, R. T., Whitcomb, S. A., & Aleman, N. M. (2017). Connecticut professional school counselors: College and career counseling services and smaller ratios benefit students. *Professional School Counseling*, 21(1), 1096–2409. DOI: 10.5330/PSC.n.2012-16.124

Lara, T. M., Kline, W. B., & Paulson, D. (2011). Attitudes regarding career counseling: Perceptions and experiences of counselors-in-training. *The Career Development Quarterly*, 59(5), 428-440. <https://doi.org/10.1002/j.2161-0045.2011.tb00969.x>

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Legewie, J., & DiPrete, T. A. (2014). The High School Environment and the Gender Gap in Science and Engineering. *Sociology of Education*, 87(4), 259–280.

<https://doi.org/10.1177/0038040714547770>

Lindstrom, L., Lind, J., Beno, C., Gee, K. A., & Hirano, K. (2020). Career and college readiness for underserved youth: Educator and youth perspectives. *Youth & Society*, 52(1), 3–34. <https://doi.org/10.1177/0044118X20977004>

Littman-Ovadia, H., Lazar-Butbul, V., & Benjamin, B. A. (2014). Strengths-based career counseling: overview and initial evaluation. *Journal of Career Assessment*, 22(3), 403-419. <https://doi.org/10.1177/1069072713498483>

Liu, V., Mishra, S., & Kopko, E. M. (2021). Major decision: the impact of major switching on academic outcomes in community colleges. *Research in Higher Education*, 62, 498-527. <https://doi.org/10.1007/s11162-020-09608-6>

Long, H., & Pang, W. (2016). Family socioeconomic status, parental expectations, and adolescents' academic achievements: a case of China. *Educational Research and Evaluation*, 22(5-6), 283–304. <https://doi.org/10.1080/13803611.2016.1237369>

Malik, S. I., & Al-Emran, M. (2018). Social factors influence on career choices for female computer science students. *International Journal of Emerging Technologies in Learning*, 13(5), 56-70. <https://doi.org/10.3991/ijet.v13i05.8231>

Mann, A., & Huddleston, P. (2017). Schools and the twenty-first century labour market: Perspectives on structural change. In A. Mann, P. Huddleston, & E. Kashefpakdel (Eds.), *Essays on Employer Engagement in Education* (pp. 9-23). Routledge.

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Maree, J. G. (2016). How career construction counseling promotes reflection and reflexivity: Two case studies. *Journal of Vocational Behavior*, 97, 22-30.

<https://doi.org/10.1016/j.jvb.2016.07.009>

Maree, J. G., & Fabio, A. D. (2018). Integrating personal and career counseling to promote sustainable development and change. *Sustainability*, 10(11), 1-16.

<https://doi.org/10.3390/su10114176>

Martinez, S. L., Wilson, C. B., & Johnson, E. R. (2024). The long-term impact of student debt on career choices and social mobility of low-income students. *Research and Advances in Education*, 3(5), 1–11. <https://doi.org/10.56397/RAE.2024.05.01>

Masdonati J., Perdix, S., Massoudi, K., & Rossier, J. (2014). Working alliance as a moderator and a mediator of career counseling effectiveness. *Journal of Career Assessment*, 22(1), 3-17. <https://doi.org/10.1177/1069072713487489>

Mau, W.-C. (2016). Characteristics of US Students that Pursue a STEM Major and Factors that Predict Their Persistence in Degree Completion. *Universal Journal of Educational Research*, 4(6), 1495–1500. <https://doi.org/10.13189/ujer.2016.040630>

Muneer, Q.-U.-A., & Khanum, S. (2020). Comparison of career decision-making difficulties of university students with provision and non-provision of career guidance and counseling services. *International Journal of Indian Psychology*, 8(3), 234-245. <https://doi.org/10.25215/0803.152>

Nota, L., & Rossier, J. (2015). *Handbook of life design: From practice to theory and from theory to Practice*. Hogrefe Publishing.

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Nota, L., Soresi, S., Ferrari, L., & Ginerva, M. C. (2014). Vocational Designing and Career Counseling in Europe. *European Psychologist, 19*(4), 248-259.

<https://doi.org/10.1027/1016-9040/a000189>

Nweze, T., & Okolie, U. C. (2014). Effective guidance and counseling programmes in secondary schools: Issues and roles in students' career decision making. *Journal of Research & Method in Education, 1*(4), 63-68. [https://doi.org/10.9790/7388-](https://doi.org/10.9790/7388-04456368)

[04456368](https://doi.org/10.9790/7388-04456368)

Piatek-Jimenez, K., Cribbs, J., & Gill, N. (2018). College students' perceptions of gender stereotypes: making connections to the underrepresentation of women in STEM fields. *International Journal of Science Education, 40*(12), 1432–1454.

<https://doi.org/10.1080/09500693.2018.1482027>

Pipkins, K. C., Rooney, G. S., & Jaunarajs, I. (2014). Back to the basics: career counseling. In K. K. Smith, E. J. Whitt., & J. H. Schuh (Ed.), *Strategic Directions for Career Services Within the University Setting* (1st ed., 35-48). Wiley Periodicals.

Rath, T., & Harter, J. (2010). *Wellbeing: The five essential elements*. Gallup Press.

Rosa, J. E., Hon, C. K. H., Xia, B., & Lamari, F. (2017). Challenges, success factors and strategies for women's career development in the Australian construction industry. *Construction Economics and Building, 17*(3), 27–46.

<https://doi.org/10.5130/AJCEB.v17i3.5520>

Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Publications.

EXPLORING HIGH SCHOOL CAREER COUNSELING EXPERIENCES AND SOCIOECONOMIC INFLUENCES ON COLLEGE MAJOR SATISFACTION

Sarzhanova, A., Lopes, R. P., Tungatarova, A., & Borankulova, G. (2017). Development of an information and reference application for vocational guidance of students.

14th International Conference on Computer Supported Education, 2, 631-637.

Savickas, M. L. (2015). Career counseling paradigms: Guiding, developing, and designing.

In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career intervention, Vol. 1. Foundations* (pp. 129–143). American Psychological Association.

<https://doi.org/10.1037/14438-008>

Sharif, N., Ahmad, N., & Sarwar, S. (2019). Factors influencing career choices. *IBT*

Journal of Business Studies, 15(1), 33-45.

<http://dx.doi.org/10.46745/ilma.jbs.2019.15.01.03>

Sheldon, E., Simmonds-Buckley, M., Bone, C., Mascarenhas, T., Chan, N., Wincott, M.,

Gleeson, H., Sow, K., Hind, D., & Barkham, M. (2021). Prevalence and risk factors for mental health problems in university undergraduate students: A systematic review with meta-analysis. *Journal of Affective Disorders, 287*, 282-292.

<https://doi.org/10.1016/j.jad.2021.03.054>

Shumba, A., & Naong, M. (2013). The influence of family income on students' career

choice at universities of technology. *South African Journal of Higher Education,*

27(4), 1021–1037. <https://doi.org/10.20853/27-4-277>

Staiculescu, C., & Dobrea, R. C. (2017). Impact of the career counseling services of

employability. In E. Soare, & C. Langa (Eds.), *Education Facing Contemporary World Issues, vol 23. European Proceedings of Social and Behavioural Sciences*

(pp. 938-945). Future Academy. <https://doi.org/10.15405/epsbs.2017.05.02.115>

Stipanovic, N., Stringfield, S., & Witherell, E. (2017). The influence of a career pathways

model and career counseling on students' career and academic self-efficacy.

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Peabody Journal of Education, 92(2), 209-221.

<https://doi.org/10.1080/0161956X.2017.1302217>

Super, D. E. (1957). *The psychology of careers: An introduction to vocational development*. Harper & Row.

Syzdykova, K. (2018). System development career guidance work in schools of Republic of Kazakhstan as a factor expanding access to higher, technical and professional education. *Soros Kazakhstan Foundation*. Retrieved from https://www.soros.kz/ru/press_center/publications/

Tan, C. Y. (2024). Socioeconomic status and student learning: Insights from an umbrella review. *Educational Psychology Review*, 36(100), 1-63. <https://doi.org/10.1007/s10648-024-09929-3>

Wang, M.-T., & Degol, J. L. (2017). Gender Gap in Science, Technology, Engineering, and Mathematics (STEM): Current Knowledge, Implications for Practice, Policy, and Future Directions. *Educational Psychology Review*, 29, 119–140. <https://doi.org/10.1007/s10648-015-9355-x>

Workman, J. L. (2015). Parental Influence on Exploratory Students' College Choice, Major, and Career Decision Making. *College Student Journal*, 49(1), 23–30.

Yates, J., & Bruce, M. (2017). The future of career education in New Zealand secondary schools: A review of the literature. *Australian Journal of Career Development*, 26(2), 62-70. <https://doi.org/10.1177/1038416217700421>

Yoon, H. J., Bailey, N., Amundson, N., & Niles, S. (2019). The effect of a career development programme based on the Hope-Action Theory: Hope to work for

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refugees in British Columbia. *British Journal of Guidance & Counseling*, 47(1), 6-

19. <https://doi.org/10.1080/03069885.2018.1544827>

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Appendices



Appendix A: Declaration of the Use of Generative AI

Thesis Title: Assessing College Counseling Factors and Their Significance for
Undergraduate Career Choice Satisfaction: A Phenomenological Study of Private and
Public-school graduates

Declaration of the Use of Generative AI

I hereby declare that I have read and understood NUGSE's policy concerning appropriate use of AI and composed this work independently (please check one):

- with the use of artificial intelligence tools, or
- without the use of artificial intelligence tools.

(If you have used AI tools as defined in the GSE policy document, please complete the rest of this form.) During the preparation of this thesis/examination, I used ChatGPT to brainstorm ideas, create a template for Invitation Letter and Informed Consent Form, and translate interview transcriptions.

I also declare that I

- am aware of the capabilities and limitations of AI tool(s),
- have verified that the content generated by AI systems and adopted by me is factually correct,
- am aware that as the author of this thesis I bear full responsibility for the statements and assertions made in it,
- have submitted complete and accurate information about my use of AI tools in this work, and
- acknowledge that there may be disciplinary consequences if I have not followed NUGSE's guidelines regarding appropriate AI use.



Name: Aruzhan Dildabay

Signature:

Date: 25.04.2025

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Appendix B: Invitation Letter Template

Dear [Mr/Ms Surname],

I hope this email finds you well. My name is Aruzhan Dildabay, and I am currently a second-year student at Nazarbayev University, pursuing a Master of Science in Education Leadership. In addition to my studies, I serve as a Career and College Counselor at Astana Garden School.

I am reaching out to invite you to participate in my master's thesis research study titled "Assessing College Counseling Factors and Their Significance for Undergraduate Career Choice Satisfaction: A Phenomenological Study of Private and Public-school graduates."

The purpose of this study is to explore and understand the impact of high school career guidance on students' satisfaction with their academic choices in undergraduate education. Your insights and experiences as a graduate could provide invaluable contributions to this research.

Participation in this study will involve an online interview lasting approximately 45-60 minutes, where we will discuss your experiences with career guidance during high school and how it has influenced your academic and career decisions. Your participation is completely voluntary, and all responses will be kept confidential and used solely for the purpose of this study.

If you are interested in participating or have any questions about the study, I am happy to provide any additional information you may need and arrange a convenient time for the interview.

Thank you very much for considering this opportunity to contribute to my research. Your participation would be greatly appreciated and will help to improve career guidance programs for future students.

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Best regards,

Aruzhan Dildabay

MSc Education Leadership Candidate

Nazarbayev University

Career and College Counselor

Astana Garden School

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Appendix C: Informed Consent Form

Study Title: Assessing College Counseling Factors and Their Significance for

Undergraduate Career Choice Satisfaction: A Phenomenological Study of Private and Public-school graduates

Researcher: Aruzhan Dildabay

Affiliation: Nazarbayev University, MSc Education Leadership

Contact Information: aruzhan.dildabay@nu.edu.kz

Purpose of the Study

You are invited to participate in a research study that aims to explore the influence of high school career guidance on students' satisfaction with their academic choices in undergraduate education. This study seeks to understand how different factors in career counseling impact the decisions and satisfaction of graduates from both private and public high schools.

Procedures

If you agree to participate, you will be asked to take part in an online interview lasting approximately 45-60 minutes. The interview will focus on your experiences with career guidance during high school and how it has influenced your academic and career choices. With your permission, the interview will be audio-recorded for accuracy in data collection.

Voluntary Participation

Your participation in this study is entirely voluntary. You may choose not to participate or to withdraw from the study at any time without any consequences.

Confidentiality

All information collected in this study will be kept confidential. Your identity will be protected, and any information that could potentially identify you will be removed. The

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data will be used solely for academic purposes and may be published in academic journals, but your identity will not be disclosed.

Risks and Benefits

There are no known risks associated with participating in this study. While there may be no direct benefits to you, your participation will contribute to a better understanding of the effectiveness of high school career guidance programs and may help improve these programs for future students.

Compensation

There is no compensation for participating in this study.

Contact Information

If you have any questions about this study, you can contact me, Aruzhan Dildabay, at aruzhan.dildabay@nu.edu.kz. You may also contact my academic supervisor, Professor Ahmet Aypay at ahmet.aypay@nu.edu.kz for further information.

Consent:

By signing this form, you indicate that you have read and understood the information provided above, and that you agree to participate in this study. You will be given a copy of this form to keep.

Participant's Signature: _____

Date: _____

Researcher's Signature: _____

Date: _____

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Appendix D: Coding Scheme

Theme	Sub-theme	Code	Explanation	Quotation
Role of Career Guidance	Availability and Quality of Guidance	Events and Sessions	The participant actively participated in career guidance events and found them helpful in shaping their career decision. External speakers provided practical knowledge and inspiration for students. Alumni shared their study experiences, providing some guidance.	"The events that were held on this topic were very helpful... I tried to attend as many of these events as I could." "Different people came and talked about where and how to apply, what to do. So, it was very useful for students planning to study abroad." "I remember graduates coming to present their fields of study. They explained and shared their experiences." "If it weren't for the work counsellor did with me, I likely wouldn't have done it on my own."
		Confidence in decision	The participant credits career guidance for helping make a well-informed decision. Career guidance provided valuable resources and insights to assist with university applications.	"They helped me with writing my personal statement, choosing a university... including my SAT results." "We had fully structured career guidance lessons with a counsellor. ... We described our unique traits." "One-on-one conversations with career guidance specialists... were the most helpful."
		Career Guidance Support	Career guidance lessons like the "I Model" and one-on-one discussions helped students understand their preferences and motivations. Neutral career counselors provided unbiased advice, which was particularly useful for making informed decisions. Career guidance tools, like tests and articles, helped the participant identify a suitable field of study.	"After completing several tests... the results showed civil engineering, aerospace engineering, and industrial engineering." "I suspect that these tests were very outdated and super generic, free tests that always gave the same results." "We were recommended to take a test independently to figure things out ourselves."
		Generic Career Tests	The school offered basic career aptitude tests but didn't follow up or provide deeper career exploration opportunities. Career guidance tests and events were insufficient to inform decisions.	"There were some tests, but I don't think they were effective. They seemed more like something to satisfy an immediate need, to calm us down." "We were only encouraged to think about one direction—teaching. They told us it was a good profession but didn't explain its challenges." "Out of the available options, I chose what seemed the easiest at the time."
		Limited Career Options	Teachers promoted teaching as the only viable career path without offering alternative options or detailed discussions. Financial resources and practical job prospects influenced the selection of perceived easier fields. Students felt career guidance failed to align with individual interests and strengths.	"We didn't even know we needed guidance. We didn't know where to start." "There wasn't any specific career guidance to help us determine our future career or profession." "There wasn't enough involvement from professionals... Teachers themselves couldn't cover all the basics."
	Absence of Guidance	Lack of Tailored Guidance	Guidance was not tailored to long-term career aspirations. Participants noted a lack of access to trained professionals in career guidance, relying on teachers without expertise. Students largely relied on their own efforts to navigate career choices without structured guidance from schools. Career guidance was limited to informal advice from teachers.	"There wasn't a specialized career counselor. It was just regular teachers or friends helping." "We didn't receive much help with career guidance. I feel it was mostly individual efforts under parental pressure." "In school, from the administration or teachers, as far as I remember, none."
		Absence of External Opportunities	The participant noted the absence of activities like excursions, internships, or exposure to other fields, which limited their understanding of alternative career paths. Schools failed to provide practical experiences and sufficient interaction with industry professionals. Limited practical exposure led to confusion about career paths.	"We weren't invited to anything, we didn't go on excursions, we didn't try internships." "It would've been great if someone had explained that changing careers is normal. Or if there had been internships or practical experiences in companies." "If I had experienced working for a construction company earlier, I might have made a different choice."

Theme	Sub-theme	Code	Explanation	Quotation
Socioeconomic Influences	Financial Constraints	Scholarship Dependency	The participant chose their major based on the availability of scholarships, as their family could not afford education expenses.	different choice." "I chose physics and mathematics primarily because there was a scholarship, and I was admitted on that basis."
		Financial Support Expectations	The participant's parents influenced their career path, emphasizing financial limitations and stable job options.	"My parents couldn't afford my education," and "They said, 'You're a girl, so it makes sense to go into teaching, it's a stable job with a salary.'"
		Practical Choice for Job Security	The participant's decision was influenced by the need to ensure job prospects in a booming industry. Teaching was seen as a stable and secure career choice due to its guaranteed salary, particularly when teacher salaries were being publicized as increasing.	"That's why I chose civil engineering, because construction was booming at the time."
		Financial Independence	Financial support from parents allowed the participant to focus on education without financial concerns.	"At that moment, around 2018, when they started raising teacher salaries, it was always in the news." "My parents' higher education... is connected to the jobs they have now—jobs that are well-paid. Because of this, there's less pressure on me to immediately start earning and I attended... the school surgical club and the biological school at the Medical University of Astana."
	Social Exposure	Extracurricular Events	Participation in school clubs and lectures sparked the participant's interest in medicine. Interest in specific subjects like biology and chemistry aligned with the chosen major.	"I participated in chemistry Olympiads and was good at biology, so I chose this profession based on that." "Both of my parents have higher education degrees; my dad even has three."
		Parental education level	Parents' educational achievements influenced the participant's understanding of the value of higher education. Family provided emotional and decision-making support, but not direct influence in career choices.	"My parents' higher education directly influenced this." "My parents are highly educated... They've already been through this process and know what needs to be done."
	Family Impact	Influence of parents' profession	The father's profession provided practical exposure, contributing to the participant's decision. Family's mathematical background subtly influenced the participant's decision.	"Watching my father work throughout my life... made the choice obvious." "Both my parents are mathematicians, and I decided to develop in that direction."
		Focus on stability and prospects	Family encouraged prestigious professions like medicine and engineering. Parental advice emphasized stability and future prospects of the career.	"My grandparents are businesspeople... they always wanted me to follow in my mom's footsteps and become a doctor." "My dad's advice was focused on the future prospects and stability of the field."
		Parental support	Family values instilled ambition and high aspirations in the participant.	"My family has always motivated me to set high goals and work towards them."
		Parental Pressure	Parents supported the participant's decisions without imposing expectations. Family influence was significant, encouraging aspirations while allowing freedom of choice.	"They never pushed me—they always supported me, whether I wanted to study abroad or stay in Kazakhstan." "There was encouragement for professions my parents worked in, as they talked a lot about them. However, there were no restrictions in choosing a career." "My parents insisted that I go into medicine."
Gender bias	Gendered career expectations	Parents' influence and expectations played a major role in academic choices. Participant faced stereotypes but remained determined to pursue STEM.	"Some people questioned my choice, saying, 'Why are you picking this? It's so hard. You're a girl, and this is STEM.'"	
	Workplace inequality and barriers	Cultural norms and parental views about gender influenced the participant's career choice, portraying teaching as an appropriate and stable job for women. Cultural expectations placed additional pressures on men in the field of medicine due to them being traditionally seen as breadwinners. Dissatisfaction with the culture and limitations in the construction industry.	"You're a girl, so it makes sense to go into teaching, it's a stable job with a salary." "Meanwhile, your peers from other fields are getting married, earning money, and living independently. For medicine, especially men, it's much harder." "It was mostly due to the company culture—how women are treated, the lack of career growth, the overly rigid hierarchy."	

Theme	Sub-theme	Code	Explanation	Quotation
Level of Satisfaction with College Major	Satisfied with college major	Enjoyment of chosen field	The participant is satisfied with their choice and enjoys their field of study. Participant enjoyed the major due to its fit with personal interests and career goals. Participant enjoys computer science but finds it challenging.	growth, the overly rigid hierarchy." "I am 100% confident that I will graduate and work in this field because I genuinely enjoy it." "Then I realized I really enjoy what I'm doing now. The environment is very supportive." "I'm satisfied because it's interesting, but I didn't expect it to be so hard."
		Personal fulfillment	Provides a sense of purpose and resilience by aligning with personal values and answering deeper motivational questions.	"It gave me a sense of purpose (studying medicine). As I said before, answers to the 'why' questions. When you know your 'why,' it keeps you grounded, even in difficult times." "It could also be luck... I might have convinced myself to love it."
		Satisfaction Due to Luck	The participant attributes their satisfaction to luck rather than careful career planning or guidance.	"It's daily stress... there's no time for a break, no time for friends, no time for hobbies."
	Unsatisfied with college major	Academic Stress and Workload	High workload and mental strain contributed to dissatisfaction. Realized lack of personal interest in civil engineering.	"During my studies, I realized I wasn't interested in it." "Honestly, they didn't align at all—maybe 2 out of 10."
		Interest in the Field	The participant's university experience did not align with their expectations, leading to dissatisfaction with their career choice. The participant expressed regret about their major but felt unable to change.	"If I had the chance, I would have picked something creative."
		Regret and Limited Alternatives	The participant compared their university choice and career path to peers, feeling more. Lack of understanding of practical applications led to dissatisfaction.	"I felt like I had chosen a lower-tier path, even though I might have had the potential to do more." "I didn't fully understand what I could become and, more importantly, what I'd be studying during my bachelor's degree."

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Suggestions for Improvement	Practical Skill Development	Diversity of professionals	The participant suggested adding more field-specific guest speakers for better guidance.	"Perhaps more meetings with people specializing in particular fields could be added... I don't recall many engineers."
			Career guidance lacked diversity in professional representation.	"Most of the people invited were businesspeople or creative individuals, but I don't recall many engineers."
			Tailored Guidance for Creative Careers	"For creative students like me, they could have encouraged activities like theater, drawing, or dance."
			Schools should organize sessions with professionals from various industries.	"It would've been great to have more interaction with people from different professions."
			Schools should involve professionals to provide realistic insights into career paths.	"The gap in our school's career guidance was that there wasn't enough involvement from professionals in this area."
		Early Practical Experiences	Inclusion of professionals from various fields, especially humanities, could enhance the career guidance experience.	"It would've been great to have more guests from the humanities."
			Schools should facilitate more interactions with industry professionals.	"Schools should provide opportunities to interact with professionals and participate in projects to better understand what a career entails."
			Providing students with internships or hands-on experience would better inform their career choices.	"It would've been great if there had been internships or practical experiences in companies."
		Emphasis on Early Career Guidance	Career choices were made late due to limited early guidance and self-doubt.	"Back then, I was very unsure of myself, and it seemed difficult, so I didn't consider it."
			Advocates starting career guidance in middle school to develop skills and align interests.	"Grade 7 is a good time... focus on developing skill sets closer to graduation."
Career Assessment Tools	Enhanced Career Tests	Start career exploration from 9th grade to better align interests with career paths.	"I'd recommend starting from 9th grade to help students explore various specializations."	
Holistic University Preparation	Support for University Transition	They recommended using modern, more tailored career tests that align better with teenage understanding and preferences.	"We have more modern tests now, right? More tailored to teenagers."	
		Proposes bridging the gap between high school and university by offering guidance on academic and social challenges.	"If they had explained the pros and cons of different universities or programs, it might have helped."	
Better Resource Allocation	Increase Counselors' Availability	Schools should provide insights into university life to prepare students.	"Before coming, I didn't have any understanding of the university life. And it's not anyone's fault—it's just a crucial factor."	
		Suggests hiring more career counselors to ensure individualized attention.	"I think there was only one counselor... they physically didn't have time."	
Financial Guidance Programs	Scholarship Awareness	Additional counselors are necessary for better support.	"Some schools only have one counselor for the entire student body, which is insufficient."	
		More focus is needed on informing students about scholarships, grants, and financial aid.	"Guidance about scholarships and career options should also be emphasized."	
Student Engagement in Career Guidance	Self-Motivation	Importance of Student Initiative	Students' engagement significantly affects the effectiveness of career guidance.	"If the student doesn't engage, there's not much the counselor can do."
		Limited Effectiveness for Some	Career guidance's impact varies based on student interest and motivation.	"If someone doesn't want to engage, it's hard to make them."
		Individual Responsibility	Students need to research and engage proactively in career exploration.	"The responsibility also lay with me as an individual and with my parents."