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PROFESSIONAL CHOICE OF HIGH SCHOOL STUDENTS AND FACTORS OF CHANGE

Abstract. *Purpose.* This article investigates the factors influencing career choices among high school students in Kazakhstan, with a particular focus on the impact of gender and school type. The study aims to identify the key motives and conditions shaping students' professional self-determination during adolescence.

Design/methodology/approach. The research is grounded in sociological and psychological theories, including the theory of professional self-determination and the concept of professional identity. A quantitative sociological survey was conducted among 9th and 11th grade students from both urban and rural schools. The sample included 1,000 students aged 15 to 17, selected through targeted sampling based on region, school type, and gender. Data were collected using a structured questionnaire.

Findings. The findings reveal that career choices among students are significantly influenced by a range of social and institutional factors, such as family background, education system characteristics, and labor market conditions. The study also identifies notable differences in career preferences by gender and school type, underscoring the importance of tailoring career guidance to individual socio-demographic contexts.

Originality. This study contributes to the understanding of professional orientation processes in Kazakhstan by providing empirical insights into the diverse factors that shape students' career decisions. It highlights the need for differentiated and personalized career support strategies in educational policy and practice.

Key words: career choice, sociological survey, career guidance, professional self-determination.

Introduction

Choosing a career plays a crucial role in shaping professionals who align with the future demands of the labor market. Conventional approaches to career selection are increasingly resulting in inefficient job placement. In light of ongoing global socio-economic shifts and the transition toward Society 5.0 – a highly intelligent and digitally integrated society – there is an urgent need to create innovative models and methods for career decision-making that reflect the growing impact of digital technologies across various sectors. Making the right choice is not an easy task. On the one hand, current trends in labor market changes and the requirements for a specialist of the future society demand that young people correctly assess their professional preferences and abilities. At the same time, rising attention must be given to preparing professionals in emerging sectors of the economy, driven by labor market demands. Consequently, traditional occupations are steadily disappearing, current roles are being reshaped, and brand-new professions are emerging.

A person's professional interests, beliefs, and value systems are shaped throughout the socialization process, influenced by factors such as family environment, educational institutions, social circles, and media exposure. The perception of a future profession largely determines the possibilities for personal professional growth and the effective socio-economic development of each society. In the consciousness of high school students professions hierarchy is formed according to their attractiveness and preferences, differentiated depending on their social background, place of residence, social attitudes, and other factors.

The process of choosing a career is inherently social, involving an individual's understanding of the

societal structure of professional labor, awareness of various occupations, and the competencies required for them. It also includes knowledge about how to gain these competencies and opportunities to apply them effectively (Mansurov & Yurchenko, 2013). Career decision-making can be categorized into two stages: the initial stage, marked by actions like enrolling in a specific educational program, and the subsequent stage, which involves entering the workforce and starting a professional career. Decision-making in the career choice process is associated with the establishment of all possible options at each stage. M. Weber (2016) suggests that individuals make career decisions influenced by traditions, rational goals, emotional or charismatic motivations. Among these, one distinct category includes factors related to the perceived prestige of a profession, where the choice is shaped by its societal status.

Literature review

Professional self-identification, a key developmental task during adolescence, inherently involves making a career decision. This process is shaped by the social context in which high school students find themselves as they approach adulthood. While career choice has historically been significant for graduates of any era, the current landscape–marked by rapid and unpredictable global changes–has significantly altered this process. The once-common notion of lifelong employment, typical of older generations, is now outdated. The labor market is evolving swiftly to meet shifting societal needs and advancements in digital and communication technologies. As new fields such as IT genetics, bioethics, and smart environment design emerge, traditional roles like accounting are being phased out or dramatically transformed. Consequently, today's students must be ready to adapt, potentially changing their career paths multiple times throughout their professional journey.

A wide range of research indicates that the phase of deciding on a future career can be psychologically challenging for many high school students. Adolescents frequently view this time as overwhelming, often marked by emotional discomfort, increased anxiety, and uncertainty about what lies ahead. Many students are not yet fully equipped to make independent and informed career decisions. These challenges tend to arise regardless of their school type or geographical location. Factors such as psychological stability and confidence in career decisions are shaped not only by external influences but also by personal attributes–such as value systems, consistent intellectual interests, clarity of career goals, self-awareness of strengths, social competence, and the ability to adapt to rapidly shifting environments.

The selection of a future profession is shaped by a combination of internal and external factors. In today's rapidly changing society, high school students face greater challenges in professional self-determination than those who matured during the more predictable and structured Soviet period, which operated within an industrial economic framework. Studies have shown that contemporary youth often feel less assured in their career decisions compared to earlier generations. This uncertainty is largely linked to the modern labor market's complexity–marked by a wide range of professions, constant transformation, and fierce competition. Moreover, in a society undergoing continual transition, the older generation is often unable to provide reliable career advice, as they too struggle to navigate the evolving professional landscape. Consequently, making informed career decisions has become a significantly more demanding process for today's students than it was in the past (Danilova, 2021).

One of the key macro-level influences on graduates' career decisions is the prevailing socio-economic environment of the time. For instance, during the challenging post-war period (1947–1948), when there was an urgent demand for labor, nearly a third of Moscow's school leavers opted for industrial professions (Ariskina, 1952). In the early 1960s, amid industrial expansion and the onset of the space age, students gravitated toward engineering, technical, and humanities-related fields. However, by the mid-1980s, interest had shifted notably toward service-oriented and humanities disciplines, which had previously held a lower status among students (Mkrtchyan & Chirikova, 1985). Recent studies reveal that today's students are mostly attracted to careers that involve interpersonal communication–so-called "person-to-person" roles. In contrast, technical fields and those involving nature are less popular. The most appealing career paths now include creative industries, IT, and education. This preference corresponds with the knowledge-driven, tech-based modern economy and reflects students' aspirations for personal growth and creativity (Danilova, 2021). Notably, attitudes toward educational careers have undergone a major transformation: once unpopular in the early 2000s (Azbel, 2004), professions in teaching and childcare–like school teaching, language tutoring, and coaching–have risen to become top choices among students.

The analysis of the results allows to identify several key motives that influence high school students' career choice (Moriyasu et al., 2022):

- **Material motives.** Many high school students aim to choose a profession that offers a stable income and financial security. The opportunity to earn decent money and spend it on personal needs, interests, and pleasures is a significant factor for this group.

- **Interest in the profession.** A considerable number of students are guided by genuine interest in a profession. They want to enjoy their work, engage in activities that inspire them, and pursue what truly fascinates them. Such interest often stems from hobbies, favorite school subjects, or personal experiences.

- **Prestige and status.** When making a career choice, high school students often take into account the level of respect and prestige associated with a profession. The desire to hold a high-status job that earns social recognition and respect is a powerful motivation for many.

- Interest in a broader domain: Rather than selecting a specific job, some high school students are drawn to general spheres of interest–such as science, the arts, healthcare, athletics, or social services–guided by their personal inclinations.

- Influence of family and social surroundings: Career preferences are often shaped by parents, teachers, peers, and relatives. Family members may suggest certain career directions, while educators and classmates can serve as examples or motivators.

- Assessment of realistic options: A number of students base their career choices on their current competencies, educational background, and accessible opportunities, making decisions that reflect a practical evaluation of their chances for success in a given profession.

Additionally, some research explores how career decision-making difficulties vary depending on high school students' locus of control. Research has shown that students with an external locus of control are more likely to face difficulties during career choice. They score higher on the scale of professional difficulties, especially in connection with a lack or contradiction of information. In contrast, students with an internal locus of control tend to make decisions more logically and confidently, experiencing fewer internal conflicts. High school students with a high level of self-control encounter fewer difficulties in making career choices. Those with an external locus of control often wait for external support and feel insecure, which complicates the process of career self-determination (Kırdök and Harman, 2018).

Modern high school students face a number of challenges in transitioning from school education to further academic or vocational training. In the context of significant changes in the economy and labor market, there is little convincing evidence that educational systems are effectively adapting to these challenges. Despite efforts to modernize curricula and expand access to higher education, a significant portion of students continues to struggle to understand the connection between the subjects they study at school and real-world professions. This situation is particularly aggravated for students who already lack motivation: those who do not think about their future careers tend to place less value on school subjects, which may explain their poor academic performance. As research has shown, students with low academic achievement and those who drop out prematurely are more likely to experience difficulties during the transition to adult life. Efforts to shape career aspirations in such students are likely to be ineffective without changes to the school experience itself, especially in terms of the accessibility and practical relevance of knowledge. To successfully implement such initiatives, it is essential to better understand which career-related educational opportunities are offered to students who are undecided about their future, how the quality of these opportunities compares with those available to other students, and to what extent they meet the needs of different groups of learners (Galliott et al., 2013).

A study on the factors influencing career choice in the STEM fields (science, technology, engineering, mathematics) among students identified both interpersonal and intrapersonal factors. The most significant influences were interpersonal – especially from family. This highlights the need to consider family support when developing strategies to attract students to STEM fields. Students also pointed to personal qualities, interest in the profession, self-efficacy, as well as moral and spiritual values as reasons for choosing a career in STEM. These findings confirm the importance of individual cognitive and personal factors in the process of career self-determination. It is especially important to consider not only cognitive aspects, but also cultural and value-based factors when further studying the motivation behind choosing professions in the STEM sphere (Abe and Chikoko, 2020).

Methodology

This article outlines the findings of a survey carried out in 2023 throughout various regions of Kazakhstan, encompassing major urban centers such

as Astana, Almaty, Shymkent, Semey, and Pavlodar. The research focused on 9th and 11th grade students attending high schools. Data collection was primarily conducted through in-person questionnaires administered to students from both urban and rural schools. This approach was chosen to gather in-depth insights into students' career preferences and the reasons influencing their professional decisions. The demographic composition of the student sample was determined using official secondary education statistics provided by the Ministry of Education and Science of the Republic of Kazakhstan. A targeted sampling method was used, with the criteria for selection being region of residence, type of school, and gender.

The sample size is 1000 respondents aged 15-17 years. The strucrure of sample is presented in the table 1.

It is important to note that the study sample includes both urban and rural high school students, as well as those from private (paid) and public schools, including both general education and specialized (advanced) schools. This allows for a more comprehensive understanding of the factors influencing high school students' decisions regarding their further educational paths.

This study presents new results on the study of career choice motivations among high school students in urban schools. However, it has certain limitations related to the use of the quantitative method. Since this method does not allow for the deep outlining of motivations in the context of different social groups of high school students, in comparison to interviews, it does provide an overview of the general trend characterizing the motivations of career choice among high school students.

Research Results. The findings reveal that a significant portion of high school students have made decisions regarding their future careers to some extent: 59.7% have made a firm choice, while 30.5% are mostly certain about their decision. The proportion of those who have not decided on a career choice is 9.9%. An analysis by gender revealed no statistically significant differences in professional self-determination. The data are presented in Table 2.

Table 1 – Structure of the sample

Varibles	Values	Distribution
Gender	Male	49%
	Female	51%
Grades	9th grade	50.9%
	11th grade	49.1%
Regions	Western	17%
	Southern	16%
	Nothern	13.2%
	East	11.7%
	Central	8.5%
Cities	Astana	9.7%
	Almaty	10.7%
	Shymkent	13.1%
Type of school	Public school	54,7%
	Specialized (lyceum, gymnasium, NICHE, private)	35,3%

Table 2 – Distribution of responses to the question "Have you decided on your career choice?" by gender

№	Response options	Gender		Total Sample
		Male	Female	
1	Yes	60,7%	58,7%	59,7%
2	Rather yes	29,4%	31,5%	30,5%
3	No	9,9%	9,8%	9,9%

Analysis of the question "Have you decided on your career choice?" by school type demonstrates that high school students from specialized schools are more likely to have made their decision. Among students in specialized schools, 64.0% have made a career decision, whereas this figure drops to 58.9% for those in general education institutions. Uncertainty about career choice is more common among students from public schools, where 10.2% remain undecided, compared to 8.1% in specialized schools. The data are presented in Table 3.

Table 3 – Distribution of responses to the question "Have you decided on your career choice?" by school type

№	Response options	School type	
		Public school	Specialized
1	Yes	58,9%	64,0%
2	Rather yes	30,9%	27,9%
3	No	10,2%	8,1%

According to analysis of respondents' answers to the question "Have your professional preferences changed over the past 3 years?" most high school students have changed their professional preferences at varying degrees: 45.3% changed significantly and 39.2% – slightly. Only 11.8% of all respondents did not change their professional preferences over the past 3 years. The share of students who did not have defined professional preferences is 3.6%, while all other students had determined their professional preferences. The data are presented in Table 4.

Table 4 – Distribution of responses to the question "Have your professional preferences changed over the past 3 years?"

№	Response options	Persentage, %
1	Yes, significantly	45,3
2	Yes, slightly	39,6
3	No	11,8
4	I did not have any	3,6

The majority of surveyed students (84.5%) changed their initial professional preferences at vary-ing degrees over the past three years. Analysis of the factors that influenced these changes shows that the top three positions are occupied by: changes in the labor market and demand for professions – 38.0%, advice from parents, relatives, and friends – 37.8%, and job availability in different employment sectors – 37.1%. The significance of these factors in the transformation of students' professional preferences indicates that they are highly responsive to labor market changes and employment opportunities during the process of career self-determination. The least significant factor in changing professional preferences is the activities of universities and colleges in attracting applicants. Only 4.8% of all respondents noted this as a factor that influenced their decision to change their professional preferences. Data are presented in Table 5.

Comparison of the significance of factors influencing the change in high school students' professional preferences over the past 3 years by gender demonstrates that there are no statistically significant differences. There are minor differences in the ranking of the following factors: (1) availability of employment in various sectors, (2) information on the Internet and in Media, (3) work of universities and colleges in attracting applicants.

Table 5 – Factors influencing the transformation of high school students' professional preferences over the past 3 years

№	Factors	Persentage, %
1	Changes in the labor market and demand for professions	38,0%
2	Advice from parents, relatives, and friends	37,8%
3	Availability of employment in various sectors	37,1%
4	Changes in personal interests related to self-realization	34,6%
5	State educational policy (support for universities, number of grants, etc.)	31,5%
6	Information on the Internet and in Media	26,9%
7	Independently obtained information from educational institutions' websites	12,0%
8	Work of universities and colleges in attracting applicants	4,8%

Table 6 – Factors influencing the transformation of high school students' professional preferences over the past 3 years by gender of respondents

№	Factors	Gender	
		Male	Female
1	Changes in the labor market and demand for professions	16,7%	16,4%
2	Advice from parents, relatives, friends	16,6%	16,4%
3	Availability of employment in various sectors	15,2%	17,0%
4	Changes in one's interests related to self-fulfillment	15,6%	14,6%
5	State educational policy (support for universities, number of grants, etc.)	13,7%	13,7%
6	Information on the Internet and in Media	11,3%	12,1%
7	Independently obtained information from educational institutions' websites	5,0%	5,5%
8	Career guidance at school	3,1%	2,8%
9	Work of universities and colleges to attract applicants	2,8%	1,5%

The analysis of recent changes in students' professional preferences by school type shows that both groups prioritize similar factors, though the degree of influence varies (Table 6). Labor market trends and the shifting demand for specific professions hold slightly more weight for students in specialized schools compared to those in general education institutions. Government policies related to education, such as support for universities and grant distribution, also have differing levels of importance. Additionally, online resources and mass media appear to play a less significant role for students in specialized schools than for their peers in general schools. Still, in both school types, this factor consistently ranks among the top three most influential drivers behind changing career preferences.

Table 7 – Factors influencing the transformation of high school students' professional preferences over the past 3 years, by school type and language of instruction

№№	Factors	School type		Language of leaning	
		Public	Specialised	Kazakh	Russian
11	Changes in the labor market and demand for professions	16,0%	19,9%	17,4%	15,8%
22	Advice from parents, relatives, and friends	16,7%	15,1%	16,1%	16,8%
43	Availability of employment in various areas of activity	16,3%	15,6%	16,1%	16,2%
44	Changes in personal interests related to self-fulfillment	15,2%	14,5%	14,4%	15,7%
55	State educational policy (support for universities, number of grants, etc.)	13,4%	15,6%	14,1%	13,4%
66	Information from the Internet and information media	12,2%	8,6%	13,4%	10,2%
77	Independently obtained information from educational institution websites	5,1%	5,9%	4,8%	5,6%
88	Career guidance at school	3,0%	2,7%	2,3%	3,5%
99	Activities of universities and colleges to attract applicants	2,1%	2,2%	1,5%	2,7%

Similarly, government education initiatives–such as university support and grant allocation–hold greater influence for students in specialized schools than for those in general education institutions, with respective rates of 15.6% and 13.4%. In contrast, digital and media-based sources of information play a smaller role for specialized school students: only 8.6% consider them impactful in reshaping their career views, compared to 12.2% of students from general education schools. Detailed figures can be found in Table 7.

Results and discussion

The professional self-determination of high school students in modern society appears as a complex and multi-layered social process, in which personal aspirations are formed and realized under the influence of a broad system of sociocultural, economic, and institutional factors. From a sociological perspective, career choice cannot be viewed solely as an act of individual rational decision-making; on the contrary, it represents the interaction between structural conditions, social status, family culture, and the educational environment.

The analysis of the obtained data demonstrates that high school students' professional expectations are increasingly being formed in a context of uncertainty and instability, which is characteristic of post-industrial society. Young people perceive their professional future not as a predetermined trajectory, but as a variable and fragmented domain, in which they must navigate through symbolic rather than institutionally fixed reference points. This situation stems from the decline of conventional support systems related to career decision-making–such as guidance from schools and families–along with the insufficient development of effective career orientation tools. Amid ongoing cultural and economic shifts, high school students are becoming more dependent on their personal definitions of success and are developing their own adaptive strategies to cope with the fast-paced changes in their environment.

The social context of career choice demonstrates a significant dependence on the socioeconomic status of the family, educational opportunities, and the availability of cultural capital. The orientations of high school students reflect both their desire for social mobility and an awareness of the structural constraints that define the boundaries of what is possible. Moreover, there is a shift in the perception of the very category of profession: it is losing its stability and becoming part of a broader identity construct that includes ideas about self-fulfillment, freedom of choice, and symbolic status.

The dynamics of professional preferences also indicate changes in the value system of adolescents, where increased importance is placed on areas related to social interaction, self-development, and creativity. At the same time, tension remains between individual expectations and the real opportunities for their realization, which are determined both by structural factors and by high school students' insufficient awareness of labor market demands.

Thus, the professional self-determination of high school students in modern society is formed at the intersection of individual intentions and social conditions, where a decisive role is played not only by internal motivations but also by access to symbolic and institutional resources.

Conclusion

Contemporary society presents high school students with ever-evolving and multifaceted challenges, particularly in the area of career self-determination. The research revealed that making a career decision is a layered process, shaped not only by students' internal motivations but also by external influences such as family, the education system, and labor market conditions. The main trends are a decline in high school students' confidence in their career choice, the growing role of subjective factors (interest, prestige, values), as well as a transformation of the concept of a career. High school students no longer perceive a profession as a destiny chosen once and for all, but rather as a path where change and adaptation are possible. In these conditions, the development of flexible planning skills, self-awareness, resilience to uncertainty, and readiness for lifelong learning becomes especially important. At the same time, schools and the educational system as a whole should create more favorable conditions for career choice: through the integration of practice-oriented modules, individual guidance, and broader access to information about real professions.

Choosing a profession while in high school is a complex and dynamic journey shaped by social influences and personal characteristics. Improving the effectiveness of vocational guidance requires a holistic approach that considers the specifics of the school environment, the psychological and developmental aspects of teenagers, and the continuous evolution of labor market conditions.

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