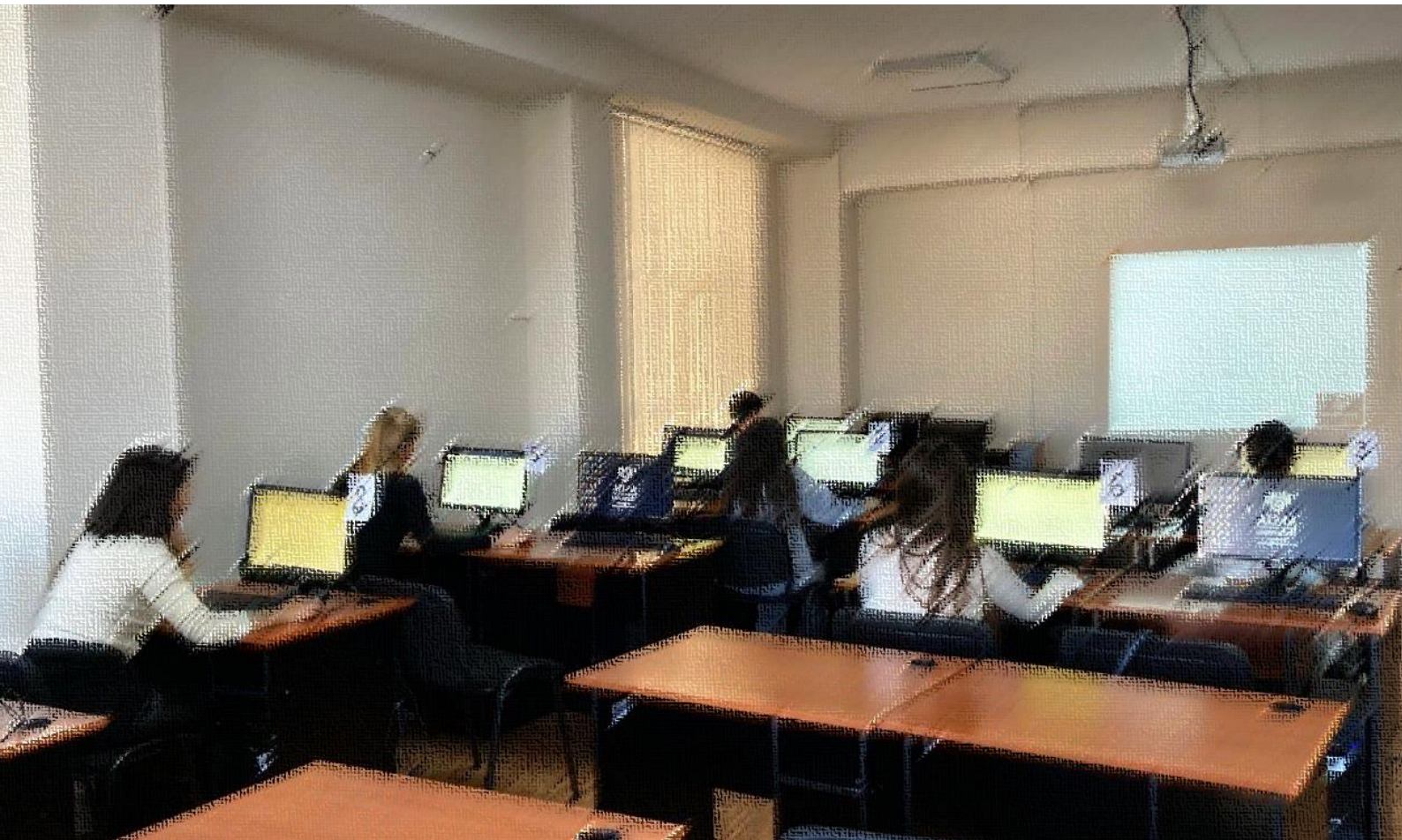


# The Evaluation of Challenges of Youth in Kazakhstan and Piloting Innovative Solutions





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Partnerships for Enhanced Engagement in Research (PEER)

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# Foreword

In the ever-evolving landscape of youth development and social policy, the issue of NEET youth—those not in education, employment, or training—presents a critical challenge that demands thoughtful analysis and innovative solutions. Over the last two decades, Kazakhstan has made substantial strides in addressing this concern, witnessing a commendable reduction in the number of NEET youths from 18.6% in 2001 to 6.3% in 2022. The government's dedication to shaping policies that facilitate the socialization, employment, and education of young individuals is evident in the extensive programs implemented to provide holistic support, from free education to mentorship initiatives.

However, this promising trajectory faces formidable obstacles, chief among them being the difficulty in precisely identifying and defining NEET youth. The methodologies employed for this purpose are still in development, impeding accurate tracking and communication with those beyond the official monitoring systems. Furthermore, a crucial aspect often overlooked is the need for a nuanced understanding of the values, needs, and motivations of NEET youth, hindering the formulation of targeted and effective interventions. Regional and gender disparities compound the challenge, emphasizing the necessity for a comprehensive approach that transcends one-size-fits-all solutions.

This project is a testament to the commitment to overcoming these barriers. Through a combination of qualitative methods, literature reviews, and groundbreaking experiments in experimental economics—both in laboratories and field settings—the researchers delve deep into the challenges faced by NEET youth in Kazakhstan. The inclusion of innovative approaches, particularly in Central Asia, the Caucasus, and Eastern Europe, sets a pioneering precedent for future studies in the region.

This text not only underscores the unique struggles faced by NEET youth in Kazakhstan but also aims to contribute globally by examining the diverse solutions implemented worldwide. The emphasis on preventive, informative, and corrective measures sets the stage for a comprehensive understanding of successful models. Notably, the exploration of a "one-stop-shop" model and a partnership network with a referral system adds a valuable layer to the discourse on providing services to vulnerable youth.

The findings of the qualitative analysis shed light on issues that undermine state programs, ranging from didactic teaching methods in educational institutions to the lack of work experience as a significant employment barrier for fresh graduates. Additionally, the distrust in state programs due to inflexibility and low administrative capacity, coupled with the stigma attached to registration with employment centers, complicates the government's efforts to engage with NEET youth.

The incorporation of experimental economics offers insights into the preferences and choices of young individuals. The revelation that an increase in wages can influence the perception of "blue-collar" work signifies a potential lever for change, highlighting the need to address societal prejudices. Furthermore, the affirmation of the positive impact of free technical and vocational education on career choices advocates for the continuation and expansion of such reforms.

In the realm of communication interventions, the text messages delivered to NEET youth emerge as a cost-effective strategy to bridge the information gap and boost participation in government programs. The significant increase in registration and enrollment in training or educational programs

among those who received messages attests to the potential of low-cost interventions in transforming the landscape of youth engagement.

As we embark on this exploration of the challenges faced by NEET youth and the potential avenues for intervention, it is our hope that the insights and recommendations presented here will not only inform policy decisions in Kazakhstan but will also inspire researchers and policymakers across the region and beyond to adopt innovative approaches in addressing the complex issue of NEET youth. The journey to empower the youth and ensure their meaningful participation in society is a collective responsibility—one that requires continuous reflection, collaboration, and a commitment to creating positive change.

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# Table of Content

Foreword.....	4
Acknowledgments .....	6
Abbreviations .....	9
Executive summary .....	10
1. Introduction and Project Overview.....	13
1.2 Overview of state youth policy.....	13
1.2 Overview of NEET youth in Kazakhstan .....	13
1.3 Overview of the project objectives and activities.....	15
2. Overview of International Approaches in NEET Youth Development.....	17
2.1 North America.....	17
2.2 Europe.....	19
2.3 The Middle East and North Africa .....	21
2.4 South and South-East Asia .....	22
2.5 Latin America.....	23
2.6 Central Asia.....	24
3. NEET Youth Challenges in Kazakhstan: Qualitative Analysis of youths and stakeholders’ perspectives .	25
3.1 Qualitative research design.....	25
3.2 Perspectives of NEET youth on educational system.....	25
3.3 Perspectives of NEET youth on employment and labor market issues .....	28
3.4 Perspectives of NEET youth on government interventions.....	29
3.5 Perspectives of Stakeholders on NEET Youth Challenges .....	30
4. Employment preferences of NEET youth in Kazakhstan: Laboratory experiment.....	34
4.1 Lab experimental design.....	34
4.2 Literature review on blue-collar and white-collar job preferences.....	35
4.3 Hypothesis and methodology .....	37
4.4 Results of the lab experiment .....	38
4.5 Lab experiment research limitations.....	42
5. Elimination of the information gap in employment, education and vocational training of young people in Kazakhstan: Field Experiment.....	44
5.1 Context and literature review .....	44
5.2 Field experiment design.....	45
5.3 Methodology and Hypothesis.....	46
5.4 Field experiment results.....	47
6. Conclusion and policy recommendations.....	51

References .....	56
Appendix .....	60
Appendix A. Description of governmental programs included in text messages.....	60
Appendix B. The content of text messages .....	62

## List of Tables, Figures and Pictures

Figure 1. Proportion of the Population by Age Group, Kazakhstan, 2020–2100

Figure 2. Share of youth NEET youth in the Republic of Kazakhstan, 2001-2020

Figure 3. Participants' choice for Blue collar jobs, %

Figure 4. The average pay-out by treatment and round

Figure 5. The average pay-out by treatment groups

Figure 6. Average pay-off for Almaty and Astana across treatment groups

Figure 7. The average share of those who chose a working profession by gender

Figure 8. Blue collar job choice distribution by stated job preferences

Figure 9. The review of outcomes by control and treatment group

Picture 1. Lab experiment conduction at Almaty Management University

Picture 2. Examples of messages that were sent in Kazakh and Russian

Table 1. Main regression results on choice of blue collar jobs by round and average payoff

Table 2. Regression analysis without control variables

Table 3. Regression analysis with control variables

# Abbreviations

ALMAU	Almaty Management University
BMAS	Bundesministerium für Arbeit und Soziales
BMBF	Bundesministerium für Bildung und Forschung
BMFSFJ	Bundesministerium für Familie, Senioren, Frauen und Jugend
CCT	Conditional Cash Transfer
CET	Continuing Education and Training
CITI	The Collaborative Institutional Training Initiative
DOL	US Department of Labor
EU	European Union
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
ION	Innovation and Opportunity Network
IREC	Nazarbayev University Institutional Research Ethics Committee
ISSP	Integrated Support Services Program
IT	Information Technologies
MCI	Monthly Calculation Index
MENA	Middle East/North Africa
NAV	Norwegian Labour and Welfare Administration
NAYE	National Action Plan for Youth Employment
NESU	National Employment Strategy Unit
NGO	Non-governmental organizations
NSRP	National Structural Reform Program
NU	Nazarbayev University
OECD	The Organization for Economic Cooperation and Development
PEER	Partnerships for Enhanced Engagement in Research
PES	Public Employment Services
PRONATEC	National Program for Access to Technical Education and Employment
RCT	Randomized controlled trials
SIDA	Swedish International Development Cooperation Agency
SMEs	Small and medium-sized enterprises
STEP	Summer Teaching and Enrichment Program
SWTS	School-to-Work Transition Study
TVET	Technical and vocational education and training
UK	United Kingdom
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNT	Unified National Test
UNU-MERIT	United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology
USAID	United States Agency for International Development
VET	Vocational Education and Training
WIOA	Workforce Innovation and Opportunity Act
WP	Work Program
YESS	Youth Employment and Skills Strategy
YG	Youth Guarantee
YRC	Youth Resource Center

# Executive summary

**Over the last 20 years, the number of NEET youths (youth who are not in education, employment, or training) has decreased by 2.9 times from 18.6% in 2001 to 6.3% in 2022.** The government of Kazakhstan has taken significant measures to regulate and institutionalize youth policies regarding NEET youth and promote their socialization, employment, and education. Over the last decade, large-scale government programs have been implemented in the country to provide systematic support for free education, employment after graduation, starting their own businesses, and providing mentoring assistance for young people in the workplace.

**However, these programs and subsequent indicators are undermined by the difficulty of identifying and defining NEET youth in the country.** While the methodology for determining the number of NEET youth as well as its subcategories is still in the process of development, it is difficult to identify and communicate with youth that are outside the official tracking system. In addition, the approaches used to study this group of young people are not aimed at a deep understanding of their values, needs, and motivations, which creates certain barriers in developing effective interventions for NEET youth. Finally, there is a lack of understanding of large regional and gender differences in the share of NEET youth across the country.

**In this project, we apply qualitative methods and literature review to understand the challenges faced by NEET youth in Kazakhstan and implement innovative methods of experimental economics (laboratory and field experiments) to test various hypotheses and potential solutions.** The use of laboratory and field experiments in Central Asia, the Caucasus, and Eastern Europe has been very limited in any area, let alone youth development. We believe our report will inspire other researchers in the region to utilize cutting-edge innovative approaches to test various solutions to social issues.

**The issue of NEET youth exists in both developed and developing countries.** Many governments worldwide utilize various approaches and programs to help identify NEET youth and support their transition to education or work. Most solutions implemented to address the issue of NEET youth involve preventive, informative, and corrective measures. We review the approaches for youth development used in all regions of the world and identify the best practices that can be useful for Kazakhstan.

**Based on existing practice, there are two successful models for providing services to meet the needs of vulnerable groups of youth.** Firstly, this involves creating a "one-stop-shop". Although this approach is considered passive and requires the young person to go to the "one-stop-shop", the variety of services that can be obtained in one place is an advantage. Such services can include employment, social assistance, social security, healthcare, housing, education, and professional training (ILO, 2017). The second approach involves creating a partnership network and referral system. Such a system brings together existing services and programs led by government and non-governmental organizations.

**A qualitative analysis of youths and stakeholders' perspective on NEET youth challenges in Kazakhstan further revealed the issues that undermine the state programs on youth development.** Young people expressed their concerns about the teaching process in educational

institutions in secondary, TVET and higher education levels. They stressed that the teaching was highly didactic without focusing on developing functional literacy and teachers were not motivated to introduce new teaching practices. At the same time, it was noted that the updated content of secondary education, a national reform on secondary education is hard to comprehend by students and was introduced too rapidly to be properly adapted by schools.

**In addition to the lack of skills, NEET youth also mentioned that lack of work experience as the main barrier for getting employed.** One of the barriers to the employment of youths is the requirement to provide work experience to potential employers. Some youths could not provide that because they were fresh graduates. Furthermore, distrust of youth in state programs to solve NEET problems are exacerbated with challenges of inflexibility of the programs and low administrative capacity. Some youths are afraid to register with the employment center due to social stigma, which makes it harder for the government to involve them into interventions.

**Stakeholders note the need for a deeper study of the value systems of NEETs and the reasons for acquiring the status of being outside of work and education.** These same experts feel a lack of platforms for discussions on youth policy issues to form a unified vision. A YRC representative further pointed out that there is no universal definition of NEET. Some stakeholders proposed to limit the NEET category to the truly vulnerable youth, i.e. mainly youth from rural areas, who experience problems with employment and education, or young people with special needs, and the unemployed, compared to those who seem less vulnerable such as self-employed youth, youth who live with rich parents and women on maternity leave.

**The laboratory experiment confirmed the unpopularity of manual labor professions among young people and their preference for office professions, even if the wages for manual labor were equal to those of office workers.** The behavior of the participants during the experiment also showed that even an increase in wages may not have an immediate or lasting effect on raising the prestige of manual labor professions. In situations where those around them choose manual labor professions, the participants' choices change quickly and allow for a balance in the ratio. Women choose manual labor professions less frequently during the game, which is likely to be the case in real conditions, especially in traditional societies such as Kazakhstan. Interestingly, participants who already have technical and professional education more often choose manual labor professions.

**An increase in wages has been confirmed as an effective mechanism for raising the prestige of manual labor professions in conditions where office professions are inherently more attractive to young people.** This is a clear indication that there is inherent prejudice towards "blue-collar" work due to various factors such as low prestige, shame or the expectation that working professions are worse paid. Salary increases may "work" even if societal opinions regarding the image of working professions do not change.

**The reform of providing technical and vocational education for free should be continued and expanded, as young people who have studied in colleges are significantly more likely to choose "blue-collar" jobs.** This influence is quite significant and widespread, with a 55% higher likelihood of choosing "blue-collar" work. The experience of receiving professional education apparently reduces the stigmatization of professions, as these young people are better acquainted with various professions that could be preferable for them, and better understand the differences in demand and wages in the labor market.

**The field experiment confirmed that text messages via mobile communication have confirmed the proven impact on informing NEET youth as incentives to change their employment status and register for training and educational programs.** Low-cost information interventions should become part of informing youth about programs. The main goal of the field experiment was to

eliminate the information gap in youth knowledge about free government programs. By eliminating this information gap, we can increase youth participation in these programs and ultimately increase employment, education, and professional training levels, which, in turn, will reduce the number of NEET youth.

**Indeed, there is a significant gap between awareness of employment, youth training programs, self-employment opportunities, and the actual utilization of these programs.** As a result, it was found that young people who received messages were more likely to register at employment centers compared to the control group (31% vs 28%). Although the difference in means is insignificant at the 10% level, it is an important indication that the messages may have contributed to a higher level of registration at employment centers. Additionally, young people in the treatment group were significantly more likely to register for training or educational programs (12% vs 6%) compared to the control group. It is possible that the text messages may have changed the youth's perceptions about the availability of such government or non-governmental programs.

**Awareness of government programs is relatively high, but the level of utilization is low: only 1 in 10 people in the control group applied for at least one program.** The main problem appears to be the imperfect information policy regarding government programs. At the same time, 2 out of 10 young people applied for at least one program in the treatment group. This is the biggest impact, confirming the influence of informational intervention on NEET young people.

**Sending messages with brief information and a registration link has a significant impact, but the government needs to explore more ways to encourage NEET youth to take action, by simplifying the registration process for these programs and requiring less documentation at the initial stages.** We strongly recommend that the government study solutions with limited resources to increase awareness of the programs offered to youth. Our intervention is a good example of a solution with minimal resources to increase awareness and the number of subscribers to these programs. For example, text messages can be adapted to participants based on their age and education level, using information available to the government.

# 1. Introduction and Project Overview

## 1.2 Overview of state youth policy

Issues of youth support are always in the focus of state policy in Kazakhstan. The government has adopted the Law "On State Youth Policy" in 2023, which introduced the term "NEET youth". The basis for action at all levels is the Concept of Youth Policy, which is updated regularly based on an analysis of the current situation. One of the leading strategic documents defining the priorities of work with youth is the national project titled "National Spiritual Renewal", where the development of new opportunities for young people, socialization, and employment of young Kazakhstanis, as well as the involvement of this social demographic group in socially useful activities is designated as a key direction. At institutional level, the government formed a Youth Policy Council under the President of the Republic of Kazakhstan in 2008 which convenes regularly to discuss current youth related issues. Moreover, youth support has been institutionalized at the regional and local level through youth resource centers (YRC), of which there are 288 across the country.

The State implements national programs aimed at facilitating the education and employment of young people who are currently not studying and not working. Since 2019, the country has launched the "Free VET for All" program, within which the right to get the first working profession for free was guaranteed to everyone. The Youth Internship program has been functioning since 2016, which helps a young person gain experience at the first workplace. A similar format of youth support is provided within the framework of the "First Workplace" program. To solve the problem of the shortage of jobs in labor-surplus regions, Serpin-2050 project is operating. Young people from the southern regions study here at the expense of the state in labor-deficient regions - mainly in the north of the country.

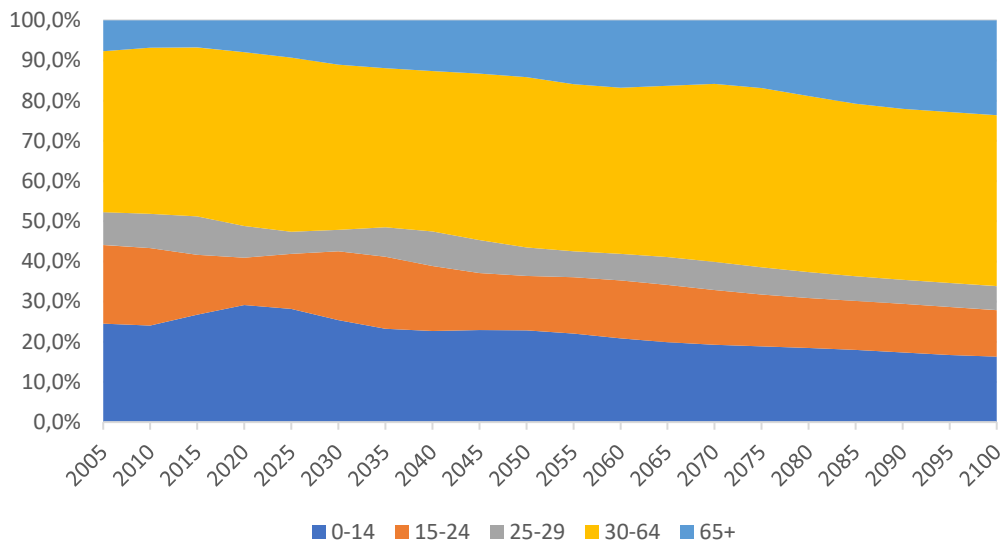
There are significant initiatives developed by non-governmental sector as well. Since 2017, the project "Youth Corps" has been initiated in Kazakhstan jointly with the World Bank. The aim of the project is to promote the involvement of young people in society and the development of life skills through a community-based ministry training program, especially for vulnerable youth, with most beneficiaries being NEET youth. Between 2017 and 2019, the project reached more than 5,000 NEET young people across the country through volunteer and social entrepreneurship grants and training programs. He supported about 2,600 project teams (consisting of 3-5 people) to create a social enterprise or a group of community volunteers and covered 76 cities, 176 districts and 640 villages across the country (World Bank, 2022).

Despite these efforts by the government and other non-governmental institutions, there are significant issues and challenges that NEET youth face.

## 1.2 Overview of NEET youth in Kazakhstan

Kazakhstan is a relatively young country (Figure 1). Due to a "baby boom" between 2000-2010, the 15–29-year-old segment of the population is projected to rise in the short-term, reaching an estimated 25.3 percent of the total population in 2035. Long-term, however, the country is expected to age. Beginning in 2035, a demographic decline is anticipated due to falling birth rates and longer life spans, with the share of the population over age 65 increasing from 7.9 percent in 2020 to 14.1 percent by 2050.

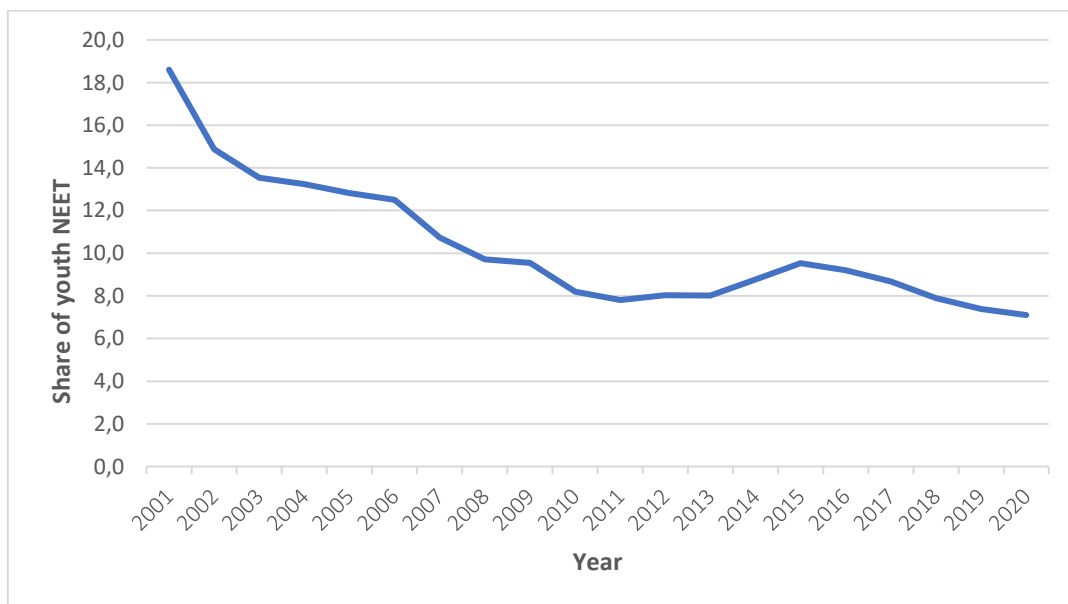
**Figure 1. Proportion of the Population by Age Group, Kazakhstan, 2020–2100**



Source: United Nations, Department of Economic and Social Affairs, Population Division. 2019. World Population Prospects 2019. Online Edition. Rev. 1.

Compared to most countries, Kazakhstan has shown a significant reduction in the NEET of young people over the past 20 years - from 18.6% in 2001 to 7.1% in 2020, that is, a decrease of 2.6 times (Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, 2023).

**Figure 2. Share of youth NEET youth in the Republic of Kazakhstan, 2001-2020**



Source: Republic of Kazakhstan, Bureau of National Statistics of the Agency for Strategic Planning and Reforms, 2021

According to the National Statistical Committee (2020), the official level of NEET among young people in 2019 was 7.4%, but due to the difficulty of identifying such individuals at an early stage, many believe that this figure is much higher and is up to 40% or 1.5 million people (Alimkhanova, 2018). This is due to the fact that many young people, especially from rural areas and representatives of vulnerable groups, tend to be in the informal labor market and do not continue their education.

There are significant regional discrepancies in the indicators of the share of NEET. In 2022, the highest figures were recorded in Ulytau oblast (11.8%), and the lowest in West-Kazakhstan (2.8%) (Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, 2023) . Nevertheless, experts have not yet identified the factors determining the values of the NEET share indicator in different regions of the country (National Research Center "Youth", 2021), as well as the issue of the high proportion of NEET women compared to men is not fully clarified.

Another problem lies in the methodology of determining NEETs, their identification, since they are outside the official state system, and they are difficult to find. Evidence and research on issues related to NEET youth is limited in Kazakhstan. Only one quasi-governmental agency reports on NEET in the annual National Youth Report. However, this report contains only quantitative information about NEET youth by region and the total number by country. It does not provide qualitative data, such as the reasons why a person becomes a NEET and does not offer solutions to meet the needs of NEET youth (Shaikhina, 2019).

As we can see, policies and measures to reduce the number of young people who do not study and do not work face a number of systemic issues. In particular, the approaches used to study this category of youth are not aimed at a deep understanding of their values, needs, motives of behavior. This creates certain barriers in the construction of effective intervention measures in relation to NEET and, as a result, calls into question the effectiveness of the planned actions. Finally, there is no established practice of evaluating the effectiveness of ongoing projects to support NEET, which expend significant resources and efforts.

### **1.3 Overview of the project objectives and activities**

An analysis of the current situation regarding NEET youth shows significant regional and country differences. Therefore, activities aimed at involving young people in education, employment and vocational training should be adapted to the conditions of a particular country and region. Unfortunately, despite the efforts of Governments to address the problems of NEET youth, Central Asian countries, including Kazakhstan, rarely take into account the effective evaluation of any interventions. Consequently, the lack of evidence-based assessment of these interventions leads to an unreasonable expenditure of public resources and a lack of a better understanding of effective approaches.

Therefore, within the framework of the project, the main objective is to apply innovative methods of experimental economics (laboratory and field experiments), which allows testing planned solutions and evaluating the effectiveness of interventions performed. Over the past decade, hundreds of such studies have been applied in the fields of education, healthcare, public administration, and small business in both developed and developing countries. The use of laboratory and field experiments in Central Asia, the Caucasus and Eastern Europe has been very limited in any field, not to mention youth development. In Kazakhstan, international organizations such as the World Bank and UNDP have conducted several large-scale field experiments, but they are not used by government agencies and NGOs to solve social problems, including youth development.

The project team has set its goal to contribute to reducing the level of NEET youth in Kazakhstan by increasing the effectiveness of state policy in Kazakhstan on prevention, coverage and reintegration of these young people through the use of experimental economics methods. Therefore, the project was designed to facilitate a comprehensive study of the current state of NEET youth with a thorough analysis of the available administrative data in the country and international data on this topic. Our proposed use of experimental methods (field and laboratory experiments) was aimed at developing recommendations for the government in terms of intervention planning, ensuring the reliability of intervention evaluation. In addition, the project is aimed at establishing fruitful cooperation between

NGOs and increasing the research potential of Kazakhstani universities with the participation of an American partner.

The tasks set by the team include the following:

- 1) Improve the methodology for identifying NEET youth in Kazakhstan in accordance with international standards and local characteristics.
- 2) To determine the characteristics of NEET youth through the study of current data and broad international experience.
- 3) Provide high-quality statistics on NEET.  
After a detailed analysis of administrative data and basic research, we provide sound approaches to NEET statistics, thereby creating a basis for understanding the actual scale of the problems and the severity of the issue.
- 4) Identify internal problems and behavioral patterns of young people.  
With the help of field and laboratory experiments, we determine the views of young people and can predict and evaluate the effectiveness of interventions in relation to them. Thus, this will make it possible to further achieve the goals of projects to support NEET, as well as to improve the results of government programs and other interventions.
- 5) Develop policy mechanisms to prevent the increase in the number of NEETs and the reintegration of these young people.

Based on desk research, data analysis, field and laboratory experiments, as well as verification of conclusions at conferences and meetings, recommendations will be focused on specific problems by types of NEET vulnerability and regions, etc., in order to achieve the intended impact and reduce the risks of ineffective implementation. It is expected that the results of the project would be distributed among stakeholders, which could also affect the change in decision-making practices in relation to NEET youth.

The use of experimental methods as the gold standard of evaluation will ensure the reliability of the evaluation of interventions tested to solve the problems of NEET youth in the context of Kazakhstan, which has not been applied in Kazakhstan or the region and represents a new and innovative approach.

During the project, three stages of research with the participation of human subjects were implemented (qualitative research, laboratory and field expertise), which required strict compliance with the standards of research ethics and obtaining the approval of the Committee of Institutional Ethics of Nazarbayev University. All members of the project team were trained in research ethics either with CITI certificates or through the passage of a specially developed ethical training in Russian and Kazakh by professors of Nazarbayev University. This training enabled researchers to gain access to research. This also applied to employees conducting surveys with young people at the stage of the field experiment. Protocols of interviews and focus groups, informed consent forms, and letters for attracting participants were developed, which were submitted as part of the application to the ethics committee.

The biggest challenges with implementation of the project were associated with restrictions in communication, movement caused by COVID-19. In Kazakhstan, most of the training and office work took place online. Since the study was planned in different regions of the country, it was necessary to postpone the dates of the events due to restrictions in flights and relocations. The pandemic caused a weak response to invitations to participate in experiments and focus groups with young people. In addition, the very novelty of the applied approaches of experimental economics scared off the participants. In addition, in Kazakhstan, as it turned out, there are no well-developed methods of working with NEET youth specifically for research purposes.

## 2. Overview of International Approaches in NEET Youth Development

The issue of NEET youth exists in both developed and developing countries. Many governments worldwide utilize various approaches and programs to help identify NEET youth and support their transition to education or work. Most solutions implemented to address the issue of NEET youth involve preventive, informative, and corrective measures. Preventive measures are aimed at school-age youth and are conducted either in or after school. These measures ensure that youth do not drop out of education and do not miss out on higher education. Outreach activities are conducted through various NGOs, public organizations, and employment centers to identify youth at risk of dropping out of education or losing their job. Corrective measures include solutions to bring NEET youth back to school, provide retraining or professional development, and provide sustainable employment opportunities.

Based on existing practice, there are two successful models for providing services to meet the needs of vulnerable groups of youth. Firstly, this involves creating a "one-stop-shop". Although this approach is considered passive and requires the young person to go to the "one-stop-shop", the variety of services that can be obtained in one place is an advantage. Such services can include employment, social assistance, social security, healthcare, housing, education, and professional training (ILO, 2017).

The second approach involves creating a partnership network and referral system. Such a system brings together existing services and programs led by government and non-governmental organizations. Government officials, such as advisers, counselors, social workers, and mentors, participate in establishing initial contact with young people. In Denmark, for example, municipal agencies contact school dropouts to develop an individual action plan that includes education, work, professional training, and other reintegration measures (ILO, 2017). Other approaches include outreach programs to identify hard-to-reach groups and territorial mapping to identify specific characteristics of vulnerable youth.

In this chapter, we review the approaches used in OECD countries, as well as approaches used in separate countries organized by regions, including Central Asia. This is an important starting point for our project because it helps us understand the programs that are already being implemented and draws important lessons for Kazakhstan.

### 2.1 North America

The region has strong government support for vulnerable youth, based on effective youth awareness and qualification-enhancement support. Lack of awareness among young people about existing programs is recognized as the main obstacle to young people transitioning into the labor market. In the United States, these measures are regulated by a special law that supports young people facing obstacles through virtual networks, national plans, and training platforms. At the national level in Canada, the Youth Employment and Skills Strategy (YESS) is in effect.

In North America, the main focus is on preventive program measures for NEET youth, carried out by educational institutions. Reintegration programs, on the other hand, are not only aimed at young

people, but also involve employers, including their ability to attract and retain young people in the workplace as part of program evaluation metrics.

### ***The United States***

There are numerous active and previously implemented programs that are oriented towards specific age groups of youth and vary in their goals and types of interventions. Among the programs classified as second chance programs are the following:

Job Corps targets youth aged 16 to 24 and provides technical skills in 10 rapidly growing industrial sectors, which can lead to obtaining a high school diploma or college credits. Participants are provided with housing, food, basic medical care, and a living allowance. Over two million young people have received training through this program since 1964. Graduates typically continue to pursue higher education, enter the workforce, or join the military. The Job Corps Scholarship Program aims to enroll 2,000 young people who are eligible for employment in twenty-six state community colleges to obtain professional technical education for 12 months with subsequent 12-month intensive counseling.

The YouthBuild program targets youth aged 16-24 who have dropped out of high school. It is a community-based pre-apprenticeship program that provides opportunities for employment and education in high-demand sectors such as construction, healthcare, information technology, and hospitality. Each year, over 6,000 young people participate in over 200 programs across 40 states. Participants split their time between on-the-job training and classroom instruction for higher education.

The National Guard Youth Challenge Program targets those who drop out of high school at the age of 16-18. The program is designed for 17 months and includes pre- and post-residential quasi-military mentorship phases. Program participants had a 12% greater chance of obtaining a high school diploma and a 9% greater chance of gaining employment (Bloom et al., 2009; Perez-Arce et al., 2012).

Out-of-school programs are geared towards younger age groups of 13-19 years old. The Quantum Opportunity program provides young people aged 14-18 with 250 hours of education, 250 hours of development and mentoring, as well as 250 hours of community service. Participants also receive financial incentives. The Summer Teaching and Enrichment Program (STEP) is aimed at young people aged 14-15 who are taught reading, math, and life skills during the summer for those who struggle with their studies and come from low-income families. Learnfare is a Conditional Cash Transfer (CCT) program aimed at youth groups aged 13-19, providing social benefits to teenagers from families who do not meet the required school attendance rates. This program has led to an increase in the number of students attending school and attending classes (Dee, 2009).

The next type of intervention is mentoring, an example of which is Big Brothers Big Sisters, available to young people aged 6-18. They are matched with adult volunteers based on shared interests and other diverse factors. Those who participated in the program for a year or more showed the greatest improvements in academic, psychosocial, and behavioral outcomes (Grossman and Rhodes, 2002).

The US Department of Labor (DOL) implements several initiatives to increase employment, some of which are specifically targeted at youth and at-risk groups. The Workforce Innovation and Opportunity Act (WIOA) sanctions Job Corps, YouthBuild, and other programs targeted at specific populations. Although the Department of Health and Human Services is the primary administrator of programs that help job seekers, it relies on and supports the interaction of other stakeholders at the national level with the Department of Education and the Department of Health and Human Services and Social Services, grant recipients at the local level. The Department of Health and Human Services provides technical assistance and other resources through the Resources web page and personal consultations. The Innovation and Opportunity Network (ION) is an online resource platform that provides key information support tools to local and state stakeholders for the successful implementation of WIOA.

Educational institutions - schools, community colleges, and universities - are part of some programs aimed at providing education and skills to youth. For example, 26 state colleges and universities were selected to receive Job Corps Scholars grants to provide eligible students with career and technical education and intensive counseling services to support each student's employment and career success (Job Corps Scholars Awardees, DOL, 2021). This is a free program for students that provides a unique opportunity to gain valuable education and skills that employers are looking for in today's workforce.

### ***Canada***

The most ambitious program for NEET youth in Canada is the Youth Employment and Skills Strategy (YESS), which informs and provides opportunities to acquire skills and gain work experience for transitioning to the labor market. It is also aimed at developing the potential of youth service providers and employers in recruiting and retaining young people in the workplace.

The implementation of preventive and reintegration programs aimed at addressing the problems of NEET youth is primarily carried out by government institutions, followed by non-governmental and charitable organizations. Most often, these measures are aimed at preventing young people from becoming NEET or reintegrating them into society, or more precisely, providing education, skills training, career planning, and development, including informational support for these measures.

The criteria used to evaluate the effectiveness of programs and the suitability of service providers for youth (under the YESS strategy), include indicators of a young person's readiness for work in terms of their skills, achieving sustainable employment, returning to further education, and influencing the participant's career growth.

## **2.2 Europe**

In April 2013, the European Commission proposed to the Council of the European Union the implementation of a Youth Guarantee in all member states. The reduction of NEETs is a clear political objective of the Youth Guarantee. This initiative aims to ensure that all young people aged 15-24 receive a quality offer of employment, continued education, apprenticeship or internship within four months of becoming unemployed or completing formal education. The implementation of the Youth Guarantee in all member states within the framework of the Youth Employment Initiative has helped to improve the situation locally by reducing the number of unemployed. In 2016, the Commission launched the "Investing in Europe's Youth" initiative, renewing efforts to support young people. Given the current positive impact of the Youth Guarantee, the Commission has increased the funding of the Youth Employment Initiative until 2020 to stimulate more effective work with young people.

In 2018, a new EU Youth Strategy was adopted, which sets the framework for cooperation with member states on their youth policies for the period 2019-2027. The strategy focuses on three main areas of action, centered around the words "engaging, connecting, and empowering." Meanwhile, COVID-19 is having a serious impact on vocational education and training. To help the economy recover after the pandemic, on July 1, 2020, the new commission launched a package of measures to support youth employment, aimed at providing a "bridge to employment" for the next generation. The Commission has proposed a recommendation to the Council, "Bridge to Employment - Strengthening Youth Guarantees," which will replace the 2013 recommendation. This extends the age range covered by the youth guarantee from 24 to 29 years old (Eurofound, 2021).

The European Economic Area, comprising of member states of the EU and three countries of the European Free Trade Association (Iceland, Liechtenstein, and Norway), established a fund in 2014 to provide additional support to youth in Europe. The activities within the Fund include systemic measures, such as the development of formal education and training modules, as well as individual measures to meet the specific needs of young individuals. These measures include effective practices that create sustainable jobs, innovative solutions on how to prepare and train young people for structural changes in the labor market, such as digitization and intelligent automation, expanding stakeholder participation, including social services, child and youth services, medical and psychiatric

workers, parents, etc., involving non-traditional employers and sectors, such as NGOs, civil society organizations, and SMEs, information and propaganda strategies, developing or engaging in social entrepreneurship/enterprises, new mentoring and coaching approaches, innovative emphasis on employment opportunities and the development of soft skills, and a combination of non-formal, informal-oriented, and formal education, among others (Youth Employment Magazine, 2021).

### ***The United Kingdom***

The youth policy on NEET in the United Kingdom is aimed at developing skills and encouraging people to get jobs, but according to some experts, it does not take into account two important factors that contribute to NEET status - mental health and childcare. Government measures do not consider the need for maximum participation of young people with mental health issues and children in the labor market (Holmes, Murphy & Mayhew, 2020).

In the United Kingdom, the increase in the number of young people in the NEET group after the age of 18 causes the greatest concern. In England, the National Careers Service was created, the apprenticeship system was reformed, funding was introduced for young people aged 18 to 24 to obtain work qualifications, and progressive methods of employment and training were developed, including to assist in the effective use of flexible opportunities in the Continuing Education and Training (CET) system and the Work Program (WP) to best meet the needs of young people.

### ***Germany***

The key stakeholder in Germany is the Coordination Support Group - Federal Government - Federal State - Federal Employment Agency, a support group led jointly by the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) and the Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Soziales, BMAS) since 2014. The support group is aimed at assisting students as they progress towards employment and determining areas for their involvement. Civil society organizations also play an important role in implementing policies regarding potential and actual NEETs. Third sector organizations such as the church-run "Caritas" and "Diakonie," as well as the secular "Parity organization" Wolfartswerverband," also support youth by implementing social security agency measures.

There are various support programs operating at the federal and regional levels in Germany. Since 2006, the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend, BMFSFJ) has gradually created 400 "competent agencies," which form the main part of the "Strengthening Youth" framework program. Each of these agencies works with a network of local agents (schools, educational institutions, employment centers, municipalities, public welfare, youth support services) (Krauß, et.al., 2018). Such a comprehensive approach enables direct individual explanatory work and offers individual solutions to various youth issues. The JobStarter+ initiative aims to expand opportunities for SMEs to train youth, especially weaker youth.

### ***Norway***

The national and municipal authorities in Norway share political responsibility for employment and social services for NEETs. At the national level, the Ministry of Labour and Social Affairs is responsible for the labor market and social security policy, the Ministry of Children, Equality and Social Inclusion is responsible for children's social welfare services, and the Ministry of Local Government and Modernisation manages (social) housing. Municipalities implement social policies and provide social assistance based on available resources.

Employment services and most social services for youth are provided jointly by the Norwegian Labour and Welfare Administration (NAV). Established as a result of the 2006 reform, NAV consists of a "state division" (the Labour and Welfare Service), which pays benefits for social insurance and provides employment services to registered job seekers, and a "municipal division," which pays social assistance using funds and provides social support. Norway allocates significant resources to active

information and clarification work so that young people not attending school and not working can quickly contact NAV or an educational institution instead of falling into prolonged inactivity. Follow-up services at the county level are a central link in working with NEETs. They track and reach out to all young people up to the age of 21 who finish school without the ability to obtain higher secondary education or employment to ensure that they are offered education or vocational training. To this end, they work closely with educational institutions and NAV, and in some counties, even have consultants located directly in NAV offices.

### ***Portugal***

The Portuguese Youth Guarantee (YG) implementation plan was presented in December 2013, and the YG scheme, which is open to students under the age of 30, was introduced in March 2014. The Public Employment Services (PES) are responsible for managing the YG program and coordinating partner relationships at all levels and sectors of the country. The implementation involves ministries, youth organizations, trade organizations, as well as social partner organizations and other relevant institutions working in the fields of education, vocational training, and social integration. (EU, 2020)

## **2.3 The Middle East and North Africa**

The Taqueem initiative was created to support and conduct research, as well as develop and implement effective youth employment programs, in partnership between the ILO and the International Fund for Agricultural Development (IFAD). This partnership has developed and implemented a project entitled "Strengthening Gender Monitoring and Evaluation in Rural Employment in the Middle East and North Africa".

As part of this collaboration, 7 results measurement projects and 7 impact evaluation projects were also supported, totaling up to USD 685,000. An investigation was also conducted on issues related to youth entrepreneurship, vocational training, and soft skills, as well as their access to credit for business projects. Silatech is another initiative in the MENA region, created in 2008 to create jobs and promote youth employment, entrepreneurship development, and expand economic opportunities such as access to credit and markets. It supports financing for projects and programs in 16 Arab countries. The organization has financed over 120,000 youth-led companies and created 200,000 jobs.

### ***Jordan***

Several projects to promote employment have been implemented in Jordan. In 2004, the Jordanian Business Development Center (PDC), a non-profit organization, was established. The organization helps to implement government reforms and promotes employment, entrepreneurial potential of youth and women. It advises graduates and students on career and professional development issues to improve their employment and self-employment prospects.

The country is implementing the National Employment Strategy (2011-2020), developed by the Jordanian National Employment Strategy Unit (NESU) of the Ministry of Labor in Jordan. The goal is to improve the standard of living by increasing employment, labor productivity, and wages.

The United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) is implementing a project in Egypt, Lebanon, Jordan, and Tunisia to assess creative professionals in the Middle East. The Swedish International Development Cooperation Agency (SIDA) provides financial support to a program that provides young entrepreneurs with premises, equipment, as well as training and consultation on setting up startups.

Better Work Jordan is a research project implemented by the Jordanian International Labor Organization and the International Finance Corporation aimed at expanding opportunities for decent work for women in the garment manufacturing sector, expanding their rights and opportunities. It provides advisory services and training to sewing factories, evaluates compliance with national legislation and international standards.

## *Egypt*

The Ministry of Planning and Economic Development of Egypt launched the National Economic and Social Program in 2016. The program led to the adoption of the National Structural Reform Program (NSRP) in April 2021, which was aligned with the National Development Strategy of Egypt until 2030, launched in 2016 (OECD et al., 2021).

The NSRP (2021-2024) aims to achieve national and international growth, global transformation and diversification of Egypt's economy, as well as develop measures to counter the COVID-19 pandemic. One of its pillars is related to the labor market, which could be facilitated through education and vocational training TVET. The role of the TVET system is enormous, and its objectives include expanding the rights and opportunities of women, youth, and people with special skills.

The Ministry of Manpower and Immigration of Egypt adopted the National Action Plan (ILO, 2010). The following program promoted technical education and vocational training, entrepreneurship development, as well as labor market policies and programs as the country's priority goals. The National Action Plan for Youth Employment (NAYE) for 2010-2015 created better job opportunities for youth. Within the TVET program, education was recognized as a priority and reduced youth unemployment rates in Egypt. Additionally, the program facilitated entrepreneurship and startups. Finally, the program contributed to the improvement of labor market policies and programs, promoting public employment and strengthening the labor market in Egypt. Another program, the School-to-Work Transition Study (SWTS), also contributed to reducing NEET rates among youth within the National Action Plan program (Barsoum, Ramadan & Mostafa, 2014).

## **2.4 South and South-East Asia**

Industry policies aimed at promoting youth employment are common across the region. Several countries in South and Southeast Asia, such as Malaysia, have initiated sectoral policies in agriculture to combat unemployment. Some countries have developed national qualifications frameworks, skills standards, and skills recognition systems, while others plan to implement the same. There is a growing trend of various career guidance, planning, and counseling programs aimed at developing youth competencies in self-awareness, education, and professional search. For example, Vietnam has implemented career guidance tools for rural secondary schools.

### *South Korea*

The unemployment rate among young people in South Korea is increasing every year, and the government is taking various preventive measures, including policy measures such as employment services, vocational training services, and employment infrastructure. A new form of support emerged in 2016 when the Seoul local government provided unemployed youth with job-seeking allowances, and other local authorities followed suit. This led to the central government introducing a youth unemployment allowance in 2017. However, this allowance provides conditional support; it supports job-seeking activities for participants in the employment support program called the "Successful Employment Package".

The youth unemployment allowance differs from wage subsidies provided to employers for hiring new and retaining existing employees; it provides subsidies for job-seeking activities and resembles the unemployment insurance system, which guarantees basic income during unemployment. However, since the receipt of the allowance is not dependent on the level of contributions by young people as a function of paid unemployment insurance, this is the closest approximation to an unemployment benefit. The program supports the provision of sufficient job-search opportunities by maintaining the income of the recipient during the job search, although this income support is provided only for six months.

The youth unemployment allowance, which is part of the "Success in Employment" package, consists of three stages. In the first stage, the person's employment goals [Individual Action Plan] are

established by assessing employment opportunities and consultations. The second stage involves developing abilities through vocational training; those who need to enhance their employment opportunities through vocational training participate in the training program of their choice. This stage may be skipped depending on the individual level. The third stage involves actual job seeking, during which the service provider provides various types of employment information and support in resume writing and job interviews. Job seekers also engage in job-search activities. The youth unemployment allowance is about USD 270 per month for up to three months for young people (aged 34 and younger) seeking employment (Ministry of Employment and Labor, 2017).

### ***Japan***

NEETs in Japan can rely on a comprehensive system of social support and employment. There are targeted services for young people seeking employment through specialized front offices; so-called "Job Cafes" offer vocational guidance and consultations in an informal setting; 160 regional youth support centers help newcomers who are not yet ready for work to develop a career plan. Job Cafes are comprehensive youth employment support centers created primarily by government institutions, such as local authorities. Youth who visit Job Cafes receive various services, including information on job vacancies, employment services, and on-site employment counseling. Social workers have a moderate or low workload, which allows them to interact closely with their clients and provide individualized support. Job seekers receive limited income support. Young applicants receive financial support for only three months.

### ***Singapore***

The country provides significant financial support and strengthens its workforce through continuous education, for example, the SkillsFuture initiative. State expenditures on continuous education have reached 1 billion Singapore dollars per year. The human capital index in Singapore is higher than the average in East Asia and the Pacific region, as well as in high-income countries worldwide, and the human capital index for girls is higher than for boys (Human Capital Project, 2020).

## **2.5 Latin America**

Although some Latin American countries have implemented minimum wage policies, only Brazil has expanded employment opportunities in the formal industrial sector. Latin American countries have not been successful in implementing policies that would involve more low-skilled people in production.

### ***Brazil***

There were several youth support programs, such as the "National Program for Access to Technical Education and Employment" (PRONATEC) (OECD, 2018), ProJovem (Ana Clara Braga, October 2, 2020) and the Bolsa Família program. Both programs helped train school graduates in the skills needed in the labor market. As emphasized by the OECD Secretary-General Angel Gurría at a seminar on youth transition to work, such initiatives improve the overall picture of youth unemployment and promote youth into the labor market in three directions (October 22, 2013). Investments in youth have led to a reduction in school dropout rates, an increase in the number of young people receiving vocational and technical education, as well as internships in Brazil. Secondly, the program has helped create more favorable conditions for employers wishing to invest in youth. More specifically, reducing employers' costs in hiring youth and providing resources to employers willing to invest in the education and professional training of youth. The last point worth mentioning was aimed at helping young people find and keep jobs. More specifically, the political initiative was aimed at reaching out to NEET youth and intervening as early as possible. In addition, incentives were provided to encourage school attendance, financial support during job search, support for entrepreneurship, and special support for young women with children.

The "National Program for Access to Technical Education and Employment" (PRONATEC) was initiated by the Brazilian government in 2011 (OECD, 2018). Through PRONATEC and various programs under its umbrella, the Brazilian government expanded access to vocational education, improved its quality, and developed incentives for every citizen of Brazil to participate in free short-term adult training courses. By 2013, an additional 562 institutions or vocational-technical schools had been established under the program. PRONATEC also promoted online and distance learning infrastructure through the "Rede e-Tec Brazil." Another breakthrough initiative, the "System S," created a network of vocational-technical schools that provided free vocational education to the unemployed or those with low income.

In 2005, the National Youth Secretariat and the Ministry of Education of Brazil launched the Projovem Campo project. The program involved 121 municipalities and provided training to 42,600 young people, 32,600 of whom were in rural communities and 9,980 in rural settlements. The program also trained 480 young municipal officials from various regions of Brazil (Ana Clara Braga, October 2, 2020). The program achieved its goals and over the 10 years of its implementation (2005-2015), it supported thousands of people from rural settlements who needed education and vocational training.

The Bolsa Família program is an income redistribution program aimed at reducing poverty and increasing school attendance among youth, which led to a reduction in income inequality across Brazil. By 2008, the program covered 46 million people or 11.1 million families (Janine Berg, 2009). The program mainly covered women, who paid directly using their credit cards, which expanded their opportunities and strengthened their position at home. As a result, the Bolsa Família program had a quick and noticeable effect on poor families, reducing poverty, promoting food security, gender equality, and increasing employment in the target group.

## **2.6 Central Asia**

### ***Tajikistan***

Programs and strategies developed in Tajikistan at the national and sectoral levels are often aimed at solving the problems of unemployed youth, with little attention paid to young people outside the education and training system. State programs for unemployed youth include vocational training and retraining through the Labor and Employment Agency, followed by employment, organization of temporary paid jobs, provision of microcredit, certification, job fairs, and employment quotas (ILO, 2015).

Key players in working with NEET youth are state organizations (Labor and Employment Agency, Committee on Youth, Sports and Tourism).

### ***Uzbekistan***

In 2020, the Youth Affairs Agency was created with the aim of taking state youth policy to a new level, effectively solving youth problems, providing comprehensive support, and coordinating the activities of youth affairs bodies (Decree, 2020). The main measures to support youth are the State Youth Policy, the Housing Program for Youth, and the Youth Employment Program "Youth is our Future" (ILO, UNICEF, and World Bank, 2020).

In a joint report by various agencies ("Consolidated Proposal", 2021), it is indicated that UNDP provided technical, advisory, and mentoring support to unemployed and informal women and youth. These programs of integrated support services (ISSP) helped 260 women develop digital skills, financial literacy, and online trading skills.

# 3. NEET Youth Challenges in Kazakhstan: Qualitative Analysis of youths and stakeholders' perspectives

## 3.1 Qualitative research design

The purpose of the qualitative part of the research was to get an in-depth understanding of the perceptions of various stakeholders on the challenges of NEET youth in Kazakhstan, including the perceptions of the NEET youth themselves. The research team members conducted semi structured interviews in Kazakh and Russian languages in 5 regions of Kazakhstan. The responses of the interviews were voice recorded and transcribed into the Russian language. Further transcripts were coded and relevant themes were developed in Russian and English languages, and the final report was translated into the English language by the research team. All research team members have the CITI certificate for conducting human subject research ethically.

There were also 5 focus groups with the participation of 48 NEET youth aged 18 to 29 years in the first half of 2022. Participants were recruited through the regional resource centers in the cities of Almaty, Taraz, Karaganda, Uralsk, and Astana. The focus group method was chosen in order to minimize the participants' feelings of stress and anxiety. Research shows that the focus group reduces the imbalance in power relations between the researcher and the participants and, consequently, reduces their anxiety. It is recognized that the focus group methodology draws attention to the needs of participants, allows them to support and reassure them.

Semi structured interviews were conducted based on the interview protocols that were approved by the Nazarbayev University Ethics Board. Individual interviews were mainly conducted through Zoom and focus group interviews were conducted face to face with the groups of 5 to 8 participants in the cities of their residence. Stakeholders for individual interviews were purposefully selected by the research team to get various perspectives. The total number of stakeholders was 25, representatives of central governments, regional branches of resource centers, and an NGO. Interviews were conducted in the second half of 2021.

## 3.2 Perspectives of NEET youth on educational system

Education was considered as one of the most contributing to the challenges the NEET youth. Young people expressed their concerns about the teaching process in educational institutions in secondary, TVET and higher education levels. They stressed that the teaching was highly didactic without focusing on developing functional literacy and teachers were not motivated to introduce new teaching practices. As for the teachers, they were mostly with the 'Soviet style' teaching, which means that the lessons required learning by heart what the teachers assigned to them. From their perspective, such facilitation of education did not equip them with the skills to do the job or critical thinking.

Most young people shared that the content of the lessons was outdated. More specifically, educational institutions do not facilitate education or mastering skills for joining the labor market. Most of the professions are not required by employers. The data analysis revealed that youth are unwilling to consider educational opportunities because they do not lead them to employment as an outcome of education. There are some more prestigious professions that require good education and it requires passing the Unified National Test (UNT), which means are more competitive.

The lessons were mostly theoretical and not relevant to real job responsibilities. One of the participants of the focus group, a young woman on maternity leave, whose husband has his own business, believes that, on the contrary, there are employment opportunities for qualified personnel, but they are critically lacking due to the low quality of graduates' knowledge ("I must honestly admit, many applicants come, they came with a diploma, but they can't do anything") (FG 2).

At the same time, it was noted that the updated content of secondary education, a national reform on secondary education is hard to comprehend by students and was introduced too rapidly to be properly adapted by schools. Some respondents perceive that teachers are not ready to teach the new curriculum, thus either themselves learning while teaching or at worst do not understand what they are teaching. ("teachers are being taught on a par with students"). It mentioned that the renewed curriculum emphasizes functional literacy and problem-solving skills over memorizing.

On the other hand, there were such students who did not attend lessons and had good grades. Meaning that they have connections who can help them with their grades without learning. The grading system of students' progress was far from fair and many students were not satisfied with it. On the one hand this does not promote responsibility and integrity to those who are getting unfair grades, for the others it undermines the trust in education and other government institutions.

Students who have learning problems are forced to leave school after grade 9 because of school level statistics. Schools are ranked based on the scores of the graduating students on Unified National Tests, thus they are incentivized to have less failing students by the graduation year. Teachers hold parent-teacher meetings where they convince parents to take failing children out of school. Teachers communicate more directly with the students themselves and threaten to prevent them from studying in high school.

The NEET youth who had experience in studying in higher education shared following challenges that caused them to leave their studies. Educational institutions set high prices for their education and higher education is inaccessible to the young people in Kazakhstan. For that reason, many young people decide to leave education because of the hardship associated with the payment for education. The problem with dormitories arose because many students were from rural areas and could not pay for their accommodation because they were expensive. Even to pay the tuition the former students had to work simultaneously and sometimes it was the reason to leave education. Young people could not pay for their education, and they did not have any other choice although they were motivated to continue their education.

As the analysis revealed, long term education with the degrees takes time and young people cannot afford spending time on education without earnings. They need to earn in order to survive, such as pay for the rent of accommodation, buy food or married young people need to take care of their children. Low socio-economic status of parents reduces the educational opportunities or taking initial low paying but possibly promising job opportunities.

Moreover, analysis shows that the role of the diploma became not so important. In their perspective connections and relatives played a more important role than the diploma because without connections the diploma cannot help with employment. As the data suggests, it is culture for Kazakhstan people to have diplomas and too many people have them although they do not work according to their

specializations. The quality of higher education, according to young people, is very low and not unique thus it is available online.

The findings suggest that many young people left their educational institutions because they understood that they did not want to work according to their specializations in the future. They applied to those education programs because their parents wanted them to apply, or due to the availability of state-sponsored grants. Some young people stressed that they did not know anything about their education before applying. Others who did not enter higher education mentioned that their parents did not emphasize enough the importance of education.

Some people left education because their teachers changed a lot and every new teacher required other modes of learning, had a different syllabus, and had different expectations from students. Regarding their experience associated with the social activities in educational institutions, they said that it was uninteresting ("there is nothing interesting that the university itself organizes").

Almost all the participants of multiple focus group interviews from various regions of Kazakhstan asserted the educational system of Kazakhstan was not ready to switch from offline mode to online mode. The teachers had challenges with online teaching such as facilitating the learning process online. For instance, the teachers had challenges in grabbing the learners' attention during the lessons. The other big concern was the grading system. More specifically, the learners could not understand the grading approaches and were demotivated. For instance, some learners did not study and had the same grades as others who actively participated and learned. Financially vulnerable families, especially in rural areas, were more disadvantaged, they were short of laptops and had to use their parents' smartphones.

Although young people are generally good with digital devices, learning online cannot match with live interaction with teachers. Motivation and self-discipline were key in making most of the constrained education circumstances. Those who were university students during the quarantine complained that having a private space in their house was hard because other family members also had to work and study from home. Studying at home reduces motivation ("I think it is better to go and study in university. It seems that a little laziness has appeared. Studying at home was a mess").

Interestingly, despite the negative effects, pandemics brought positive effects such as raising the importance of self-learning by the participants, the opportunity for joining a variety of online education platforms, and the advantages of reallocating time saved from reaching the educational institutions during offline mode. Pandemic helped to critically analyze the existing online educational opportunities which the participants previously neglected. The participants found existing online educational platforms beneficial to them. The variety of educational platforms such as Coursera and other massive online courses were found as meaningful to them. The participants were enabled to consider other educational opportunities in the global educational discourse and they were able to reconsider other educational options other than face-to-face education provided by the accustomed Kazakhstani educational institutions. Additionally, online education opened new horizons for them and helped them joining to the global education systems.

Interestingly, some participants asserted that online education was considered cheaper in terms of money and resources, and it saved their time. As the data suggests, the cost of online education was cheaper, and some courses were free of charge. The participants could be enabled to attend the lectures at a time convenient to them. They also were able to choose the learning mode, for example, to do the assignments in teams with other groupmates online. Additionally, they were enabled to choose the disciplines according to their own interests and that option was not available prior to the pandemic.

As for academia, young people suggested *hiring young people for administrative positions* because they were more creative and had a mindset open to new knowledge and changes. Additionally, young people would like to have elective disciplines which were helpful for their future employment. Such empowerment of young people with the knowledge and skills would help them to be competitive staff in the future job of their choice.

### **3.3 Perspectives of NEET youth on employment and labor market issues**

In addition to the lack of skills, NEET youth also mentioned that lack of work experience as the main barrier for getting employed.

As the data suggests, one of the barriers to the employment of youths is the requirement to provide work experience to potential employers. Some youths could not provide that because they were fresh graduates and accordingly, they did not have work experience. The next concern is that the potential employers ask the youth to provide the employment record, the document that traces all the data on previous employment of the holder of the document. Another challenge is that the employers must provide a letter of recommendation from the previous employment. It was not possible for the youth because they did not have employment before. Failing to successfully transition to employment makes young people lose confidence and lose opportunity to develop basic work skills.

Internships are included into the academic programs of university and TVET study and should provide initial work experience, however, this happens formally, and workplaces also engage interns with only basic functions like copying and filing documents. The data suggests, youths in NEET expect the youth centers to prefer to have internships in private companies because they get more professional experience there. Private companies were more interested in sharing their experience and equipped them with the skills required to do the everyday job. As for the state-run companies, the youth were asked to do the job which was not connected with the job and such duties did not contribute to their growth professionally.

#### *Lack of trust into institutions.*

Some participants believe that corruption, connections, prevent a young person from getting employed. As the data analysis reports, youth need to have kinship for employment. Additionally, the data reports the youth stressed that even after getting employment, they need relatives, kinships to keep that employment. As the data reports, employment was difficult to keep because they could be fired and other people would get their jobs. In other words, youth in the NEET category could not stay employed because they did not have connections for keeping their employment after education

#### *Rural and urban divide.*

Youth from rural areas were disadvantaged in several ways. Firstly, youth from rural areas and regions noted, less job opportunities are available, thus they tend to move to big cities. The absence of available jobs is associated with the systemic problems in the economy of Kazakhstan. Besides unavailable jobs, education in rural areas was lower than in cities.

In the regions, the industry and agriculture were not developed which did not guarantee them meaningful employment. By meaningful employment the youth from the regions mean jobs other than working as waiters in the cafes but according to their specializations or education. Some youth stay unemployed due to the absence of jobs in the regions and the search for employment takes much time, sometimes months or even years. The other interesting point expressed by the youths is that the lack of knowledge of Russian language made them less compatible in the labor market. Some

employers required knowledge of the Russian language or even English. In Kazakhstan's regions and remote areas of Kazakhstan it is challenging to study English and Russian languages.

#### *Pandemic impacts on wellbeing and employment*

The pandemic has shifted the focus of the labor and education market to an online format, reducing the number of jobs. A number of young people note that at the same time new conditions of life in the pandemic have given new opportunities, the spectrum of services on the labor market has been expanded. Others note that in the transition to the online format, many employees lost their jobs and received a salary of 50%.

### **3.4 Perspectives of NEET youth on government interventions**

Distrust of youth in state programs to solve NEET problems are exacerbated with challenges of inflexibility of the programs and low administrative capacity. Some youths are afraid to register with the employment center due to social stigma, which makes it harder for the government to involve them into interventions.

#### *Lack of trust for government programs*

In general, the focus group participants were not interested in participating in the state programs. Particularly, the conditions of the Youth Practice program are perceived as uncomfortable for young people due to low wages, and poor working conditions created by organizations, especially private ones, one of which is irregular working hours, and a large amount of work. In addition, the program's conditions are inflexible, a young person cannot change the organization if he is not satisfied with the working conditions, respond to the program itself and change its conditions. Therefore, young people do not stay in the workplace under this program, they leave after 2-3 days.

The data also suggests that the state representatives do not organize events and activities which help them to get employment and raise their trust to the governmental bodies. They stressed that the events available to them were not interesting and meaningful. Mostly, they were arranged formally by local administrations to provide reports to the higher authorities. It seemed to the young people that those events were organized not to support them but the government. In other words, such events and activities do not have connections with their interests and future employment and undermine trust.

Indirectly, one of the focus group participants characterized the isolation of young people with low socioeconomic status. He believes that people who do not have financial problems cannot understand the problems of a young man with limited means. In turn, he is ashamed to tell others about his problems. Overall, youth and especially university graduates are afraid to register with the employment center and receive the status of being unemployed due to social stigma, and when independent job searches do not bring results, they become discouraged and stay in long-term unemployment

#### *Flexibility of government programs*

The data suggests that youths prefer to get access to the money allocated to their support. For instance, they want to have some money for their own capacity building directly to their accounts. After getting that money, they want to choose the available capacity building training, workshops and pay themselves for their educational opportunities. In their understanding, they know better what kind of training they need for getting employment.

The participants also expressed their need to be provided with lunch or food during their internship with the employers. It was suggested because some of the participants expressed financial hardships and they did not have enough money to buy food during the internship.

On the facilitation of the support by the youth resource centers, youth expect to have additional training according to their interests such as IT courses or even workshops. Additionally, they expect to have access to capacity building exercises and activities which help them to establish connections with other youths who are in the NEET category. The activities could be chess playing, sports contests organized during weekends. Another point mentioned by the youths, they want to have access to all the available vacancies instead of being sent to visit the employers and considering the vacancies which were not interesting to them.

Particularly, they want to have initial tests, which would help them to understand what skills they lack and what kind of capacity building they need to get employment in certain companies. They also expressed their willingness to have support from psychologists and vocational specialists who can help them to get the job.

#### *Administration of the programs - professionalization of the staff*

The programs of the youth centers were not clear to the youths. In their perspective, they did not understand the goals of the programs and how the programs could contribute to their employment. Next, the staff of the youth centers was not supportive in terms of delivering the data about the availability of state programs with clear explanations about the pros and cons of the state programs. Additionally, the youths had concerns that they could not get information about the events organized by the youth centers. As the data seems to suggest, the youth resource centers need additional training for capacity building of their own staff. As some of the participants stressed, some of the staff could not provide support to them due to the lack of their capacity. Participants suggested using “the mystery shopper method” to assess the barriers young people face in reaching and receiving government programs.

### **3.5 Perspectives of Stakeholders on NEET Youth Challenges**

NEET youth is a highly diverse group and the reasons for being NEET vary widely across our respondents. According to the worker of YRC, they follow a broad and not specified in detail definition of NEET. They use the following broad definition of NEET youth categories to address and tackle all those who may stay not defined and therefore not addressed:

- i. Unemployed people from 15 to 28 years old, who are graduates of higher education graduated in the current year and are considered as unemployed.
- ii. Young people who drop out of vocational or university education and are unemployed.
- iii. Those youth released from prisons are considered as unemployed and in need of socialization.
- iv. Young people who have completed the military service. The list of such youth is rendered by regional centers of the Ministry of Defense.
- v. Youth with disability, or youth who are temporarily not working due to health issues.
- vi. Those who are in maternity and paternity leave.

A YRC representative further pointed out that there is no universal definition of NEET. Some stakeholders proposed to limit the NEET category to the truly vulnerable youth, i.e. mainly youth

from rural areas, who experience problems with employment and education, or young people with special needs, and the unemployed, compared to those who seem less vulnerable such as self-employed youth, youth who live with rich parents and women on maternity leave. In Kazakhstan women may stay on maternity leave for up to three years and have some amount of parenthood payments. These youth may have seasonal and highly fractured employment due to informal employment possibilities, making enough to live on. Such youth can also be employed in their households and be unpaid workers without official employment. Respondents pointed out that youth who are “Tik-Tokers” or those who make money by repairing apartments are not interested in participating in the state programs since they receive significant income amounts, which usually may go untaxed, and therefore such youth are also categorized as NEET.

Respondents commented that it is only through recent improvements that there are some community and expert opinions gathering and discussions on this topic happening, which is indeed needed to promote knowledge and expertise sharing.

#### *Developing and managing NEET youth database*

Apparently, the methodology for identifying the number of NEET youth is determined by the National Bureau of Statistics; they, in turn, refer to the methodology of the International Labor Organization (ILO). While statistics are important, the local YRCs are informed that they don't receive data on individual level, which makes it hard for them to work individually with NEET youth. The same challenge was reported by an NGO. To tackle this, YRCs collect data via surveying households visiting them, involving volunteers to make house-to-house surveys on household composition, employment, and asking for reasons of their unemployment. They believe that at least 10% of the data on the NEET youth becomes irrelevant in a few weeks due to rapid changes of employment of youth – some go to school, some go to work, and some become unemployed again.

In general, it was constantly mentioned that the identification of NEET is not well developed, therefore timely and effective responses are pending. It is believed that developing a database which would reflect the tax, pension, and medical insurance data to get the list of those who failed to have any income recently would help to investigate and address their needs accordingly. At the same time the security issues related with keeping and managing data were brought up.

Stakeholders share the need for further communication to set a common vision for resolving NEET issues, improving methodology and solution sharing among themselves. These can help to derive effective algorithms among all involved institutions and centers. Also, YRC representatives think that setting up a research center that focuses on youth issues and sets a basis for working with vulnerable youth can be helpful to solve the deep roots of youth problems. As major recommendations, the resource centers and non-governmental organizations argued that there should be one body responsible for promoting the youth policy in Kazakhstan.

#### *Trust to government initiatives and social stigma*

In line with NEET youth perspectives, the stakeholders also noted some level of distrust of youth in state programs to solve NEET problems. Additionally, it is pointed out that overall youth and especially university graduates are afraid to register with the employment center and receive the status of being unemployed due to social stigma, and when independent job searches do not bring results, they become discouraged and stay in long-term unemployment. However, the recommendations for these problems are not clear-cut. As one solution - employees of employment centers should visit universities to explain the possibilities of the state employment platform of enbek.kz and this could broaden the youth's understanding of opportunities.

An idea put forward was to train staff specifically to address the problems of NEET youth. Specialized experts can reveal better targeting and re-engaging solutions as there are many specifics of NEET in each group and region. A staff member of an organization working with youth suggested using “the mystery shopper method” to assess the barriers young people face in reaching and receiving government programs.

### *Social living conditions and education quality in rural areas*

Despite almost universal coverage at secondary education level, youth stay in their villages as they cannot afford the accompanying costs of living in the cities if they didn't get the state grant for higher education. Such young people cannot or do not want to work, justifying this by the lack of education. Financial barriers are constantly emphasized as being the main reason that puts youth at risk. Moreover, due to unfavorable family conditions, it is said that youth and subsequently, As such youth at risk are reluctant to deviant behavior such as smoking and drinking, and committing crimes, so it is essential to involve them in extracurricular activities at sports halls and playgrounds, cultural institutions (theaters, clubs, philharmonic), etc. Therefore, family policies should be enhanced to tackle negative issues. Some respondents noted that NEET youth are mainly grownups, whose behavior and attitudes are unlikely to change easily, therefore intervention measures should start at secondary school level.

Stakeholders agree with NEET youth that rural education lags significantly behind in leveling skills of youth. The low education quality systematically decreases their chances to reaching enough points in the national tests, making it impossible for them to get scholarships to pursue education further. According to a respondent, the state of rural schools are poorly equipped and maintained that it “discourages” students to study, therefore, it is necessary to install water supply and gas, and provide transport as a basis. The challenges of rural education are multi-level and complex.

Another education system-related issue is that youth at school does get insufficient career guidance on their skills or on the currently available study opportunities. Several proposals were made to improve the preventive work with NEET youth at school such as career guidance and psychological support for students from disadvantaged backgrounds, these can enhance their resilience in their endeavors.

A college management representative pointed out the idea of creating and delivering training via online learning tools. He emphasized that not all training modules of vocational education can be online, and roughly around 20-30% offline to do practical work in workshops and laboratories. It is imperative to adapt the education system to meet the demand and needs of youth. He said that in big cities like Aktobe and Nur-Sultan, it takes time to travel from work to study, and from the financial aspect, it also accounts for substantial expenses. He is assured that young people and older people have learned to use and study through Zoom and all of us are gradually adapting to digitalization.

Main education-related issues are that NEET youth significantly lack skills. According to a YRC representative, there are some jobs that stay vacant for several years due to the fact that unemployed or NEET youth are not able to meet the education and skills requirements of vacant jobs. Overall, highly skilled jobs which are well paid require a good level of training and higher education, which is most likely lacking by NEET youth. According to his estimate, in the Kyzylorda region, there are around 1,800 vacancies and around 3,800 unemployed young people, however, these youth mostly cannot fill vacant places due to their lack of qualifications and skills.

Also, soft skills are said to be lacking by NEET youth such as problem-solving, communication, confidence as well as writing skills, which are crucial in writing a resume, drafting interview preparation, and dealing with stressful situations. It is said that introducing a subject in schools and

colleges called “soft skills”, where topics on teamwork, education, and leadership are covered can improve the situation.

#### *Labor market issues*

A further exacerbating factor is inadequate planning for the needs of the labor market. When the states determine priority specialties with funded scholarships, they do not thoroughly investigate the further employment opportunities in the regions, thus forming the excess supply of certain graduates that then enter unemployment as their needs are not met. YRC representative pointed out to the issue that local training centers do not provide the demanded professionals, and those who get training in well-demanded areas tend to stay or move to big cities and do not return to local regional centers. According to him, most training centers train on basic-skill level qualifications such as welder and hairdresser, while demanded specialists in the aerospace industry in Kyzylorda region, for example, are lacking.

Therefore, education programs to be revised to address local needs. In one case, it was mentioned that 90 students who graduated from a regional university and majored in biotechnology were financed by scholarships but could not then find suitable employment relevant to their degrees in the region. As such it is recommended to do a labor market study for human capital needs in the region and prioritize the relevant specialties.

#### *NEET expectations*

According to the opinion of a college management representative, there is an issue that young people are getting less and less interested in getting a profession and studying 3-4 years. They are rather keen to do short-term courses and earn money. An example of him was that women mostly learn how to do cosmetic treatments such as manicures, where in around ten days they learn the basic skills, and then continue to improve their skills and at the same time earn good money. According to our respondent, young people have no desire to graduate from a university or college, in contrast, the desire to open their own business, work for themselves and be independent, even at the cost of low skilled jobs, has recently gained prestige.

Another important issue identified is that there is a prestige of white-collar jobs. According to our respondents, professions related to manual labor, i.e. blue-collar workers do not hold the same prestige and respect compared to professions related to office work. Additionally, some people enter higher education just to formally obtain diplomas, not necessary knowledge, and skills. Such graduates are then not able to perform professional tasks accordingly nor have an interest to work in their major relevant employment.

According to stakeholders, some NEET youth have overexpectations on employment types and levels that do not match their existing knowledge and skills. Youth with such ambitions that do not match with their education and skills want to get a higher salary level, which leads to disappointment and discouragement, but they are not taking lower paid jobs.

# 4. Employment preferences of NEET youth in Kazakhstan: Laboratory experiment

Our study aimed to investigate the decision-making processes of individuals when selecting between higher education and vocational education and training (VET). Through interviews with relevant stakeholders, we identified a concerning trend of low youth participation in VET programs, despite favorable policies promoting VET education. To address this issue, we conducted laboratory experiments and subsequently estimated multivariate regression models, which incorporated information regarding intervention-level characteristics. Our analysis sought to identify the factors that were associated with the observed levels of reported choices and behaviors.

## 4.1 Lab experimental design

We conducted a lab experiment at NU and ALMAU in computer-equipped rooms with internet access, which allowed us to carry out the experiment. The laboratory experiment process involved obtaining repeated approvals for the study design and participant recruitment processes from the Research Ethics Committee of Nazarbayev University (IREC). To attract students, the team used social media and sent information emails to students via career centers of the universities. The revised recruitment strategy proved to be successful, with 118 participants enrolling in the study.

According to our research project's literature review and qualitative phase, we hypothesize that two experimental manipulations, specifically knowledge of the other group's salary (treatment 1) and public shaming (treatment 2), or combinations of both (treatment group 3) may influence the career path choices of students between white-collar and blue-collar jobs. The career paths we refer to are exemplified by the following professions: blue-collar jobs such as builders, sewers, tractor drivers, hairdressers, and carpenters; and white-collar jobs such as office clerks, bookkeepers, managers, marketers, and IT specialists.

Our research project used the oTree tool to conduct our laboratory experiments. is a Python-based platform that enables both laboratory and online experiments to be conducted, without the need for software installation on participants' devices. Furthermore, it is an open-source platform that can be run on any device (Chen, Schonger, and Wickens, 2016), which made it ideal for our study's requirements, as we needed a platform that could provide customized and dynamic functionality (Holzmeister, 2017) for our behavioral experiments.

We provided a show-up fee of 2,000 tenge for participants and monetary payoffs were given as 2% of the average salary earned in each game round. We included the show-up fee for participants as a crucial consideration in the issue of incentive size, which is essential for ensuring the experiment's validity. It is important to ensure that participants are adequately compensated for their efforts in participating in the study (Smith & Walker, 1993). When determining the appropriate level of pay for participants, it was necessary to consider the cost of living in the country and the cities where the experiment was conducted to ensure that the incentives offered were perceived as meaningful.

As we developed the lab design, we recognized that economists often incorporate market mechanisms into their experiments to incentivize optimal behavior and discourage suboptimal behavior. To achieve this, we used labor market salary settings based on the demand for different types of jobs. These feedback mechanisms serve to modify irrational behavior, with a greater impact when the game or negotiation is repeated multiple times. However, we acknowledge that immediate and frequent feedback is rare in real-life situations, and participants cannot easily change their behavior and skill sets to match the job requirements. In behavioral economics, Loewenstein (1999) has noted that for most people, economic decisions are made in contexts where feedback is not immediate enough to shape behavior. Despite these limitations, our experiment investigated how students choose between white-collar and blue-collar jobs. Repetition is a common practice in economic experiments, as it allows for a deeper understanding of learning processes and how individuals respond to incentives and modify their behavior accordingly. Hence, we conducted 10 rounds per game in our experiment.

To ensure the effectiveness of our experimental design, pre-test lab experiments were conducted with a small group of participants from NU and ALMAU. The pre-test sessions lasted for a maximum of 30 minutes, which included the post-experimental survey. The feedback received from the participants regarding the clarity of instructions and language, game pace, and other significant aspects was valuable in refining the experiment design. Furthermore, the pre-test allowed us to test the accessibility of the game and server access options, ensuring a smooth experiment run.

The actual lab experiments were carried out at NU and ALMAU, with a total of 118 participants. Our initial target group was NEET youth, but we decided to conduct the experiments with students due to recruitment difficulties. Many studies have shown that students are a representative sample of the population at a national level for lab experiments. The sample size was determined by reviewing the implementation of lab experiments in our supporting GSU centers. Participants were given a show-up fee of 2000 tenge, and based on their game results, each participant received an average of up to 5000 tenge, with the average payment being approximately 4000 tenge (equivalent to approximately 8 USD).

To ensure compliance with laboratory experiment protocols, participants' computers were labeled with unique numbers and registration forms were completed, containing participants' names, seat numbers, phone numbers, and the agreed-upon compensation amount for participating in the study. Prior to the start of each game, the project team explained the study's objectives, ethical guidelines, and their own responsibilities to the participants. Following this introduction, the participants proceeded with the game and the completed forms were collected. The lists of participants along with their data were stored on a disk accessible only to members of the project team.

*Picture 1. Lab experiment conduction at Almaty Management University*



## **4.2 Literature review on blue-collar and white-collar job preferences**

Given the significance and pressing nature of the issue of NEET youth, as well as the current global focus on this matter, there is a need for more effective and evidence-driven measures to address this challenge. The literature review pointed to various factors influencing youth job preferences, including labor market institutions, education and training, individual characteristics, and social and cultural factors (OECD, 2022).

The stigma attached to TVET pathways in Arab countries is an obstacle to the development of skilled workforces that can meet the demands of their economies; these negative attitudes towards TVET in these countries are deeply rooted in their cultural attitudes and perceptions (Sultana, 2017).

Bilboe (2011) conducted a study to investigate the low enrollment rates in technical and vocational institutions in Kuwait. The research revealed that more than half of the participants did not choose vocational education as their first option because they perceived it as providing inadequate preparation for the labor market. Instead, attending university was viewed as a better way to achieve higher socio-economic status. This suggests that insufficient knowledge about the benefits of vocational education could contribute to the low interest in enrollment.

Alnaqbi (2016) investigated the perception of vocational education and training (TVET) in the United Arab Emirates, particularly among lower socio-demographic groups. The study found that these groups had less confidence and tended to stigmatize themselves as being at the bottom level of the social hierarchy. Parental preferences and a desire for higher-paying jobs among the participants mainly influenced this negative perception of TVET.

In Saudi Arabia, despite the government's efforts to promote TVET, negative attitudes towards this type of education persist due to the dominance of foreign workers in the technical and industrial sectors. The perception among students that technical and vocational training jobs offer fewer financial incentives than white-collar jobs has discouraged enrollment in TVET programs (Mellahi, 2000). As a result, the government's Vision 2030 policies aim to change the socio-economic factors stigmatizing TVET and promote the development of a skilled workforce that meets the country's demands and realities (Khashan, 2017). The preference for white-collar jobs among Saudi nationals has left gaps in the job market, largely composed of skilled and manual employment opportunities. This phenomenon has resulted in higher-than-expected levels of unemployment in Saudi Arabia, despite being a prosperous country (Yamada, 2018). Saudi Arabia's values and interests concerning vocational training differ from those of developed countries (Alasmeri, 2012).

The TVET sector faces significant stigma in Saudi society, particularly among those living in tribes, who refuse to engage in occupations that conflict with their beliefs and ideas (Mellahi 2000). Thompson (2018) emphasized the need to change the mindset of young Saudis to accept technical and manual work as a legitimate and acceptable career path, as the cultural stigma attached to these professions is one of the major reasons why young Saudi men refuse to engage in manual work. As a result, the country has a shortage of skilled workers, which limits economic growth and development.

One major issue contributing to negative attitudes towards TVET in Saudi Arabia is the perception that it offers lower employability and salary compared to white-collar jobs. A study by Madhi and Barrientos (2003) found that differences in career opportunities, mobility, working conditions, and pay between Saudi and non-Saudi employees have contributed to negative attitudes toward technical and vocational training among Saudi nationals. The article also highlights social prestige as a factor that contributes to stigmatizing TVET in Saudi Arabia. Olesel (2010) and Ayub (2017) studies found that young people from lower socio-economic backgrounds were more likely to enroll in vocational education and training programs than their wealthier counterparts. Parental choices can have a significant influence on students' pursuit of TVET. Alandas (2002) reveals that the preferences of students' fathers are the primary factor influencing students' pursuit of TVET; however, no statistically significant differences are linked to parental academic level and income. Regarding the influence of parental choice on students' decisions, Alnaqbi (2016) and Ayub (2017) argue that the freedom to make decisions is an essential factor for students to pursue TVET. They found that students from lower socio-economic backgrounds who perceived they had less freedom to choose their career path were less likely to pursue TVET.

The study by Aldossari (2020) suggests that promoting women's participation in TVET can help reduce the stigma attached to this type of education and training. This finding contradicts the findings of Calvert and Al-Shetawi (2002), which stated that the main factors that influence women's decision to participate in TVET are related to how the education system is structured rather than their personal preferences or societal pressures.

Research on TVET programs in African and Asian countries has revealed the negative perception associated with vocational education. In African countries, this stigma is traced back to the emphasis placed on colonial education in the humanities and a postcolonial movement to increase the proportion of white-collar workers and intellectuals. Studies conducted in Ghana and Nigeria have shown that TVET programs are viewed as being intended for individuals with low intellectual ability and are typically composed of school dropouts or illiterates, leading parents to discourage their children from pursuing such programs due to limited academic opportunities and a lack of societal prestige (Aryeetey et al., 2011; Essel et al., 2014). Kennedy (2011) similarly found that Nigerian students tend to avoid TVET programs due to their reduced social status and prestige in the community, which family and peers reinforce.

Similarly, in Asian countries, TVET is viewed as providing opportunities for poor families with lower social prestige. Even though vocational education returns are higher than academic education, perceptions of TVET remain negative in Indian society (Agrawal and Agrawal, 2017). Ayub (2017) found that Pakistani parents also have a statistically significant role in influencing students' decisions to enroll in such programs; specifically, less educated parents with lower income and occupation levels were more inclined to encourage their children to pursue TVET.

Some studies from developed countries also show that students' willingness to engage in technical and vocational education and training (TVET) is strongly influenced by prevailing social and economic attitudes. A study of TVET in Australia found that young people from lower socio-economic backgrounds are more likely to pursue TVET than their wealthier counterparts (Olesel, 2010). In the study of the UK, it is emphasized that the divide between academic and vocational education remains strong in the United Kingdom, where those who pursue vocational education are less positively perceived in society than university students (Chankseliani et al., 2016). This lack of clear articulation of the value of vocational education and an emphasis on traditional education have led students to attribute decreased importance to TVET (Chankseliani et al., 2016).

### **4.3 Hypothesis and methodology**

In accordance with our experimental design, we randomly assigned participants into three groups: the first group received information about salary only, the second group received information about both salary and the job choice of other participants, and the third group received both treatments. Our main hypotheses are based on the effects of each treatment on participants' behavior. The first treatment, called "salary reveal", involves participants being shown their own and others' salaries, expecting this to influence their job choice.

Our first hypothesis is that, by the end of the 10th round, we expect to observe more participants choosing white-collar jobs despite their lower salary in treatment 1. This is based on our review of the literature and the qualitative phase of our research, which suggest a salary discount associated with blue-collar jobs. In other words, young people are more likely to choose white-collar jobs even if the salary is lower than that of blue-collar jobs, or they would be willing to accept a blue-collar job only if the salary rate is relatively higher. The size of this discount on blue collar jobs would be the difference between the salaries of the two types of jobs. If, however, we observe an equal number of participants choosing white- and blue-collar jobs, it would indicate that young people care more about

salary than their preference for white collar jobs, suggesting the absence of a salary discount on blue collar jobs.

Hypothesis 2 posits that, at the end of the 10th round, a greater number of subjects will opt for white collar jobs despite receiving the same salary in treatment 2. This hypothesis is informed by our research's literature review and qualitative phase, which suggest that youth harbor a stigma against blue collar jobs that extends beyond salary differences. If the number of subjects remains the same, this would imply the absence of a shaming mechanism that affects the selection of blue-collar jobs.

In the third treatment group, both salary and shaming components are combined. We anticipate that the additional shaming component will result in a higher salary discount on blue collar jobs than that observed in treatment 1. Consequently, our Hypothesis 3 is that, at the end of the 10th round, there will be a greater proportion of subjects who choose white collar jobs in treatment 3 compared to treatment 1.

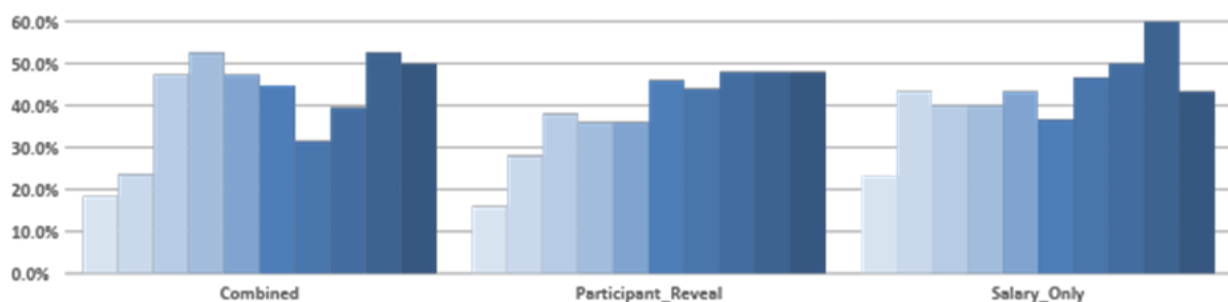
#### 4.4 Results of the lab experiment

In treatment group 1, where salary changes were implemented, only 25% of the participants chose a blue-collar job despite being offered the same salary level as the white-collar job. Although the salary for blue-collar jobs increased in the following rounds, it was not until round 8 that the share of participants choosing blue-collar jobs caught up with that of white-collar jobs. However, this share dropped again to 43% in round 10. These findings suggest that salary plays a role in job preference, but preference towards white-collar jobs persists. If this were not the case, the share of participants choosing blue-collar jobs would have settled at 50%.

In treatment group 2, where shaming was implemented, only 16% of participants chose blue collar jobs in the first round, with a gradual increase over the rounds. Interestingly, the share of participants choosing blue collar jobs stabilized at around 50% by round 8, but never exceeded it. This observation implies that when participants revealed their preferences, they were more likely to choose blue collar jobs and felt less ashamed. It is possible that participants revealing their choice of white-collar jobs alleviated the potential shaming element in the first rounds, leading to its elimination by the final rounds.

In the third treatment group, which combines both salary changes and shaming mechanisms, we observe a combination of the effects observed in the first two treatment groups. Initially, only a low 18% of participants chose blue collar jobs. However, due to the combined impact of salary differences and the anti-shaming effect observed in treatment group 2, the share of those who chose blue collar jobs equalized faster, reaching around 50% by round 3. Although there was a significant decrease in the share of participants who chose blue collar jobs by round 7, by the end of the experiment (round 10), the share of participants who chose blue collar jobs was equal to the share of those who chose white collar jobs.

**Figure 3. Participants' choice for Blue collar jobs, %**



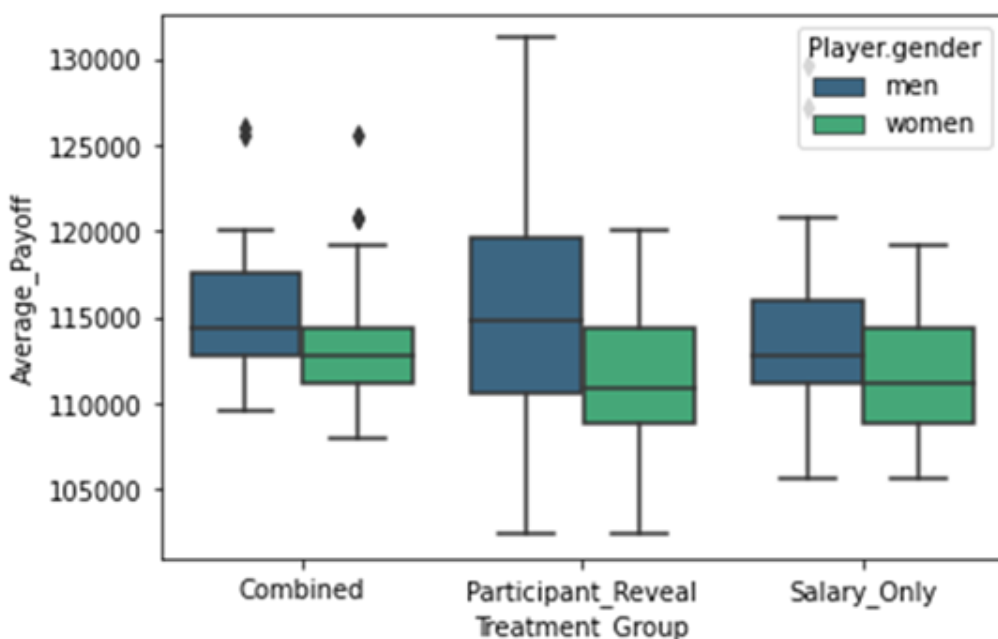
The observed preference for white-collar jobs despite a lower salary level implies that both males and females are willing to sacrifice monetary rewards for the opportunity to work in a white-collar job instead of a blue-collar job. These findings lend some support to the assertion that a portion of the challenge of youth unemployment can be attributed to a preference for white-collar jobs. Moreover, it is possible that the blue-collar jobs listed in the study, including builder, sewer, tractor driver, hairdresser, and carpenter, are viewed as temporary and insecure forms of employment due to the limited or no bargaining power of trade unions in Kazakhstan. Based on the study results, we can infer that job stability may be more important than earnings.

Based on the results, it can be observed that the mean pay-out stabilizes at approximately 117,000 KZT by the 10th round for all three treatment groups, which is close to the pay-out level that balances the choice between blue collar and white collar jobs. The overall average pay-off for the combined treatment is higher at 114,463 KZT compared to around 113,000 KZT for the separate treatments across the 10 rounds.

**Figure 4. The average pay-out by treatment and round**



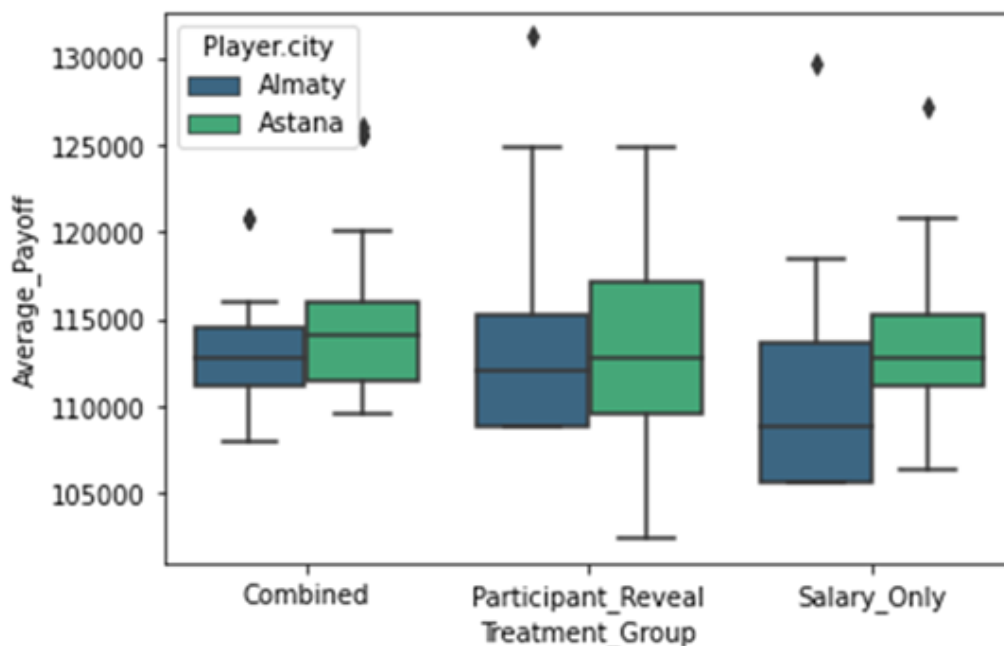
**Figure 5. The average pay-out by treatment groups**



The experiment was conducted in two cities, Astana and Almaty, and it is interesting to compare the data in the context of these cities. Participants from Almaty were found to be 8% less likely to choose working professions on average than participants from Astana, with 35.4% and 43.5%, respectively. The differences between the two cities were especially significant in the data for the first and third treatment groups, with higher rates of choice of working professions by residents of Astana. Specifically, in group 1, there were 8.5% more young people who chose working professions in Astana compared to Almaty, with average rates of 43.5% and 35%, respectively. In the second group, the average rates were almost the same, indicating that when no one influences the choice, young people in both cities unanimously choose working professions at the level of 37-39%.

In the box plot, we can observe varying median values of average pay-off for both cities and treatment groups. The box plot of the combined group in Almaty appears to be relatively shorter, indicating that students in this group had less variation in their salaries, and there was less dominance of one job choice in many rounds. On the other hand, in Astana, the box plot for the participant reveal treatment group shows a high spread of average pay-off values.

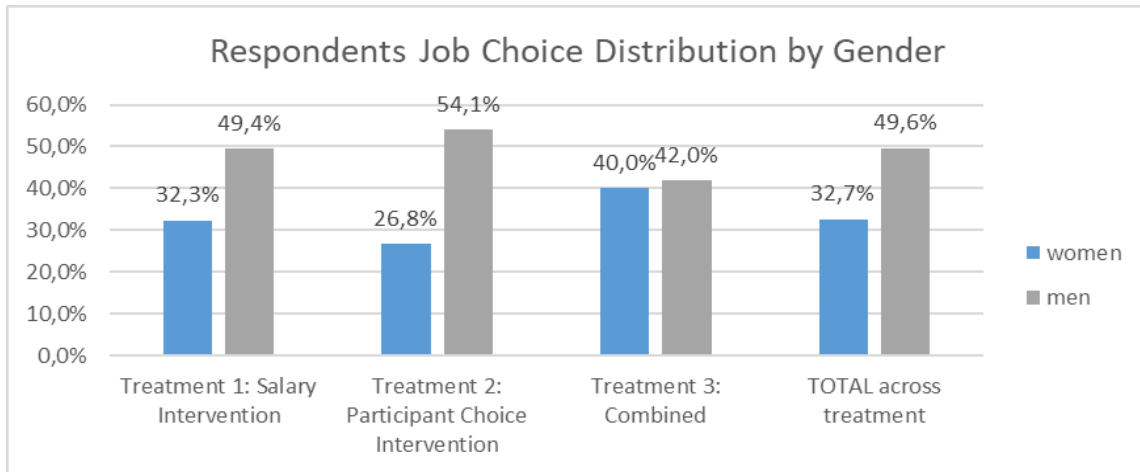
**Figure 6. Average pay-off for Almaty and Astana across treatment groups**



In terms of gender, the results of the experiment show that, on average, 49.6% of men choose working professions across all groups and rounds, with men's interest in such professions increasing by a factor of 1.9 over the 10 rounds. However, in the presence of social pressure in treatment group 3, men's interest in working professions decreases significantly to an average of 42%, while the corresponding figures for groups 1 and 2 are 49.4% and 59.1%, respectively.

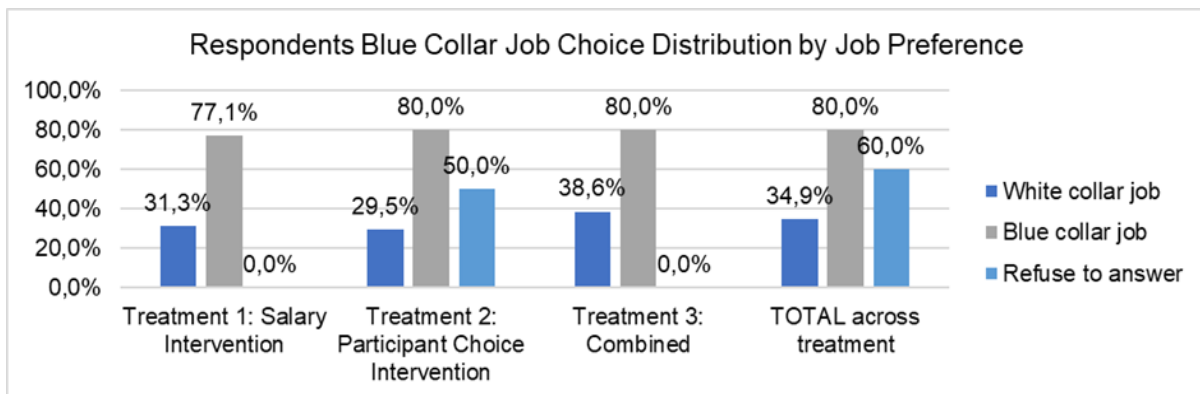
Moreover, the results indicate that women tend to choose blue-collar jobs less frequently than men across all treatment groups, with a difference of 15 percentage points between them. This difference is most pronounced in the treatment group with a shaming effect, where participants were aware of the choices of others and their own choices were revealed. Furthermore, despite the increasing salary levels for blue-collar jobs in the salary-only intervention, women still tended to opt for white-collar jobs.

**Figure 7. The average share of those who chose a working profession by gender**



During our laboratory experiment, we found that the majority of participants (80%) who believed that their skills aligned with blue-collar jobs chose to pursue those professions. In contrast, only 35% of participants who felt they were more suitable for white-collar jobs chose blue-collar jobs.

**Figure 8. Blue collar job choice distribution by stated job preferences**



*Regression analysis*

The main choice each participant makes in the experiment is the choice between a white-collar job and a blue-collar job in all three types of treatments for ten rounds. Through our survey in the end of the experiments, we also collect data on age, gender, city, educational attainment, parents' educational attainment and job type, and participant's job type preferences. Overall, participants are balanced across treatment groups regarding age, while for other background variables, the difference is not systematically significant. We use all these variables as control variables for more precise estimations. Based on the results, a review of choices made by participants in each treatment group by round already reveals significant preferences towards white-collar jobs. Given the randomized design, we can estimate the experimental effects of the treatments.

We found that the introduction of shaming separately and along with salary changes do not significantly impact the probability of choosing a blue-collar job. We found that the coefficients in round 10 are both positive, indicating approximately 10 to 12 percent increase in the probability of choosing a blue-collar job when shaming and combined mechanisms are introduced compared to just salary mechanisms.

With respect to average payoff, as expected, the impact on payoff in shaming-only treatment does not significantly differ compared to salary only mechanism, however, the average payout significantly increases in case of combined treatment. On average, those in the combined treatment group earned approximately 2,500 KZT higher than salary only mechanism. In other words, the introduction of shaming over the participants towards higher payout faster than just salary differences.

It is also noteworthy that gender plays a significant role in the probability of choosing blue-collar jobs. By round 10, women are 20% less likely to choose a blue-collar job compared to men in the overall sample.

Also, we found a very strong and significantly higher probability of choosing a blue-collar job if a participant had a previous educational experience in a blue-collar related field since vocational education is usually focused on blue-collar jobs. By round 10, participants with vocational education backgrounds are 55% more likely to choose a blue-collar job. On average, has over 16,000 KZT earnings compared to those who are still students and have not completed higher education yet. Also, other things being equal, blue-collar jobs would require an incremental of salary to be as appealing as white-collar jobs.

#### **4.5 Lab experiment research limitations**

It is important to acknowledge that this experiment and its conclusions have limitations. Specifically, the experiment was conducted among students from two prestigious higher education institutions located in the two largest cities of Kazakhstan, and as such, the findings cannot be considered representative of youth throughout the country, nor can they be viewed as representative of the NEET youth population targeted in our research project. While it is common practice to use university students in lab experiments within the social sciences, it is important to exercise caution when interpreting these results. To obtain a more comprehensive and accurate understanding of youth development in Kazakhstan, it is crucial to engage local and national experts and to commit to a long-term, holistic approach to youth development.

Additionally, further research is needed to examine intermediate outcomes, such as which skills are most suitable for different job types, what level of salary is deemed fair, and the impact of shaming and group dynamics. It is important to expand the scope of outcomes of interest to better synthesize evidence on how interventions affect attitudes and behaviors. More detailed information on these intermediate outcomes will help to improve our understanding of the causal pathways between the intervention and the final outcomes. Furthermore, more research is needed to investigate the intrinsic and differentiated characteristics of youth behavior in response to the treatments employed in the experiment.

**Table 1. Main regression results on choice of blue collar jobs by round and average payoff**

	1	2	3	4	5	6	7	8	9	10	11
VARIABLES	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Payoff
Shaming (treatment 2)	-0.029	-0.099	0.007	-0.02	-0.049	0.148	0.039	0.008	-0.079	<b>0.102</b>	<b>1,019</b>
	-0.093	-0.108	-0.121	-0.112	-0.116	-0.118	-0.123	-0.118	-0.111	<b>-0.12</b>	<b>-1,289</b>
Combined (treatment 3)	0.001	-0.141	0.1	0.107	0.085	0.127	-0.06	-0.089	-0.044	<b>0.119</b>	<b>2,484*</b>
	-0.105	-0.116	-0.129	-0.128	-0.127	-0.126	-0.129	-0.125	-0.125	<b>-0.129</b>	<b>-1,262</b>
Age	0.001	-0.018	0.03	-0.019	0.049*	0.001	0.077***	-0.003	-0.002	<b>0.034</b>	<b>50</b>
	-0.027	-0.025	-0.031	-0.031	-0.027	-0.027	-0.028	-0.031	-0.032	<b>-0.031</b>	<b>-331</b>
Gender	-0.160*	-	-0.002	-0.167*	-0.112	-	-0.124	-0.144	-0.103	<b>-0.199**</b>	<b>-2,558**</b>
	-0.082	0.292***	-0.102	-0.099	-0.097	0.273***	-0.095	-0.1	-0.102	<b>-0.099</b>	<b>-1,193</b>
City	-0.1	-0.012	-0.007	0.001	-0.242**	-0.006	0.05	-0.084	-0.148	<b>-0.039</b>	<b>-673</b>
	-0.078	-0.1	-0.115	-0.11	-0.1	-0.109	-0.111	-0.108	-0.11	<b>-0.112</b>	<b>-1,305</b>
Vocational education/TVET	0.774***	0.431***	0.665***	-	0.744***	0.532***	0.544***	0.493***	0.418***	<b>0.551***</b>	<b>16,436**</b>
	-0.103	-0.123	-0.142	0.538***	-0.137	-0.131	-0.143	-0.136	-0.129	<b>-0.138</b>	<b>-1,675</b>
Completed Higher Education	-0.06	-0.032	-0.053	-0.149	-0.085	-0.008	-0.161	0.028	-0.244**	<b>-0.12</b>	<b>-25</b>
	-0.092	-0.112	-0.122	-0.113	-0.117	-0.122	-0.115	-0.124	-0.123	<b>-0.126</b>	<b>-1,273</b>
Completed Masters/PhD	-0.076	-0.003	0.07	0.083	-0.111	-0.072	-0.098	-0.228	-0.009	<b>-0.009</b>	<b>-458</b>
	-0.113	-0.13	-0.208	-0.213	-0.184	-0.188	-0.187	-0.173	-0.197	<b>-0.2</b>	<b>-1,671</b>
Constant	0.301	0.922*	-0.227	0.904	-0.425	0.452	-1.065*	0.642	0.776	<b>-0.152</b>	<b>112***</b>
	-0.572	-0.515	-0.614	-0.627	-0.551	-0.55	-0.57	-0.627	-0.638	<b>-0.624</b>	<b>-6,730</b>
Observations	117	117	117	117	117	117	117	117	117	<b>117</b>	<b>117</b>
R-squared	0.109	0.149	0.036	0.074	0.107	0.098	0.109	0.073	0.077	<b>0.07</b>	<b>0.156</b>

# 5. Elimination of the information gap in employment, education and vocational training of young people in Kazakhstan: Field Experiment

## 5.1 Context and literature review

The design of the field experiment was developed during the experimental methods training at Georgia State University in October 2021 and presented to faculty for comments and suggestions. The main purpose of the field experiment is to address the informational gap in youth knowledge of free governmental programs. 40% of youth reported having constant issues with finding employment (National report «Youth of Kazakhstan – 2018»), the same report shows that despite having 203 unemployment agencies with 7 youth specific national employment programs, 58.7% never heard about them.

The main focus of the literature on youth employment historically has been on interventions such as training, including soft and hard skills training, business and financial literacy training and similar invasive interventions. Kluve et al. (2017) completed a comprehensive review of 113 interventions to improve labor market outcomes of youth and classified them into four categories: (1) Training and skills development; (2) Entrepreneurship promotion; (3) Employment services; and (4) Subsidized employment. Given the importance and urgency of such programs around the world, it is expected that most of these programs are invasive and work with youth directly and intensively, especially when funded by the government and international organizations. However, the report also stresses the need to more research on intermediate outcomes and mechanism, and stresses the importance of cost-effectiveness of these programs even when they have positive outcomes.

In that regard, low-resource interventions such as text messages play an important role. While, it is relatively difficult to calculate the cost per person in more invasive intervention programs, text messages are universally accepted as a low-resource and highly cost-effective solution to informational gap in various fields. There is a significant literature on the impact of text message interventions in important fields such as economic development in agriculture (e.g., Aker and Fafchamps 2013, Goyal 2010), health (e.g., Dammert et al. 2014, Pop-Eleches et al. 2011), financial (e.g., Karlan et al. 2010), and fishing markets (e.g., Jensen 2007).

However, there is very limited number of applications of similar cost-effective solutions using text messages in the labor market literature, especially related to youth. The most relevant research for our purpose is the text message intervention in Peru by Dammert, Galdo, and Galdo (2015). They investigate the causal impacts of integrating mobile phone technologies into traditional public labor-market intermediation services on employment outcomes. Particularly, they send text messages with up-to-date information on job vacancies and find positive and significant short-term effects on employment for public labor-market intermediation.

An important finding reported in this study is that, in the labor market, the scope and novelty of the information travelling through digital means seems to be important. While the impacts from traditional intermediation are not large enough to be statistically significant, the unrestricted-SMS

treatment group shows statistically significant employment effects in the first two months following the intervention. Although the differential impacts among treatment groups are not sufficiently large to be statistically detected, the results suggest that integrating mobile phone technologies into traditional, public labor-market intermediation and extending the set of information available for jobseekers can constitute a cost-effective labor-market initiative as the marginal costs of providing SMS information are low.

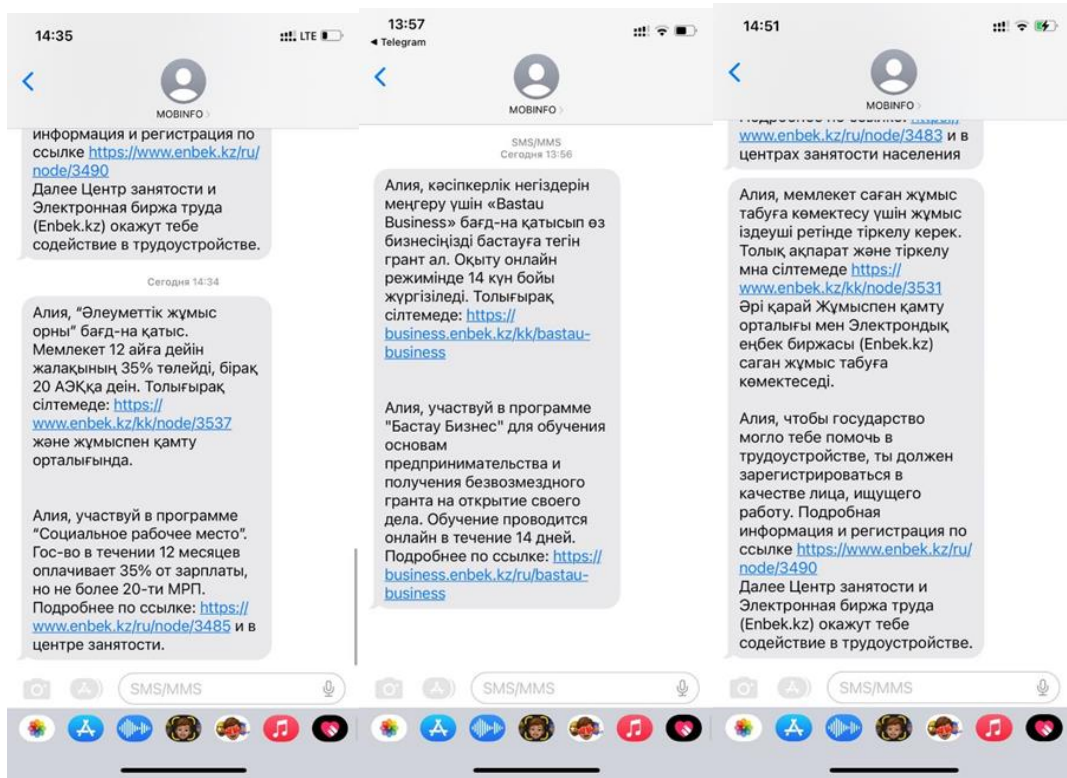
## **5.2 Field experiment design**

The argument is that by addressing this informational gap, we can increase youth participation in these programs and eventually the rate of employment, education and training, which in turn would decrease the number of NEET youth. To address this informational gap, we sent text messages to selected group of NEET youth containing the information about government programs, particularly those listed on Enbek.kz website. Enbek.kz is the governmental electronic employment center and offers a host of information on vacancies, employment opportunities, various programs offered by the government. For our particular intervention, we included the following programs: “Professional education”, “Youth internship”, “Bastau Business”, “First Employment Place”, “First business grant”, “Public works”, “Social Workplace”, “Generational contract”. Each message contained a brief description of the program and the link to access more information on how to sign up.

To test the impact of this intervention, we used the randomized controlled trial (RCT) approach. We recruited 339 NEET youth through a partner organization and randomly divided them into two groups - 170 youth in treatment group and 169 youth in control group. Youth in treatment group received the intervention in a form a text message described above. Overall, youth in treatment group received 13 messages - twice a week (Tuesday and Friday afternoon) for four weeks. On top of the information about the governmental programs, we sent a text message on importance of registering at local employment center and on Enbek.kz. This message was sent every week on Friday for four weeks to test it’s impact on sign-up rate, and since it is sent at a higher intensity than individual programs, we expect a higher impact.

The first wave of recruitment was done through social media in the beginning of 2022 and youth from all over Kazakhstan signed up, we recruited approximately 189 young people. To increase the pool of young people, we hired a consultant to work with Youth Resource Centers and were able to recruit additional 150 young people in the beginning of 2023. We made an effort to ensure the youth is representative of NEET youth in Kazakhstan so the second wave of youth was recruited from all four regions, particularly from Mangystau, Aktobe, North Kazakhstan, Pavlodar, Zhetysu oblasts.

Picture 2. Examples of messages that were sent in Kazakh and Russian



The endline survey we collected data on youth demographic characteristics such as age, type of residence, gender, marital status, number of household members, source of livelihood, poverty scale, educational achievement, including of their parents. We also collected information on their employment status and related activities such as job search. We had a set of questions that are particularly related to the programs we covered in the text messages to assess their awareness about the program and whether they signed up or not. Finally, we have questions related to employment centers and Enbek.kz to assess their sign-up rate as a result of more intensive informational treatment.

By the end of the endline data collection, we had completed surveys from 160 young people – 88 from control group and 72 from treatment group. While this is an indication of a significant attrition with respect to the total number recruited (almost 50%), the differential attrition is relatively low – 52% in control group and 42% in treatment group, amounting to 10% differential attrition.

### 5.3 Methodology and Hypothesis

Given the randomized design, we can estimate experimental effects using the following simple intent-to-treat specification:

$$Y_i = \beta_0 + \beta_1 * T + X_i + \varepsilon_i$$

where  $Y_i$  is the outcome of interest for individual  $i$ ,  $T$  is an indicator for the treatment group that received text message.  $X_i$  is a vector of covariates such as age, gender, residence type, and marital status. The coefficient  $\beta_1$  captures the effect of the treatment on a set of outcomes. If  $\beta_1$  is positive

and significant, then we would conclude that receiving text messages increased the outcome indicator compared to the control group.

Our main outcomes are rate of employment, rate of educational and training sign-up, awareness about the governmental programs, sign-up rate to at least one of the governmental programs and sign-up rate to electronic or local employment centers.

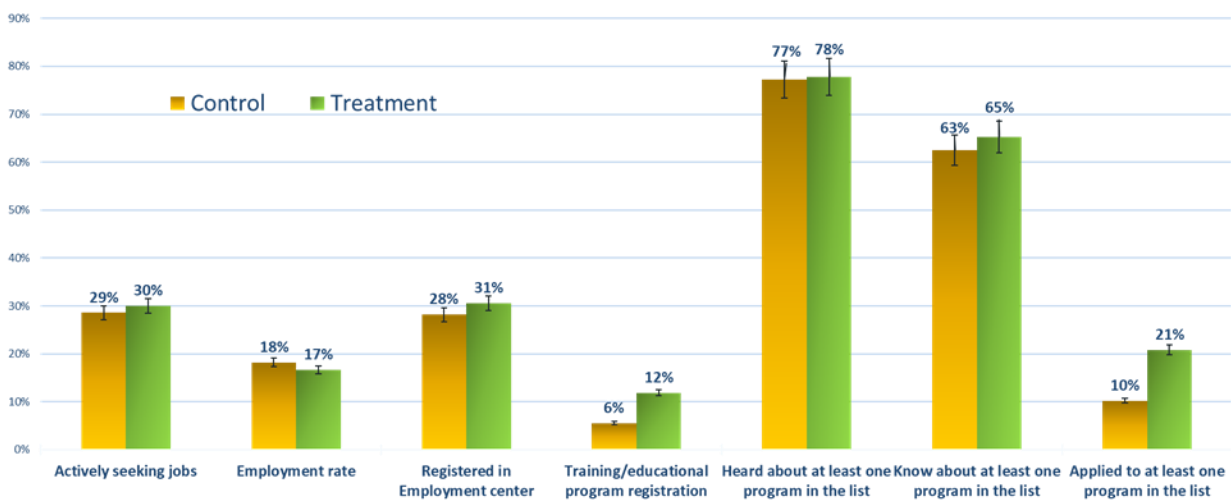
Our hypothesis is that text messages will address the informational gap and will at least increase the awareness of the program. The shortened period of treatment in our case due to operational delays will create complications since it might undermine the impact. On top of that, due to challenges with the recruitment and attrition, we might not have enough statistical power to detect a significant impact of our treatment. Nevertheless, we believe it is an important step of applying experimental methods to provide solutions to NEET youth issues, one of the main purposes of our project. We can use the results of this field experiment as a proof of concept and intend to generate interest to receive funding for a larger study.

### 5.4 Field experiment results

We report the averages of outcomes in Figure 9 for a preliminary review of the treatment effect. The share of youth actively seeking jobs are similar between control and treatment group, just as the employment rate. In other words, youth that received text messages about employment, education and training opportunities did not report significantly higher activity in the job market and it did not materialize in higher employment rate. While we did expect at least higher activity seeking jobs since the text messages encouraged it, the overall short period of the project implementation might be the explanation for low difference. While youth in control group and treatment group were practically equally active, treatment group youth were more pro-active in terms of applications and registration.

Youth that received the messages were more likely to register in employment centers compared to the control group (31% versus 28%). While the difference in means is not significant at 10% level, this is an important indication that messages might have encouraged higher sign-up rate. On top of that, we observe that youth in treatment group were significantly more likely to register for training or educational programs (12% versus 6%) compared to the control group. While these may not be the training and education programs listed in the text messages, it might have encouraged youth to seek for more training or educational opportunities. It is possible that it might have changed their perception of availability of such programs by the government or other non-governmental entities.

**Figure 9. The review of outcomes by control and treatment group**



We also observe relatively high share of youth in both control and treatment groups that have heard or aware of the governmental programs which were included in the text messages. Approximately 4 out of 5 young people have heard of at least one of the governmental programs we included in the text messages, and approximately two-thirds of youth know about these programs. On the other hand, there is a significant gap between awareness and application for these programs.

While almost all of youth in our sample are eligible for these programs, only 1 in 10 youth actually applied for at least one of the programs in the control group. It is encouraging to observe that 2 out of 10 youth applied for at least one of the programs in the treatment group, which means that youth that received the messages with information about these programs were twice as likely to actually apply for at least one of the programs. This is the largest impact we see among all of the main outcomes.

Further, we discuss the results a regression analysis of the outcomes by treatment with and without control groups. Regression results are reported in Table 2 and 3. Since the outcome indicators are binary variables and we estimate logit models, the coefficients can be interpreted as probabilities. The same of applicable to control variables except for the *age* variable which is number of years. Robust standard errors are applied, and significance is reported using stars – one star for 10% significance level, two stars for 5% and one star for 1%.

**Table 2. Regression analysis without control variables**

VARIABLES	1	2	3	4	5
	Employment	Employment Center Registration	Training and Educational program registration	Awareness of at least 1 program	Application to at least 1 program
Treatment	-0.105	0.113	0.828	0.12	0.837*
	-0.421	-0.388	-0.656	-0.332	-0.457
Constant	-1.504***	-0.936***	-2.833***	0.511**	-2.172***
	-0.277	-0.265	-0.516	-0.221	-0.353
Observations	160	130	131	160	160
R-squared	0	0.001	0.013	0.001	0.022

According to the regression analysis, we observe that most of the outcomes have a positive estimation coefficient expect for the employment indicator. Youth in treatment group are about 10% less likely to be employed, but 11% more likely to register in the employment center. They are also 82% more likely to register for a training or educational program and 12% more likely to be aware about at least one governmental program we included in the messages. The main issue with these estimates is that they are not significant at 10% level, therefore treatment is likely to have no impact at all and reported coefficients might be false positives.

On the other hand, we observe a positive and significant impact of treatment on probability of applying to at least one of the governmental programs included in the text messages. Youth that received the text messages twice a week for 4 weeks are about 84% more likely to apply for one of these programs by the end of the treatment period. This is an important indication that youth were indeed induced to take action to sign-up for these programs as a result of our intervention.

**Table 3. Regression analysis with control variables**

VARIABLES	1	2	3	4	5
	Employment	Employment Center Registration	Training and Educational program registration	Awareness of at least 1 program	Application to at least 1 program
Treatment	-0.254	0.089	0.85	0.216	0.763
	-0.441	-0.391	-0.637	-0.346	-0.514
% Female	-2.243***	-0.136	-0.584	0.525	-1.652***
	-0.584	-0.482	-0.806	-0.391	-0.625
% Urban	0.395	-0.16	0.527	-0.292	-0.699
	-0.447	-0.399	-0.689	-0.348	-0.464
Age (Years)	-0.033	0.021	-0.017	0.013	0.045
	-0.07	-0.055	-0.116	-0.049	-0.081
% Married	0.766	-0.379	0.205	0.105	1.296*
	-0.632	-0.492	-0.696	-0.407	-0.716
% with Higher ed	0.51	-0.405	0.357	0.716*	-0.648
	-0.454	-0.448	-0.625	-0.39	-0.538
Constant	-0.401	-0.973	-2.651	-0.225	-2.525
	-1.755	-1.399	-2.463	-1.275	-2.2
Observations	160	130	131	160	160
R-squared	0.121	0.019	0.024	0.048	0.119

When we include the control variables, specifically when we control for gender, type of residence, age, marital status and educational attainment, the sign of coefficients do not change while the magnitude of the coefficients is fairly similar to regression without control variables. Youth in treatment group are about 25% less likely to be employed, but 9% more likely to register in the employment center. They are also 85% more likely to register for a training or educational program and 21% more likely to be aware about at least one governmental program we included in the messages. However, addition of control groups decreases the significance of the coefficient for application to at least of the programs. It is no longer significant at 10%, although it is significant at 15% level. It is not significant by conventional cut-off levels but considering the addition of number of control variables, the p-value is still considerably low.

We also observe that females were significantly less likely to be employed and apply to at least one of the programs. In fact, females were also less likely to be registered in employment centers and register for training or education programs, despite higher likelihood of awareness of governmental programs. This is an indication that women might have sufficient information about programs, but they are less likely to take action in terms of job market participation and applications.

The results are encouraging to some degree due to a largely positive impact of the treatment on most of the outcomes, especially that are transitional towards higher employment. Low significance levels of the coefficients might potentially indicate the probability of false positive results; however, it is important to keep in mind the issues with power due to low number of observations. Our original power calculations required higher number of youths to be recruited, which did not materialize due to implementation and administrative issues. We believe that the results are a good indication of potential impact of low-resource interventions such as text messages and further research with higher

number of observations and longer treatment period might shed a more conclusive light into the question of its impact on youth outcomes.

## 6. Conclusion and policy recommendations

The research team studied international practices of identifying NEET youth and identified local factors influencing these approaches. Unclear subgroups within the NEET youth, sharp regional differences in the number of these young people, and unexplored reasons for the high proportion of women who are neither in education nor employment hinder a deep understanding of the current state, problems, and program planning regarding NEET youth. The group's findings also pertain to the lack of research helping to clarify the values, needs, and motivations of NEET youth.

Therefore, during the project, a qualitative study was conducted for the first time using the representations of NEET youth regarding possible factors contributing to their low employment levels and dropout rates. Additionally, the understanding of key stakeholders regarding the problems of NEET youth and possible solutions was examined. As revealed in focus groups with young people, they experience disappointment due to the low quality of teachers, the complexity of the curriculum, and the inability of higher education to provide soft skills that aid in employment. Corruption, low wages, and inflexibility of government employment support programs are cited as significant factors contributing to their lack of success. Stakeholders are more concerned about the weak professional level of youth workers, which is linked to low salaries, the absence of professional development programs, and instructional materials.

According to the project objectives, experimental economics methods were applied for the first time in Kazakhstan, including laboratory and field experiments. The laboratory experiment allowed for predicting the decisions made by young people in response to interventions aimed at enhancing the prestige of vocational professions. We believe it is important to introduce the foundations of evidence-based approaches into research and policy planning in Kazakhstan. This approach is based on the recognition of the non-linearity, ambiguous, and often irrationality of decisions made by individuals. This key assertion justifies conducting laboratory experiments in policy planning. In our case, the laboratory experiment demonstrated the potential success of efforts to change the preferences of young people towards vocational professions through increasing wages and engaging NEET youth in peer environments. Although not immediately, these measures will have an impact on youth, although they may be less successful for women, indicating the need to develop special tools for them. Conversely, young people who already have technical and professional education will be more receptive to changing their career preferences.

As a reliable tool for assessing the effectiveness of government programs regarding NEET youth and, as a result, reducing their numbers, a field experiment was also conducted, involving a minimally invasive intervention and evaluating its effectiveness. The effectiveness of sending 13 SMS messages to a treatment group about existing youth education and employment programs was evaluated through a randomized controlled trial, which is not widely used in Kazakhstan as a mechanism for evaluating policy interventions. The results showed that such inexpensive interventions can be used to bridge the information gap about youth support programs due to the existing, as we previously found out, disconnect between awareness of youth programs and their utilization.

Such informational interventions, as demonstrated by the experiment, can influence the registration of young people at employment centers, that is, their "emergence from the shadows," which will facilitate the identification and work with this demographic. Moreover, the informational intervention is likely to affect young people's decisions to participate in trainings or educational programs and change their perceptions of the accessibility of government programs. Again, there are separate results

related to women, for whom the message distribution had a weaker influence, but this is also valuable information for developing specific approaches to working with them.

In addition to the actual research, the project team's activities involved interacting with key stakeholders and informing them about the conducted experiments. We participated in meetings with youth resource centers, the Committee on Youth Policy of the Ministry of Information and Social Consent, the large-scale Civil Forum, and the World Bank's project conference "Zhastar Project," which shares similar goals. The project has strengthened ties with non-governmental organizations and Almaty Management University, which were partners in this project. Immersion in the NEET issue brought the project team closer to experts in youth policy, enriching discussions within the expert community with innovative research methods that can be applied.

The conducted project has generated, in addition to the obvious results, the potential for researchers in Kazakhstan to conduct studies using laboratory and field experiments. Collaboration with the Center for Experimental Economics at Georgia State University has facilitated the growth of the project researchers' research potential.

The project team continues to engage with government agencies beyond the project's scope to disseminate research results and plans to develop an appropriate plan to consistently inform government bodies and other organizations involved in policy development about opportunities to enhance program effectiveness. At the same time, we understand that the methods we have tested during the project can be applied more broadly for planning all government initiatives.

On March 28, 2023, during the final conference, we presented the research results to key stakeholders along with recommendations, which are provided below.

### ***Recommendations based on overview of international approaches***

Based on the information and lessons learned from other countries on how they define NEET and approach the issues facing NEET youth in their countries, Kazakhstan could draw lessons from such experiences and review NEET measures to make existing and new programs more effective and outcome-oriented. The following list of preliminary recommendations provides an opportunity for such a review.

- I. Define a set of measures to address the NEET problem, grouping them into 3 stages depending on whether the young person is at risk of becoming NEET or is already NEET. The stages include prevention, information and awareness-raising, and corrective measures.
- II. Conduct a pilot study to determine which measures are effective in specific regions of the country and in urban/rural conditions. Use the experience of the Zhasproject pilot project in 2017 for a more thorough evaluation of the impact of various government programs using both experimental and quasi-experimental methods.
- III. To develop effective measures to reduce youth unemployment in Kazakhstan, it is necessary to identify the main factors influencing the emergence of this type of unemployment in further research. These may include:
  - Labor force growth,
  - Business conditions for young entrepreneurs and market competition,
  - Ability to obtain credit for business development,
  - Inflexibility of the labor market and legislation, its low ability to create high-skilled jobs,
  - Mismatch of qualifications with employer requirements,
  - Gender differences in education and employment,
  - Other.

### ***Recommendations based on qualitative analysis of youths and stakeholders' perspectives of challenges faced by NEET youth***

Interviews with stakeholders and focus groups with NEET youth allow presenting recommendations for improving the quality of education and improving the coordination of government programs

- I. NEET youth mostly realize that they lack skills and knowledge to get employment. They contribute this to the education system mostly. The secondary education attainment rate is very high; however, the youth mentioned the several gaps in education that contributes to becoming NEET. Among them are the slow transition of the education from the old type of education characterized by formal and memorization to a renewed curriculum that is characterized by the emphasis on problem solving, functional literacy and critical thinking. Lack of or not effective career advising. Vocational and higher education also pierced to be not related to the labor market. The quality challenges of education are exacerbated in the rural areas and the pandemic-related circumstances. For the longer-term impact there is a need for further investment into education reform to make it equitable and fair, that promotes quality education in urban and rural schools. Education system should better equip XXI century and relevant skills and be more resilient to future possible emergencies like pandemics.
- II. Challenges in education leads to lack of competencies, combined with poor career advising at school, perceived corruption and nepotism in hiring, limited consciousness, and lack of determination and energy contribute to failure to transitioning from education to employment. Labor market is still partially planned in terms of allocation of state education grants for higher education, which faces some challenges in determining the market labor needs.
- III. While there are several government intervention programs there is a need for further increasing their flexibility to account for more individual needs. Developing the feedback loops and data driven decision making would help to timely identify the emerging needs and adapt for them.
- IV. Further improving the administration is needed, which may include professionalization of the program administrators, providing them special training, developing professional certification, initiating program evaluations among other measures.

### ***Recommendations based on lab experimental analysis of employment preference of NEET youth in Kazakhstan***

Several recommendations can be drawn based on the analysis of a lab experiment conducted as part of our project.

- I. There is a need to enhance the prestige of blue-collar jobs through perceived increases in salary. The opinions of society and close circles such as friends and parents significantly influence the image and interest in working professions, as well as the concept of employment in blue collar jobs. The strong initial preference towards white collar jobs observed in all treatment groups, with less than a quarter of participants selecting blue collar jobs in round 1, is a clear indication of inherent bias towards blue collar jobs due to factors such as low prestige, shaming, or expectation of lower salary. In the later rounds, we observe a preference shift towards blue collar jobs when participants are presented with higher relative salaries. Interestingly, we also observe that revealing the participant choices did not hinder the increase in the share of those who chose blue collar jobs. This significant finding underscores the potential benefits of increasing job prestige.
- II. It is recommended that the government increase youth participation in vocational education institutions. Our analysis reveals that participants with prior experience in vocational

education are significantly more inclined to choose blue collar jobs. This impact is both highly significant and sizable, with a 55% greater probability of opting for blue collar jobs. The experience gained through vocational education appears to reduce stigma or shame associated with blue collar jobs, as individuals become more familiar with the various available job opportunities and gain a better understanding of market demand and wage differentials.

- III. Efforts should be made to enhance the appeal of blue-collar jobs to women. Although this may prove challenging in more conservative societies, promoting a better understanding of the range of blue-collar jobs that do not necessarily entail intensive physical labor can help to increase female interest in these roles. The involvement of women in the labor force is also an important area for further research, given traditional family roles and cultural perceptions that prioritize higher education as a means of earning respect in both familial and institutional settings. Factors such as flexible working hours and access to childcare may also serve as potential barriers to women's participation in the workforce.
- IV. The findings of laboratory experiment emphasize the importance of using empirical evidence to inform and test state programs and projects. Furthermore, the results underscore the need for careful design of youth employment interventions, informed by a thorough understanding of youth behavior and decision-making processes.

### ***Recommendations based on field experimental analysis of elimination of informational gap in employment, education and vocational training of young people in Kazakhstan***

Based on the results of the descriptive and regression analysis of the field experiment, there are several recommendations that can be made.

- I. NEET youth need to be encouraged to take action in signing-up to governmental programs.

Governmental programs awareness is relatively high, but rate of application is low: 4 out of 5 of young people heard about at least one of the programs, but only 1 out of 10 in control group applied for at least one program. So the main issue seems to be taking action on the information that is provided by the government. Sending messages with brief information and the link to sign-up has a significant impact, but the government needs to explore more ways to encourage NEET youth to take action by simplifying the process of registration to these programs and require less documentation in the initial stages.

- II. Government needs to explore low-resource solutions to increase awareness and sign-up rate to programs offered for youth.

As our analysis reports, sending text messages with information on governmental programs with links to more information on how to sign up significantly increased the rate of application to at least one of the programs. Youth that received the messages were about 83% more likely to apply to at least one program included in the messages compared to a control group that did not receive any messages. Our intervention is a good example of a low-resource solution to increase awareness and sign-up rate to these programs. However, government needs to explore other potential solutions. For example, text messages can be tailored to participants in terms of their eligibility by age and education based on information that the government has.

- III. Government needs to simplify the process of employment center registration.

While the treatment did not have a significant impact on registration in local employment centers, we observe that only one-third of NEET youth in our sample were registered at all. Government needs to explore ways to simplify the process and encourage youth to register so that the efforts to sign them up to relevant programs and match with potential employers are more effective.

IV. Government needs to encourage women to increase their job market participation.

Our analysis shows that women are relatively more aware of the governmental programs, however, they are significantly less likely to take action in terms of applying to these programs and other educational or training courses, and eventually less likely to be employed and be active in the job market. Additional research is needed to explore the core reasons for lower participation; however, it is likely that women are more likely to be busy with childcare or housework, and more likely to be constrained due to family obligations. Women also might be more likely to be excluded from the job market by employers due to various reasons. The government needs to explore the reason behind lower participation in the job market by women and explore solutions to encourage women to take more action.

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# Appendix

## Appendix A. Description of governmental programs included in text messages

The programs can be categorized into three groups: 1) employment assistance, 2) training and 3) self-employment opportunities. The messages included these three categories and the information on the importance of the registration at employment centers and their contacts.

Description of current government programs:

- Job-search assistance

Government programs are administered through local employment centers. There are 207 employment centers in Kazakhstan, their addresses are available in the following website <https://www.enbek.kz/ru/zaniatost/czn-contacts>. The website allows one to search for suitable vacancies. The government requires all public organizations to announce their vacancies on the enbek.kz website. Employment centers and the Enbek.kz portal provide assistance in finding employment:

- 1) for vacancies that are in the database of employment centers
- 2) for vacancies posted by employers on the Enbek.kz portal.
- 3) government subsidized temporary jobs: public works, social jobs, youth practice, first job, generational contract, silver age.

- Registration as a job seeker

Registration as unemployed and job seeker is important for the government to personalize the assistance. Unemployed people can register as a job seeker, which is required for further registration as an unemployed person. The registration can be done through in person visit to employment centers at the place of residence or online through the e-government web portal ([www.egov.kz](http://www.egov.kz)) and the Enbek.kz portal the Ministry. The job seekers should demonstrate interest in finding a job by responding to vacancies offered by the Electronic Labor Exchange and the Employment Center attend job interviews.

“Youth internship” is one of the government programs that aims to help get the first work experience for those who completed their higher education. Unemployed young people may participate in this program within three years after completing their studies. Internship lasts up to 12 months, during which the interns will receive payment in the amount of at least 30 monthly calculation index (MCI).

- Training programs

“Vocational training” includes vocational training or retraining in order to obtain new specialties (professions). Vocational training may take place in educational institutions or at the workplace potential employers. The duration of vocational training is up to 6 months, based on the characteristics of qualifications and skills. Participants are provided with tuition fees, monthly stipend, travel grants and housing allowance if study happens in other city. After successful completion of the training, the employer employs the intern a period of at least 12 months on the Social Contract program.

- Subsidized employment

“Social Workplace” is created by the employer on a contractual basis with the employment center for the employment of the unemployed with subsidized wages. Work in a social workplace is temporary,

the duration of participation is up to 12 months. The program subsidizes 35% of the salary set by the employer, but not more than 20 MCI.

"The First Job " program gives graduates and unemployed youth the opportunity to find a job. The employer arranges for a permanent job for a period of at least 24 months, while the employment center subsidizes wages for the first year of work. The monthly subsidy from the local budget is 30 MCI.

"Generation Contract" program creates a workplace where an active worker of pre-retirement age transfers his/her experience and skills to the participating young people. The "Contract of Generations" involves graduates of educational institutions who graduated no more than two years ago. The duration of work is at least 18 months, after completion, the participant is provided with a permanent job or he replaces an employee who has reached retirement age. Salary is at least 30 MCI.

- Direct job creation and public employment programs

"Public Works" program aims to provide the unemployed with temporary employment. Public works do not require preliminary professional training of the employee and have social orientation. The duration of the program is up to 12 months. The monthly income under this program is 20 MCI. The high school students can also participate in this program during their holiday times.

- Start-up subsidies, self-employment assistance, and support

"Bastau Business Training" program provides citizens with the opportunity to do business by providing training on the basics of entrepreneurship. Among other categories, unemployed youth are also eligible to participate in the program. Training is conducted online for 14 days. At the end of the course, the program participant must score at least 70% of the correct answers on the final test in order to receive a certificate of course completion. The certificate is valid for three years and enables to apply for the Startup Business Development Grant ([business.enbek.kz](http://business.enbek.kz)).

"Startup Business Development Grant" is issued for implementation of new business ideas and start-ups. Registered unemployed, individual entrepreneurs up to 1 year, as well as self-employed people can apply for the grant. The grant amount is up to 400 MCIs. Within 12 months, the grant recipient submits a report on its intended use to the employment center.

## **Appendix B. The content of text messages**

#1. general information, February 14 at 15:00

Thank you for participating in the youth project of Nazarbayev University! You will receive SMS 2 times a week for 1 month about government programs for employment, training and grants. For questions, contact WhatsApp at +77769484974

#2 Education SMS #1, February 14 at 15-30

Participate in the Vocational Training Program. Training is carried out in educational organizations or at the workplace for no more than 6 months. Paid tuition, scholarships and travel. More details at <https://www.enbek.kz/ru/node/3487> and at the employment center.

#3 Employment SMS #1, February 17 at 14:00

Participate in the Youth Practice program for your first work experience. The practice lasts no more than 12 months for young people not older than 29 years old within 3 years after training. Salary not less than 30 MCI. More details at <https://www.enbek.kz/ru/node/3482> and at the employment center.

#4 Registration SMS #1, February 17 at 14-30

For the state to help you find a job, you must register as a job seeker. Detailed information and registration at the link <https://www.enbek.kz/ru/node/3490>

Further, the Employment Center and the Electronic Labor Exchange (Enbek.kz) will assist you in finding a job.

#5 Education SMS #2, February 21 at 14:00

Participate in the Bastau Business program to learn the basics of entrepreneurship and receive a free grant to start your own business. Training is conducted online for 14 days. More details at the link: <https://business.enbek.kz/en/bastau-business>

#4 Employment SMS #2, February 25 at 14:00

By participating in the "First Job" program, you can get a permanent job for a period of at least 24 months, while the employment center subsidizes the payment for the first year in the amount of 30 MCI. More details at the link: <https://www.enbek.kz/ru/node/4235> and in the employment center

#6 Registration SMS #2, February 25 at 14:30

In order for the state to help you find a job, you must register as a job seeker. Detailed information and registration at the link <https://www.enbek.kz/ru/node/3490>

Further, the Employment Center and the Electronic Labor Exchange (Enbek.kz) will assist you in finding a job.

#7 SMS about Grant #1, February 28 at 14:00

Receive a "Startup Business Development Grant" at no cost to implement new business ideas and develop a start-up business. Those registered in the database of the unemployed up to 29 years old can participate in the program. You can learn more and apply at the link <https://business.enbek.kz/en/how-to-get-government-grant>

#8 Employment SMS #3, March 3 at 14:00

For temporary employment, participate in the Community Service program. Advance preparation is not required. More details at the link: <https://www.enbek.kz/ru/node/3483> and in employment centers

#9 Registration SMS #3, March 3 at 14-30

In order for the state to help you find a job, you must register as a job seeker. Detailed information and registration at the link <https://www.enbek.kz/ru/node/3490>

Further, the Employment Center and the Electronic Labor Exchange (Enbek.kz) will assist you in finding a job.

#10 Employment SMS #4, March 7 at 14:00

Participate in the Social Workplace program. The state within 12 months pays 35% of the salary, but not more than 20 MCI. More details at the link: <https://www.enbek.kz/ru/node/3485> and at the employment center

#11 Education SMS #3, March 7 at 14-30

Go to <https://skills.enbek.kz/ru> to access many online educational courses, most of them are free.

#12 Employment SMS #5, March 10 at 14:00

Participate in the "Contract of Generations" program if you graduated no more than 2 years ago, you can get a job under the guidance of a mentor for a period of at least 18 months. More details at the link: <https://www.enbek.kz/ru/node/4233> and at the employment center

#13 Registration SMS #4, March 10 at 14-30

In order for the state to help you find a job, you must register as a job seeker. Detailed information and registration at the link <https://www.enbek.kz/ru/node/3490>

Further, the Employment Center and the Electronic Labor Exchange (Enbek.kz) will assist you in finding a job.