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Cilt 25 • Sayı 4 • Ekim 2025

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Underemployment Experiences Among Youth with Higher Education Graduates: A Qualitative Research Study in Istanbul

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ABSTRACT

This study aims to determine the causes of youth underemployment in emerging economies and to propose measures to minimize it, thereby drawing attention to its significance. In this context, semi-structured interviews were conducted with 12 young individuals aged 15-29 who work outside the fields in which they received their education, in the province of Istanbul, one of the emerging economies of Türkiye, characterized by a youth-dominant demographic structure and numerous universities. According to the findings of the study, there are several clear reasons for the education–employment mismatch among higher education graduates. Over the years, labor market conditions in Türkiye have hindered graduates' ability to secure jobs in their own fields. Factors such as high living costs, environmental pressures, and psycho-social issues have significantly aggravated this mismatch by forcing young people to seek employment outside their educational backgrounds. Furthermore, it was found that early career experiences often create a vicious cycle largely shaped by negative experiences. The similarity between our findings and those of numerous previous studies in the existing literature indicates credibility and consistency.

Keywords: Underemployment, youth, higher education, qualitative research, Istanbul.

JEL Classification Codes: J24, J63, J64

Referencing Style: APA 7

INTRODUCTION

Changes and transformations are occurring in many countries across the world. These shifts driven by rapid technological innovation significantly affect human existence in fundamental areas such as education, health, and law, particularly the economy. It is highly challenging to term these effects as unilateral and progressive. Instead, it would be more comprehensive to classify impacts as positive or negative, considering the dynamic interaction between economic and social factors. For instance, economic liberalization has directly positive effects on trade volume and economic development rates. In addition, from an improvement/development perspective, increases in poverty reduction organizations, legal frameworks aimed at reducing or preventing discrimination in the labor market, and a series of employment policies aimed at reducing unemployment can also be considered positive effects. Nevertheless, these positive effects are not without their shadows. For instance, it is asserted that while diversity and efficiency in employment policies increase, they harm productivity. Although multiple factors contribute

to this situation, the increasing deregulation of markets with developed industries and the resulting conditions (Appelbaum and Schettkat, 1995) and the inability to adequately utilize labor capacity based on education and qualifications may be among the most complicated.

In general, two phenomena influence the equilibrium of the labor market: unemployment and underemployment. While unemployment can be managed through macroeconomic considerations and practical interventions, underemployment poses a more complex challenge, potentially leading to structural economic problems arising from multifaceted factors that resist easy solutions. Underemployment, like unemployment, is a problem that can be solved, however it is a complex process that requires rigorous coordination between institutions. Over time, various definitions of underemployment have emerged, including a mismatch between an individual's education and job requirements. (Dooley et al., 2000).

Underemployment was initially defined at the 13th International Conference on Labor Statistics in 1982

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and was categorized along two dimensions. The first dimension is related to time-related insufficient working hours/duration as a visible form. The other, with its invisible aspect, covered all aspects of underemployment. However, a shift occurred at the 19th International Conference on Labor Statistics in 2013, where underemployment was redefined as the inadequate utilization of the workforce in terms of time. However, the perspective outlined at the 16th International Conference on Labor Statistics reflects the framework for understanding labor underutilization. Therefore, since 2013, underemployment also represents the mismatch between labor supply and demand, considering the “underemployment” approach.

Underemployment is a form of employment that directly reflects the quality of individuals, including their productivity, reducing their capacity and, therefore their welfare. More precisely, it is a mismatch between an individual's education level, skills, and job. This is a situation in which individuals are primarily employed in jobs below their educational qualifications or involuntarily in many fields unrelated to their education (Montcho et al., 2022).

Within the framework of the 2013 approach, the classification Thompson et al. (2013) is given in Table 1 below.

The effective utilization of the labor force presents challenges, particularly in emerging economies. These nations have limited economic resources, lower employment rates than developed countries, and a high rate of disguised unemployment. This situation reflects the misappropriation of scarce resources and the need for economic efficiency in emerging economies.

The consequences of inefficient labor force use extend beyond the economic realm, directly affecting a nation's development. This problem at the macro level is caused by many factors, including slow or jobless growth, inadequate education, and employability skills, skills mismatch, geographical mismatches, malfunctioning labor markets, and discriminatory practices toward culture, gender, and socioeconomic differences (ILO, 1998). Among these macro factors, those related to incompatibilities are directly related to the concept of “underemployment,” which will serve as the primary focus of this study. On the other hand, when solving this critical problem, some priorities come to the fore regarding the effectiveness of the measures.

Emerging economies must take a series of strategic steps to achieve sustainable economic development goals and fight underemployment. The most important steps are reforms in education and employment. When educational reforms are congruent with technological advancement, they directly impact productivity. Therefore, it will maximize the productivity of companies engaged in economic activities and contribute positively to collective welfare. Thus, emerging economies can sustain their economic development by providing high-quality employment. However, implementing the measures/solutions has limitations. These restrictions are primarily due to limited economic resources.

This study highlights the significance of integrating education and workforce planning for emerging economies to maintain a balanced labor market. Emerging economies should reduce mismatches between educational qualifications and labor market demands while focusing on rapid development and prioritizing innovations that create value. In this context,

Table 1: The types of underemployment

Education/Knowledge Underemployment	The degree to which a person's education level, knowledge, skill, and abilities exceed the education level that is required for their job
Experience/HierarchicalLevel Underemployment	The degree to which an individual experience level or previous hierarchical level exceeds that which is required for their job
Wage Underemployment	The degree to which a person's previous wages exceed the current wages on his/her job
Job Status Underemployment	The degree to which a person's desired job status (e.g., full-time, part-time) matches their current job status
Job Field Underemployment	The degree to which a person's desired occupation or field of employment matches the occupation or field of employment of their current job

this study illuminates the root causes of inadequate employment, which is one an obstacle to economic development in emerging economies. Specifically, this study focuses on the adverse effects/losses associated with inadequate employment in Türkiye, a prominent emerging economy.

Within the framework of Thompson et al. (2013) underemployment classification, this study focuses on a participant group who experiences both education and knowledge underemployment and job field underemployment.

However, many theories explain the mismatch between education, skills, and jobs. Rather than being an independent theory, this situation is presented as being intertwined with economic, sociological, and educational theories. For example, human capital theory is based on the idea that individual's qualities, such as knowledge, skills, education, and health, have economic value and that investments made in these qualities increase individual productivity and contribute to economic growth (Becker, 1993). Another is related to the theory of job fit and intention to leave, which is addressed within the productivity framework (Jovanovic, 1979). There are also objective criteria that determine education-job mismatch.

International standards have been developed to measure objective mismatches between education, jobs, and skills. The first is ISCED (International Standard Classification of Education), a standard classification system developed by UNESCO to compare and analyze education systems internationally. The other is ISCO (International Standard Classification of Occupations), an occupation classification system created by the International Labor Organization (ILO). ISCO seeks to standardize labor market analyses by categorizing occupations according to tasks and skills. These two classification systems provide a basic standard for analyzing the matching of education and occupation by classifying educational background and occupational roles. The education level and fields of education provide clues in this regard. For example, ISCED 6 (undergraduate education) is expected to be in ISCO-08 Major Group 2 (Professional Occupations). If individuals work in ISCO-08 Major Groups 4 or 5 (Clerical, Service, and Sales Personnel), there may be a mismatch between education and occupation. In terms of field of study, an individual who graduated from ISCED in the field of "Engineering, Manufacturing, and Construction" but works in the ISCO group of "Service and Sales Personnel" may reflect a skills mismatch. Finally, according to ISCED levels of education, it is essential to consider whether an individual has met the

minimum level of education required for the occupation in which he or she is working, and this is where the concepts of overqualification and underemployment come into play.

Young individuals in Türkiye and the experiences of those with a bachelor's degree or higher in terms of employment opportunities are the targets of these forms of underemployment and the focus this study. The scope of the research represents the opinions of 12 young participants (15-29) within Istanbul's province. To gather insights, conducted an in-depth field research in Istanbul's province. This location is a strategic choice due to its significance in terms of population size, the number of universities, and employment potential within Türkiye.

The primary contribution of this study lies in raising awareness among the younger generation through a comprehensive examination of underemployment and the development of tailored strategies. The contribution of exhaustive analyses and a qualitative methodology is crucial. A further contribution of this review is that the young workforce, which is one of the groups most affected by the crisis in emerging economies, particularly in developed economies, after the 2008 financial crisis, examines the losses or disadvantages of flexible work arrangements in depth, using qualitative methodology, and in the context of an emerging economic structure. Furthermore, this research offers valuable insights for countries undergoing demographic transformation and facing an aging population. This can aid in shaping awareness regarding the nature of jobs available to the young workforce and in making necessary policy adjustments.

The study is divided into four main sections. The first section is the introduction section, followed by the literature review section. The methodology and findings are presented in the third section, discussion followed by the conclusion, , and recommendations are presented in the final section.

LITERATURE REVIEW

Many empirical and theoretical studies on underemployment have been published in the literature; factors such as gender, education level, wages, education system, perception of overqualified, and productivity are mentioned as essential critical concepts used to define or measure underemployment in various dimensions. In this context, previous studies have addressed multiple methods and dimensions. These studies provide a comprehensive perspective on the effects and causes of underemployment.

Many empirical studies in the academic literature investigate the causes of underemployment. By comparing the employment opportunities of highly and relatively less educated individuals over 25 years, Aberg (2003) found that the highly educated workforce needed to be more employed due to the limited job opportunities. A similar study focused on the causes of unemployment. Since 1970, Klein (2015) has conducted a study to determine whether there is a distinction between the unemployment risks of individuals from diverse educational backgrounds in West Germany. This study determined that individuals who graduated from institutions that provide vocationally qualified education have a lower unemployment risk than those who graduated from institutions that offer general education. At the same time, the adverse effects and fluctuations of the economy have been acknowledged as external factor that exacerbate the disparity in unemployment risk between individuals with low and high levels of education. In another study, in which the analysis of higher education and skilled, Green and Heenseke (2021) analyzed graduate labor supply and demand, high-skilled positions, and underemployment in 26 European countries for the period 2005–2015 using the European Labor Force Survey and EU-Income and Living Conditions Statistics. A study of the workforce between the ages of 30 and 59 found that the proportion of highly educated workers is increasing in all countries.

However, the supply of highly-skilled workers is decreasing at the same rate in all countries, so underemployment is gradually growing. In another study, based on the assumption that the causes of underemployment of those with higher education may differ, Verhaest and Velden (2013) investigated the reasons for the variation in the underemployment rate of postgraduate-educated workers across nations. In this study, which is based on people who graduated no more than five years ago and included 13 European countries and Japan, it was determined that the quality of the education system and programs of the countries, the economic climate, and the relative surplus of the highly educated workforce account for the mismatch in the underemployment rate of the highly educated workforce. At the same time, it has been discovered that the education system and its quality can cause a distinction between countries and various education levels within a country. In an economy in which unemployment has become a long-term issue, underemployment can significantly decrease productivity. In this context, Nunez and Livanos (2010) analyzed the effects of education level and the work sector on short- and long-term unemployment

in 15 European countries. The study, based on data from a labor force survey, found that an individual's education level is more effective in reducing short-term unemployment than long-term unemployment. In another study focusing on labor productivity, McGowan and Andrews (2015) used PIACC data from 19 OECD countries to investigate the relationship between labor market mismatch and labor productivity. As a result, it was determined that labor productivity declines as the underemployment rate rises because of the conflict between the labor market and high-skill mismatch.

However, significant research exist on underemployment determinants by category. Studies conducted four times in Türkiye yielded overlapping and distinct results. A study by Taşçı and Darıcı (2010) examined the causes of underemployment in Türkiye using data from the 2006, 2007, and 2008 Turkish Statistical Institute Household Labor Force Surveys (TURKSTAT). The findings show that while women are less likely to be underemployed than men, city women are statistically more likely to be underemployed. In contrast, men did not differ significantly statistically between rural and urban areas. Both men and women are less likely to be underemployed after marriage. College graduates, regardless of gender, are more likely to be underemployed than illiterates. In addition, Central Anatolia, West Anatolia, and West Marmara have the highest underemployment rates for women in Türkiye. In contrast, the East Black Sea and West Marmara have the highest rates of male migration.

Ünal and Gönülağan (2019) examined the characteristics of underemployed Turkish people. The 2014-2017 TUIK Household Labor Force Surveys were used to determine gender, age, marital status, education level, graduated school, workplace status, region of residence, and year of employment. According to logistic regression analysis, being male, young, single, low-educated, a social science graduate, living in developed regions, and recently starting a job increase the likelihood of underemployment. In recent years, the most underemployed graduate departments in Türkiye are in social sciences, and initiatives that will offer employment prospects for educated workers despite increasing labor supply have been stressed. Dikmen (2021) used socioeconomic variables such as gender, education level, company size, sector structure, marital status, and working style to explain the underemployment status of 19-30-year-olds in Türkiye across time. TURKSTAT 2018 Household microdata were used. According to the findings, women with less education than university

graduates, those working in medium and large enterprises, and those in the informal sector are more likely to be underemployed than men, while married and divorced / widowed women are less likely than singles. Unpaid family workers are more likely to be underemployed than casual workers, and young adults in the education sector are more likely to be underemployed than others.

In addition to its causes, underemployment has many distinct effects. Literature on these specific categories of impact is relatively recent and noteworthy. In this literature review, the individual, social, and economic consequences of underemployment following the global COVID-19 pandemic, which has not only health but also economic and social dimensions, are examined. Following the pandemic, job losses, economic recession, etc., have occurred. Because of these factors, it is predicted that global underemployment will progressively increase, negatively impacting the psychological health of people and the economies of countries. (Kaur, et al., 2020).

In another study, Lee et al. (2021) investigated the effects of unemployment and underemployment on mental health during the COVID-19 pandemic. The survey conducted between April and May 2020 in the United States determined that the underemployed workforce was left to deal with psychological issues such as melancholy and anxiety due to the inability to work full-time and employment insecurity. In addition, this condition was more prevalent among women (55.7%) and young adults (18-29) (57.0%) than among males. Li et al. (2022) examined the effects of underemployment on employee health using the China Labor Force Statistics for 2014-2016 compiled by the Sun Social Science Research Center. According to these findings, the average number of underemployed workers in China increased from 0.035 in 2014 to 0.103 in 2016, indicating that underemployment is increasing in China. It has been stated that underemployment has similar negative consequences to unemployment, even if it protects workers from unemployment. It has been demonstrated that underemployment can have short-term and long-term negative psychological impacts on the individuals. In another study on the effect of underemployment, More and Rosenbloom (2020) examined underemployment and career satisfaction. The survey of 310 Israeli academics found that job satisfaction decreased with employment underemployment. The study considered underemployment to be a violation of the "psychological contract"—an individual's business expectations.

In addition to empirical studies examining underemployment across various age groups, studies

focusing on the young workforce, which is also the focus of this study, are gaining importance. Using a various academic methodologies, the compatibility between the education level of the younger age group and the jobs they hold is examined. Gender and other factors were also discussed. The 2008 crisis affected underemployment in Türkiye between 2007 and 2011, according to Acun and Güneş (2014). This study uses TURKSTAT household data from 2006 to 2011. The survey found that 25-29-year-olds were more likely to be underemployed. Due to the lower labor force participation rate, women are likely to be underemployed. Women are more underemployed in textiles than men. Research shows that underemployment rises with schooling. Being male, young, unmarried, a university graduate, working in a small-scale firm, working informally, and being underemployed during economic crises enhance the likelihood of underemployment.

This research is conducted within the context of Türkiye. Therefore, a framework that considers the impact of the dynamics in Türkiye is reflected. Thus, numerous studies have been conducted at various times on education level, unemployment, and skill-job matching in Türkiye. In one study, Selim et al. (2014) used panel data from the 2007–2010 TURKSTAT Income and Living Conditions Survey to study the socioeconomic factors of unemployment. First, the unemployment problem in Türkiye is structural due to rapid population pressure from migration, negative population structure, technological unemployment due to technological advances, unjust income distribution, unregistered employment, low female employment, inadequate labor force education, and investment costs. This study discovered a counterintuitive association between education and unemployment in Türkiye. Thus, university graduates are more likely to be unemployed than illiterates, and educational status increases unemployment. This contradicts research that education reduces unemployment.

In particular, youth Emeç et al. (2020) investigated the underemployment status of young people aged 15 to 29 in Türkiye. Using TURKSTAT 2014-2017 Household Labor Force survey data, this study emphasized the impact of actual wage level, age, and education status on underemployment. As the individual's real wage increases, the probability of being underemployed decreases; as the individual's age increases, the likelihood of being underemployed increases; and contrary to the assumption that the level of education would harm underemployment, the level of education has a positive effect on underemployment. In another study reflecting

a structure comparable to that of Türkiye in international literature, Rajmohan and Abeysekera (2016) found that the mismatch between labor market expectations and graduate's skills caused unemployment, arguing that unemployed university graduates threaten Sri Lanka's economic growth. More private universities have highlighted the competitiveness between public and private university graduates. One hundred business graduates from three organizations and human resources managers from linked companies were surveyed. Education quality has a weak effect on boosting income in labor markets, and the difference is attributable to human resources manager's education quality criteria. Meyer and Mncayi (2021) analyzed South African 20-34-year-old graduate underemployment. In a quantitative study of 1072 youth, 45% reported being underemployed and 55% not. 63% of underemployed youth wish to shift careers and are financially and morally exhausted from working below their credentials. The survey also indicated that 25-29-year-olds were more likely to be underemployed than 30-34-year-olds. Büyükgöze-Kavas et al. (2021) examined the validity and reliability of the Subjective Underemployment Scale among Turkish employees. The research revealed that this scale, which measures employees' perceptions of their employment level, is significantly related to variables such as job suitability, job satisfaction, and career expectations in the Turkish context. Based on 20 years of Household, Income, and work dynamics from Australia data, Fauser and Mooi-Reci (2023) evaluated underemployment for men and women aged 25–34. Women are more likely than men to face underemployment in the early phases of their careers, which traps them in the cycle and exposes them to unfavorable long-term work experiences. This study demonstrated gender imbalance in early career underemployment. Developing programs to eliminate underemployment and increase women's employment was stressed. Kirazcı and Büyükgöze-Kavas (2024) examined the effects of underemployment on job needs and job satisfaction among Turkish employees. The findings revealed that social support plays a vital role in these relationships and can mitigate the adverse effects of underemployment.

Finally, another research conducted following the qualitative methodology analyzes time-based underemployment in a single province in Türkiye. Tartılcı (2022) conducted a qualitative study on time-based underemployment in Türkiye, focusing on Denizli province. This study used a semi-structured questionnaire to conduct in-depth interviews with 20 participants. The results showed that participants wished to shift jobs

due to "low wages," "mismatch of the field of education and the job they did," and "working for too long"; most were unfamiliar with underemployment. In the study, the participants explained underemployment using negative concepts like "human capital loss," "low productivity," "job dissatisfaction, unhappiness," and "shrinking the economy, decrease in taxes and decrease in value added" in an individual sense. The remedy to underemployment was "improving the education system" and "increasing employment opportunities."

METHODOLOGY

This study used a qualitative research methodology. Interviews using semi-structured form were preferred for data collection. In accordance with the purpose of the study, the sample type was determined to be purposive sampling.

In the study, semi-structured interviews were conducted with 12 young people working in different sectors and various statuses aged 15-29 in Istanbul and detailed information was provided in Table 2.

The majority of participants are graduates of state universities. Participants are also inhabitants of districts on Istanbul's European (6) and Anatolian (6) sides with distinct socioeconomic characteristics. In addition to balancing the number of participants, the heterogeneity of the settlements in Istanbul was tried to be reflected. In terms of gender, there is a balance between women (6) and males (6). To determine whether the gender of the participants affected their status, we ensured that an equal number of men and women were included in the study. The increase in the age of marriage (Coşan, 2023) and the limited employment opportunities for those in this age group support the focus of this study.

Other side, purposive sampling of these species was preferred in the present study. Because it is designed to identify individuals with the potential to provide diverse and rich data, in this research, as a first step, we received approval for this research from the ethics committee of Marmara University (Date and number: 2022-24/11, Ethical approval number: 2022-7/7). Then, to determine the participants, we posted a form on the Marmara University Population and Social Policies Application and Research Center (PSP) website by the scope of the study. Among the participants who completed the form, we identified those with high potential to provide rich data. Two female researchers (PhD©) involved in the study communicated with the candidates and conducted preliminary interviews. As a result of these interviews, we assessed the participant candidates based on their characteristics and potential to provide a various of data to the research team. We then

Table 2: Characteristics of the participants

P. No	Age	Sex	Marital status	The type of university	Graduated department	Graduation year	Working position
1	28	Female	Single	State	Business Administration	2017	R&D Specialist
2	27	Male	Married	State	History	2019	Store manager
3	26	Female	Single	State	Contemporary Turkish Dialects and Literature	2019	Pastry maker
4	22	Male	Single	State	Chemical	2022	Waiter
5	26	Female	Married	Private/Foundation	Industrial Engineering	2019	Grant officer
6	29	Male	Married	Private/Foundation	Psychology	2019	Social worker
7	28	Female	Married	State	Archeology	2017	Teller
8	29	Female	Single	State	Archeology	2019	Employee of linking machine
9	28	Male	Single	State	Journalism	2016	Police officer
10	29	Male	Single	State	Math	2018	Bailiff
11	23	Female	Single	Private/Foundation	Turkish language and literature	2022	Sales Consultant
12	29	Male	Single	State	Department of Business Administration	2015	Sales Consultant

finalized the final list of candidates to be interviewed. Sharing the form again in certain periods, preliminary interviews, determining the final list, and negotiations took about four months. During the preliminary interviews, it was made clear to the candidates why and for what purpose the study was conducted. While qualifying in the process, considered the criteria of being a reluctant employee, especially outside the training field, due to the circumstances. In addition, the year of graduation was another criterion. The criteria used in this study must explain underemployment independently. Therefore, the limited scope of the requirements is one of this study's most critical limitations.

We wanted to determine how long it has been since the candidates graduated and whether they showed any

change, break, or acceptance/unacceptance reflexes over the years regarding their situation. We hypothesized that one of the reasons our participants worked outside of their field of study was because they were unintentionally continuing their education in a department from which they had enrolled. However, after conducting interviews, we realized that this was largely not the case and that mismatching emerged later in the process. The fact that a faculty member in the research team and two female researchers who conducted the interviews were actively working at universities, non-governmental organizations, and research centers with their projects and publications on employment and unemployment highlighted the experience factor in the healthy conduct of the interviews.

DATA COLLECTION AND ANALYSIS

We prepared the questions in the interview form based on the literature and gave their final shape by receiving feedback from experts who have field experience in the employment of young people. Three experts provided their opinions. The questions were structured according to their fields of study: work psychology, sociology, and social policy. We conducted pilot interviews with three individuals to assess the clarity of the prepared questions. These three individuals possess the characteristics of those who met the participant criteria. Then, we proceeded to the primary interviews. In the study, we reached out to 30 people through a form and asked them about the mismatch between their field of education and their jobs.

Using the Zoom , interviews lasted 45 minutes and 1.5 hours and were recorded with the user's permissions. In addition, after each interview, the research team discussed observations and notes to acquire contextual details and exchange ideas to ensure data richness. We interviewed candidates who met this criterion individually. In the 12th interview, we realized that the data was repeating itself, and we ended the interviews by assuming that we had reached data saturation.

There were no repeated interviews with any participants. The data processing procedure was initiated after the transcription of the interview data, marking the beginning of the collaborative journey. The transcribed data were first interpreted by the research team and sent to some participants for verification, which invited them to contribute to the validation process. However, sufficient feedback on the findings is still needed, which highlights the ongoing nature of our collaboration.

The obtained data were analyzed first, and a guide was created according to interpreting the data. To question the meanings derived from the experiences by the nature of the phenomenology design, the transcribed text was divided into various experience groups, and open coding was performed. It was decided to create explanatory themes in propositions about the research question and which themes would be brought together by establishing relationships between the explained themes.

The most frequently mentioned concepts and opinions in the obtained volume data were coded and categorized in the subsequent data processing step. A single researcher performed this procedure to ensure analysis integrity. The researcher who conducted the coding provided a detailed explanation. The codes were

then evaluated and checked according to the guidelines created by the research team. In addition, no software-based application was used in the coding process. In addition, no software-based application was used for the coding process.

The analytical techniques used to analyze the obtained data can be differentiated according to the problem, structure, and purpose of the study. Thematic analysis was preferred in this research. This made it possible to reveal a more in-depth cause-effect relationship and contributed significantly to shaping the analysis process. (Çelik et al., 2020).

RESULTS

The open coding and themes, derived from the significant findings of our study, are presented below, along with the conclusions.

The first of these themes examines the intricate dynamics of education and job mismatch, a crucial aspect in the field of education and employment studies. The study sheds light on the personal motivations and challenges faced by individuals in their preferred university departments. The participants' candid sharing of their experiences in department preferences and the career path-building process is insightful and relatable.

The effects of the first employment experience on out-of-field employment during the transition to work life after education and the burdens brought by the psychology of unemployment are revealed. The next theme is that the tensions created by the long-term breaks after graduation emerge as long-term unemployment and financial concerns. The next theme focuses on the effects of out-of-field employment experience on job satisfaction, motivation, and social connections. The effects of education and job mismatch on psychological and physical health are determined as separate theme. The impact of being employed out of the field on family and social relations is also explored in terms of an individual theme. Experience, wage expectations, and future perspectives are presented as the dynamics of out-of-field work. In addition, an aims of this study was to examine the effect of the participants' gender on their employment status. Although the number of participants was equal, no gender-related findings were observed in the interviews. Therefore, underemployment experiences are almost similar for everyone.

Dynamics of Education and Job Mismatch: Major Choices, Experiences, and Career Paths

In Türkiye, university preferences are determined by the results of a centralized examination system. Even though the exam name has changed over the years, its structure has remained consistent and unchanged. This examination is given to all students who wish to pursue university education. Students choose based on their results and examination rank. In addition to state universities, foundation universities also make accepts based on the outcomes of these examinations, and the exam rankings play a significant role in the provision of scholarships at foundation universities.

Typically, students take the exam with a specific university and department in mind. If their exam scores are insufficient for their target department, they will either retake the exam or seek alternative departments that accept the exam score. Some students who voluntarily or involuntarily read the department realize, over time that it does not meet their desires and expectations. This motivation motivated some students to quit their department and retake the university examination. However, if a university-placed student retakes the exam, a portion of the placement score is reduced. This situation diminishes the likelihood of enrolling in college compared to those who have not previously taken the exam. Due to many reasons, such as the difficulty of re-preparing for the exam, exam anxiety, the fact that a part of the score will be cut, and family and environmental factors, many students finish the department they have chosen and then look for a job in different fields, even though they realize that the department is not suitable for them once they are placed.

Initially, we believed that one of the reasons our participants were working outside their field of study was because they were unintentionally continuing their education in a department from which they had enrolled. Therefore, they would naturally pursue distinct careers upon completing their university education. However, the interviews revealed that eight participants voluntarily studied the department. Although their reasons for choosing and reading in their departments varied, the participants that they preferred to study in their departments. The influence of personal interest and role models are the primary motivations for choosing their disciplines.

"When I was choosing university, that is, when I was choosing my department, I did so with some encouragement from a high school teacher. After

recognizing my high school history instructor as a role model, I decided at that time..." (P1)

"I studied my department with great interest. I thought it was a great fit for my character, which I recognized while reading it. It was a perfect fit for my character. This has always been the foundation of my existence. Even when traveling in a single direction, I find it extremely annoying to take an extended route. Industrial engineering is founded in part on this concept. To conduct all operations as efficiently as feasible. Here, you are mathematically calculating what I did and the decisions I made personally..." (P5)

People who stated that they did not study the department voluntarily did so because they did not receive enough points for the department they targeted and were forced to remain in their home city due to financial difficulties.

"I chose a department in Istanbul. Since I reside in Istanbul, I had to make a decision based on my city of residence. Financially, I would have to leave town. As I will be living with my family, I selected the city where I currently reside as my first option..." (P8)

"I chose my department reluctantly. I chose my college with the expectation that I would not win in the first year. It was going to be a department from IIBF¹, but I was unable to find a department that suited my abilities and desires..." (P12)

The process of obtaining a job in one's field after graduating from college is influenced by many factors, including individual and social capital growth and development. In other words, successful academic and social participation during college years will facilitate the job search process. Consequently, a second assumption for the participants working in a field unrelated to their education was that they may have yet to actively participate in such a development process despite having studied in their favored departments. This assumption was based on the notion that individuals who have yet to develop their skills and competencies in a highly competitive job market may have trouble obtaining employment in their preferred field. However, only two participants indicated they could not participate because they had to work while attending university. One participant stated that he was more interested in recreational activities than departmental activities despite studying in the chemistry department.

¹ IIBF: Faculty of Economics and Administrative Sciences

Conversely, the remaining nearly all participants indicated that they actively participated in various departmental activities. Numerous participants organized or participated in these activities, which included internships, volunteer work, university club activities, archaeological excavations, and field excursions. These experiences contributed to their personal growth and facilitated their integration into the social milieu of their chosen field.

"...I utilized my college years productively. I participated in numerous activities and symposias both inside and outside the classroom. In particular, we organized international symposiums at our university. In addition, I was involved in the creation and organization of various symposiums. I was both the university's history department representative and the faculty representative. Afterwards, we also established a history department-specific community with a few of our peers. Additionally, we functioned as a community at our university. In addition, I was the chairman of this society of history for four years..." (P2)

"...when we entered the third grade, we became more active as a result of forming a group with our peers. Here we are, conducting research on sports culture. This approach eventually gained some attention. L... They invited us to appear on the air. We communicated in this manner. They requested that we create a radio program for their station. [They said]. Then we went to a similar programme..." (P9)

Processes in Which Long-Term Unemployment and Financial Concerns Lead to Off-Field Employment After Graduation

When beginning out-of-field work, it is essential to consider the effects of job search time. The individual who has been looking for a job for the shortest period has been looking for a job for approximately two months, while the individual who has been looking for a job for the most significant period has stated that he has been looking for a job for approximately two and a half years. The average duration of the participant's employment search is was approximately nine months. Regarding job search duration, the participants' experiences highlight the prevalence of long-term unemployment or unsuccessful attempts to obtain employment based on education level.

Individual financial concerns and expectations, which encompass personal expectations and themselves and external influences, are also influential in this process. After graduation, the anxiety of obtaining sufficient income to cover living expenses increases, revealing the need to enter the workforce to support themselves and their families and to provide financial stability, regardless of the field. This situation, as there are no jobs in their field, also forces people to accept jobs outside of their desired field, and the low wages of the available jobs make their qualifications incompatible with their positions.

"I took the position solely for financial reasons. Because, after a certain age, I stated that I worked in higher education, etc. Since my university days, I have been attempting to sustain myself without any financial assistance. Upon graduation, I intend to continue my current life..." (P7)

"...I looked for a job in my profession for 2.5 years without success. The employment I found did not adequately pay, and in some cases, it paid ridiculously low wages..." (P11)

The Effects of First Work Experience, Out-of-Field Employment, and Unemployment Psychology on the Transition from Education to Work

Negative experiences in the transition from education to employment stand out as a possible explanation for participants' employment outside their education and below their qualifications, given that they received education in their preferred field and participated in the academics. This assumption highlights the significance of individuals' initial employment experiences. The prevalent belief is that practical knowledge and skills are acquired through on-the-job training, regardless of the caliber of university education; in other words, the job is learned on the job. Therefore, the first work experience provides the opportunity to work in the selected field and gain real experience of their academic background. This experience enhances the continuance of the learning process and field-specific expertise. It also assists individuals in comprehending the inner workings of the industry. Therefore, the first work experience after graduation is crucial for individuals who advance in their field.

"...I worked in a shop. Also, there were book festivals. It was seasonal, occurring primarily once a year, and I spent 10–15 days. In addition, I worked for a theater company. There, I was a member of a light-related technical staff. There, I had a working procedure." (P7)

"I worked in a cafe as a server. Honestly, I even worked at a doner centre. I have always labored outside my education." (P11)

The examination of the participants' responses revealed various reasons why people choose to work in a field outside their own fields. One of such aspect is the psychological aspect of unemployment. The longer an individual is unemployed, the less likely they are to find a job and the greater their level of anxiety. As a result, individuals gravitate toward different areas with two distinct perspectives. The first is a temporary orientation to non-field and frequently low-skilled employment until a job in their field is found. Job hunting is an expensive endeavor; the longer it takes, the greater the expense. Individuals with no income temporarily accepts positions outside their field to continue their job search in their desired field over time. However, in this process, individuals continue to work in the position they have entered because there are no available positions or time to look for work.

"There was only one chemistry-related company near me." I submitted an application upon graduation. I thought working temporarily until I heard from them. But there was also no news..." (P4)

Accepting that he cannot find a job in his field and beginning to search permanently for employment in a different field is another situation. The unemployment rate is high, and the labor market is highly competitive. Each year, new graduates begin their job search in the market. While recent graduates are preferred for low-paying positions, those with experience are sought for positions with comparatively better working conditions. Individuals working outside their field of study only partially enter both classes, so they begin their job search at a disadvantage. The psychology of unemployment, environmental pressure, and market conditions causes this disadvantageous position.

"At that time, you may hear from my colleagues, acquaintances, or cousins, but not from family, 'Did you study for nothing, why are you unemployed?' Certainly, such pressures do exist..." (P1)

"...the impulse to miss something due to my age, the need for something, that is, I will have difficulty in employment related to my field; After researching KPSS² and similar processes, I observed that this was not a very hopeful situation for me, and I

actually felt compelled to work in a field unrelated to my department. My family and the environment had an undeniable impact on me. Constant pressure, constant inquiry, and a constant desire to know whether something has been accomplished compel people to conform to what they hear from their surroundings rather than their own actions. Since I am 23 to 24 years old; They were saying "you've studied so much for this," "you've read for nothing," "you've studied a blank department," "how old are you, you're going to get married, and you still don't have a job,"..You know, I turned to a different business, a sector, to say, 'I can also achieve something.'" (P2)

Effects of Education and Job Mismatch on Job Satisfaction, Motivation, and Social Connections

In addition, participants emphasized the mismatch between their education, credentials, and the requirements of their current position. Regarding the relationship between education and employment, most participants who reported possessing more knowledge and skills than their current status stated that the education they received was unrelated to their current position and made no significant contribution to their work

"My work has nothing to do with the orientation of my education. Because I perform with my physique here. In other words, the faster I move my arm... My only benefit from my duties here is my physical health. Aside from that, even the smallest detail of my previous training is irrelevant here. Let's not say it's unimportant, but if it's not happening here, it's of no use." (P8)

Other participants stated that their education or, more generally, undergraduate education indirectly impacted their employment and the tasks they performed. In this context, the relationship between education and work is not directly related to the nature of the work but rather to the individual's influence on the individual's attitudes and behaviors while conducting his duties.

"To make a correlation, I am a graduate of the Journalism Faculty, specifically the Communication Faculty. As a police officer in the field, my education at the Faculty of Communication offers me an advantage. Because I can communicate effectively, I believe I can better analyzing the opposing side. In this sense, it is related. A second connection is that journalism is a public service to me, which is also how I view policing." (P9)

² KPSS: Public Personnel Selection Exam

The participants' comments illuminate on numerous aspects of their current jobs. Participants predominantly expressed discontent regarding the workload. However, a few participants, linked their problems with their superiors to their educational heritage.

"...I dislike the atmosphere at work as well. For instance, I don't like it when they demean people, say things to a few working [university graduates] peers like me such as "you read it for nothing," "why don't you do your own job," and "you can't be anything," and it drives me away. (P3)

"...My manager has never attended college, etc., which humiliates my education and humiliates me. They always speak as if they were on top..." (P11)

The participants also mentioned their positive workplace experiences, even if they initially did not enter the job and workplace willingly. Positive experiences are primarily described in relationships with coworkers rather than financial matters. These friendships with other employees in the workplace help the individual become accustomed to and adapt to the unfamiliar job and workplace, make it easier to bear with the situation and contribute to the individual's motivation to continue working. The emphasis on workplace relationships and friendships demonstrates that social connections and a supportive work environment can serve as coping mechanisms for underemployed individuals. Therefore, solid social links can provide a sense of belonging and motivation to continue working while mitigating some of the negative aspects of an unsuitable job.

"I adore my coworkers very much. We converse, even among ourselves, we converse. Our companionship is the primary factor that keeps us in this institution. There are instances such as writing reports in the afternoon. These instances are what kept us to work..." (K6)

Effects of Education and Job Mismatch on Psychological and Physical Health

Nearly all participants acknowledged and described the psychological effects of working outside their field of education, a remarkable finding. Although the participants do not actively consider this issue and did not always experience associated emotions, they reported that when they thought about their situation, they frequently concluded that their efforts were futile and that they were on a different path than anticipated. Although they occasionally attribute this situation to the system, it causes them to doubt themselves and

feel regret. In addition, some participants reported experiencing hair loss, sleep disturbances, headaches, muscle/joint discomfort, and skin issues due to these conditions. In addition, one participant described experiencing protracted depressive episodes.

...while I was studying, I tried to do my best and absorb as much as possible, but why was I unable to achieve anything? Maybe I'm a store manager in the industry I'm in, or maybe I'll be a regional manager, but I always ask myself, "Why can't I do anything about my own field? ", "Am I unsuccessful? ", "What am I missing? ", and "Do I have a defect?" I'm forming mental symbols. It has a detrimental psychological impact on me..." (P2)

"...I endured such periods of psychological depression for an extended period of time. These periods lasted between two and three months. I was utterly depressed and in a constant state of anxiety for two to three months. It has a profound psychological effect. That is, because I could not handle it. There were so many things I shouldn't have done that I was saying shouldn't have happened. This shouldn't be the case, as there are alternative versions; why are these versions implemented in this manner? It was a lot of trouble for me, I couldn't lift it..." (P5)

In addition, it has been observed that being employed outside of the education field impacts the motivation and performance of some participants, resulting in a lack of job satisfaction or a decline over time.

"It has no negative effect on my work performance, but it does impact my motivation. Because I have an education and I cannot do anything about that education. Since I could not find employment related to my education, I began to a negative attitude toward it. (P3)

"It has a negative effect on our motivation in a 100% cases. If I worked here as a psychologist, I might come to work with flowers in bloom, but now I arrive with a sigh and have trouble waking up (...) I endeavor to do whatever is asked of us, but I am not motivated. In no manner, especially over the past two to three years, I am undergoing a process with which I am unsatisfied." (P6)

Effects of Out-of-Field Employment on Families and Social Relations: Expectations, Pressures, and Response by Individuals

Some participants stated that their employment circumstance affected their familial and social relationships. Advice and encouragement to find a job as soon as feasible before beginning work can gradually become condemnation when people work in unrelated positions. Participants occasionally asked themselves, "Did you study that for nothing?" Interestingly, this discourse does not always correspond to occupation and salary. Even workers outside their field of study earn a higher wage, they are still expected to advance in their field of study. Therefore, young people confront expectations and pressure generated by their current situation in the jobs they choose to avoid or ease family and environmental pressure.

"...My family asks, "Since you have an education, why don't you do your own job?" They actually do not appear to comprehend a little..." (P3)

"...my family opposed my entry into the textile industry." They stated, "You are a college graduate, a door may open; try your luck in various fields." Although they do not wish to, they continue to pose queries such as "why you are there?" However, as stated, I submitted applications and conducted interviews. But as I said, I was the one who made the applications and interviews. After negative results or irreversible places, after a time, I gave myself to this field. Otherwise, everyone reactions to me, such as "why are you there? You shouldn't be there," However I was only who went through the unemployment process alone. (P8)

Off-Field Employment Dynamics: Work Experiences, Salary Expectations, and Future Perspectives

Age and time since graduation are variables that influence the participants' preferences and decisions regarding their employment status. Participants who graduated less than a year ago continue to seek employment in their field, but those who graduated more than a year ago appear more inclined to remain in the current industry. This reflects the reality that people progressively lower their expectations and goals because of their experiences and the labor market's challenges.

"...it is better to do the profession when the information is much fresher in journalism (...) But if I were to be in that situation today [if I had quit

my job], I would not continued in my field, in that respect..." (P9)

"...I graduated in 2017, how many years have passed, regrettably, information decays if it is not utilized, if it is not processed. I feel incredibly insufficient regarding the department I just study..." (P7)

The wage level is a contributing factor to this circumstance. Only respondents indicated that they would earn a higher salary if they worked in their field of education. Other respondents noted that their wages would remain unchanged or decrease. This suggests a structural issue. As education is a form of human capital, it is anticipated that barring exceptions, wages and fringe benefits will increase alongside education levels.

On the other hand, participants who have yet to have the opportunity to obtain employment in their fields know the general wage level by observing the people around them or following developments in the field based on their prior experiences. In addition, low wages discourage switching employment. Thus, inconsistent wages contribute to underemployment.

"Full-time retail employees are paid roughly the same as those who have been in their field for three to four years, and the majority of them say, "I read it for nothing." I don't think I will not gain much by working in my field." (P12)

However, despite being employed outside their field of study, nearly all participants reported that their jobs enhanced their abilities and allowed them to acquire new skills. These skills are not explicitly related to their field of study but encompass a variety of knowledge and skills. Participants tried to learn the position, mapped out a career path to advance in the current order, and attended periodic trainings provided by their institutions. These investments influence participants' decisions regarding in skill development and the potential costs of leaving their current position.

"...Not only as a service, but after experiencing the process from retail mathematics, computers, sales programs, starting from the starting point of the products to the sale in the store, maybe you can learn something at a level to establish your own business when you have the opportunity in the future." (P2)

Participants expressed various emotions and attitudes regarding their future outlooks, including anxiety,

uncertainty, optimism, and hopelessness. These diverse responses demonstrate the complexity and interconnectedness of their future perspectives, which are influenced by their employment-related experiences, expectations, and challenges

DISCUSSION

Lent et al. (1994) developed the Social Cognitive Career Theory (SCCT) to explain the factors that shape individuals' career and academic interests, preferences, and performance. This theory describes how individuals interact with environmental and individual factors by addressing the effects of self-efficacy, outcome expectations, and personal goals on career development. In our study, personal interests and role models were identified as the primary source of motivation and were consistent with the social cognitive career theory. On the other hand, Brunello and Checchi (2007) revealed that academic or vocational guidance (tracking) at an early age can increase social inequalities because low-income or disadvantaged groups are often directed to less advantageous tracking paths. Van de Werfhorst and Mijs (2010) revealed that the centralized examination system, early guidance, and school differences can increase individual achievement inequalities. What emerges when educational preferences, influencing factors, and career paths are constructed is the relationship between educational systems and social inequality. The environmental effect is seen intensely in the findings of our study, and the guidance effect has a structure that further increases inequalities.

On the other hand, long-term unemployment and financial concerns have caused individuals to turn to out-of-field employment. Wiczer (2013) states that individuals who have been unemployed for a long time have a reduced probability of rejoining the labor market. This situation often stems from a mismatch between skills and job requirements. However, those who find it are likely also reflexed to escape the psychology of long-term unemployment and the pressures brought by financial concerns. Therefore, matching of the job with the field of education can be put on the back burner due to these concerns. In this context, Aronson et al. (2015) reveal that the uncertainties experienced by individuals in the process of finding a job due to the economic crisis have increased the tendency to turn to low-income and out-of-field employment, and this situation has profound effects on individuals' sense of identity and career development. More (2024) reveals that graduates who experience a mismatch between education and field of work remain unemployed for more extended periods

than those who are compatible. Indeed, in our study, it was observed that awareness that the time it takes to find a job is long and that meeting the costs of living is the primary motivation. In this sense, the findings and the literature are similar.

The first job experience can help individuals gain a permanent identity over time due to financial concerns under competitive conditions. In this context, Botezat et al. (2024) show that individuals who experience mismatching between high school and university education fields are more likely to experience skill mismatch in their first job after graduation, and this effect decreases after five years. Still, the mismatching in the first job is effective in the long term. Albert et al. (2023) stated that vertical mismatch (education level is higher than job requirements) is less permanent than horizontal mismatch (education field not being compatible with the job field) because some graduates who experience horizontal mismatch prefer to stay in their first job. The study states that this situation reflects the high youth unemployment characteristic of the Spanish labor market. From this perspective, one of the labor market characteristics in Türkiye is high youth unemployment, and young people may prefer to stay in their first job due to intense competition concerns. The effect of flexible working arrangements on labor markets can even be considered. In this sense, the relative increase in part-time jobs in Türkiye has caused a tendency towards jobs outside the field and an obligatory effect. This supports the consistency of our findings.

Jackson and Li (2022) revealed that many graduates turn to out-of-field or low-qualified positions during the job search process, which negatively affects career satisfaction and income potential in the long term. Banerjee and Sequeira (2023) similarly state that when job opportunities do not arise immediately, job seekers become more impatient, reduce their reservation fees, and turn to lower-paid jobs closer to home. In this respect, the perception of a lack or inadequacy of job opportunities indicates a tendency for individuals to psychologically lower their expectations and take the first job they find. The findings we obtained in our study reflect this situation.

Mismatches between the field/department of education and the job for individuals need to be clarified. Robst (2007) examined the matching of individuals' university departments with their jobs and evaluated the effects of this matching on income, job satisfaction, and career success. He demonstrated that individuals with high education and job matching generally experience

higher income and job satisfaction. Still, in the event of mismatching, there may be losses in skill use and wages. Similarly, Somers et al. (2019) demonstrated that the mismatching between the field of education and the job in which individuals work negatively affects their earnings and job satisfaction. Still, the effects vary according to the sector, country, and labor market characteristics. Sloane (2020) emphasizes that these incompatibilities are associated with low wages, low job satisfaction, and limited career advancement, but the effects may vary between sectors and individual characteristics. Therefore, the impact of job and education matching on motivation and performance can be seen. However, when it is considered that the results in question are directly related to the countries' labor market, sector, and individual characteristics, structural problems in Türkiye's labor market are a determining factor. Our study noticed how the perception of higher qualifications substantially affects motivation performance and job satisfaction through behaviors.

The problem set for individuals can be even more profound. The effects on psychological and physical health are pronounced. Bracke et al. (2014) showed that situations where education level and job position are incompatible increase mental health problems such as depression and anxiety, and this effect is significantly more pronounced in highly educated individuals. Dunlavy et al. (2016) stated that individuals who experience mismatching between education level and job requirements have worse general health status, and especially highly educated individuals working in low-status jobs are more affected by this situation. Xu and Chen (2024) show that education level being higher or lower than job requirements is associated with an increase in mental health problems such as depression and anxiety. These findings emphasize that work and education compatibility is a critical factor for individuals' psychological well-being, and our findings are consistent with these findings.

For individuals, being employed outside the field also affects family and social relationships. In this context, related studies that include indirect findings, although not direct, are essential. Taş and Özmen (2019) focus on the effects of the material and moral support provided by the family on individuals' positive future expectations and career adaptability. Bacanlı et al. (2018) reveal that parents' career expectations have a decisive effect on adolescents' career preferences and adaptation. Sarsıkoğlu and Bacanlı (2019) found that perceived career barriers negatively affect students'

career adaptability and that this effect varies depending on variables such as gender, social environment, and individual factors. Therefore, when the literature is examined, the family's primary position as a material and moral support provider for career adaptation is high due to their expectations. It can be said that working outside the field where the individual is educated is related to the costs brought by these expectations in this respect. However, the role of the environment that prevents career adaptation stems from the pressure element. The individual takes action regarding their position against the environment. When this disrupts career adaptation, it is considered an inhibitory factor. In Türkiye, the effect of family expectations and the social environment on a career can be considered to have a significant impact within this framework. We can say that this has an intense effect on the findings of our study

Employment experiences outside the field, salary expectations and awareness, and future projections are essential indicators for determining individuals' positions. Kim and Choi (2018) revealed that job mismatch leads to lower wages, reduced job satisfaction, and poor performance and that individuals whose qualifications exceed the requirements of the job are particularly negatively affected by this situation. Similarly, Rios-Avila and Saavedra-Caballero (2019) emphasize that education-job mismatch reduces individuals' income potential and job satisfaction and that the dynamics of the labor market and individual choices are among the main reasons for this mismatch. Serikbayeva and Abdulla (2022) take a broader perspective and state that individuals experiencing mismatch generally earn lower incomes and that this situation negatively affects both individual well-being and economic efficiency at the national level. Aytun and Meçik (2023) revealed that graduates experiencing mismatch face more serious income losses, especially in low-wage segments. More advanced, Abdulla (2024) shows that this mismatch reduces total labor productivity and negatively affects economic growth.

On the other hand, it is undeniable that there are also positive new skills and experiences. However, the intense emphasis here is that the participants' expectations about wages and the future align with the realities of the labor market, and the expectations are low. However, it should be stated that in Türkiye, which is undergoing a demographic transformation and facing the reality of an aging population, inadequate employment due to insufficient education and job mismatch is problematic for the future, and there is a need for awareness about

the nature of the work offered to individuals and the experiences of individuals.

CONCLUSION

This study address the causes of underemployment among employed young people. We applied the interview form questions that we determined based on the literature with the help of a semi-structured interview technique. Underemployment turns into a form that starts in the early career periods of young people and then takes the form of a negative vicious circle.

Young population potential is essential to the economic development of countries. Keeping the labor supply and demand in balance is appropriate to ensure economic sustainability. In a nation where quality education is available, it will be possible to increase and expand the skill level of the young population. Also, the efficiency level in labor productivity will grow in a country with a qualified workforce structure. Thanks to these situations, it will be possible to reach the sustainable development goals easily.

In this study, strategic due diligence is made for countries to reveal and minimize the causes of underemployment. The most significant limitation of this study is that only Türkiye, one of the emerging economies, is considered. The study was conducted only in Istanbul, one of the emerging economies in Türkiye. There are some reasons why we only focused on Istanbul in the study. In this sense, it was thought to be more reasonable to take a picture of Istanbul and make predictions because it is a city where the service economy is most intense, where the young university graduate population is relatively high, where the highest number of higher education institutions are located, where job opportunities are relatively high, where finding a job is relatively faster but where there is a lack of qualifications, and because it allows the phenomenon of underemployment to be experienced more intensely.

In Türkiye, macrodata can be considered an indicator of education and job mismatch, namely time-dependent underemployment data. According to the latest data of TÜİK, this time-dependent underemployment and the integrated unemployment rate is 18.2%. When the characteristics of the labor market in Türkiye and especially the youth unemployment data are taken into consideration, this corresponds to a very high rate. This situation

shows that many individuals who want to work full-time in Türkiye cannot work the hours they want due to economic conditions. Of course, the problem discussed here is more about the mismatch between the education system and the labor market than the benefit of the results brought by flexible working arrangements. In developing countries, these rates are high due to economic fluctuations and problems in the labor structure. The prevalence of informal employment, in particular, also paves the way for the emergence of underemployment. The inadequacy of work areas and work environments in developing countries exhibits a similar character to Türkiye (Van der Berg and Van Broekhuizen, 2012). Mismatches between education systems and labor markets also cause a loss of economic efficiency.

Türkiye can implement successful policy examples in different countries that can provide solutions to underemployment. It is stated that in Germany's dual-structure vocational education system, integrating practical training in the workplace and theoretical knowledge provided at school enables young people to successfully transition to the labor market (Euler, 2013). In the skills development system implemented in Singapore, the technical and vocational education system's success in responding to the labor market's needs is attributed to the synergy provided by the government's strategic guidance and the active participation of the private sector. Yoon (2017) evaluates the transformation of innovation-based policies and the country's technology-based growth in the context of employment policies. Türkiye can create strategic targets for the needs of the labor market by adapting these policies within the framework of its internal dynamics, and considering that its technology infrastructure is also expanding, technology-based employment can be an essential political goal in reducing underemployment.

The results and proposed strategies make it simpler for other emerging economies to address this issue effectively. On the other hand, the problem of underemployment is also an essential problem for other countries. This problem may be experienced if necessary measures are not taken in the labor markets of developed economies, which have taken on a different structure with the changes in the demographic structure and immigration policies. For this reason, it will be helpful to conduct comparative studies with other emerging and developed economies at the national and regional levels in future studies.

REFERENCES

- Aberg, R. (2003). Unemployment Persistence, Over-Education and the Employment Chances of the Less Educated. *European Sociological Review*, 19(2), p. 199-216. <https://doi.org/10.1093/esr/19.2.199>
- Acun, S., & Güneş, B. (2014). Türkiye'de 2008 Krizinin Eksik İstihdama Etkileri. *Ekonomik Yaklaşım*, 25(90), s. 49-69.
- Albert, C., Davia, M. A., & Legazpe, N. (2023). Educational mismatch in recent university graduates. The role of labour mobility. *Journal of Youth Studies*, 26(1), 113-135.
- Appelbaum, E., & Schettkat, R. (1995). Employment and productivity in industrialized economies. *International Labour Review*, 134, 4-5. 605.
- Aronson, P., Callahan, T., & Davis, T. (2015). The transition from college to work during the great recession: Employment, financial, and identity challenges. *Journal of Youth Studies*, 18(9), 1097-1118.
- Aytun, U., & Meçik, O. (2023). Wage Returns to Field of Study-Occupation Mismatch in Turkish Graduate Labor Market: Quantile Regression Approach. *Ege Academic Review*, 23(4), 653-666.
- Bacanlı, F., Akyol, E. Y., Kaynak, S., & Özhan, M. B. (2018). Ergen-ebeveyn kariyer uyumu ölçeği'ni Türkçeye uyarlama çalışması. *Ege Eğitim Dergisi*, 19(2), 389-407.
- Botezat, A., Incaltarau, C., Diac, S. A., & Grosu, A. C. (2024). Having your career path decided too early: the effects of high school track on education-occupation mismatch. *International Journal of Manpower*, 45(6), 1171-1190.
- Bracke, P., Van De Straat, V., & Missinne, S. (2014). Education, mental health, and education-labor market misfit. *Journal of Health and Social Behavior*, 55(4), 442-459.
- Brunello, G., & Checchi, D. (2007). Does school tracking affect equality of opportunity? New international evidence. *Economic policy*, 22(52), 782-861.
- Büyükgöze-Kavas, A., Allan, B. A., Turan, M., & Kirazci, F. (2021). Context and validation of the subjective underemployment scale among Turkish employees. *Journal of Career Assessment*, 29(2), 283-302.
- Çelik, H., Baykal, N. B., & Memur, H. N. K. (2020). Nitel veri analizi ve temel ilkeleri. *Eğitimde Nitel Araştırmalar Dergisi*, 8(1), s. 379-406. <https://doi.org/10.14689/issn.2148-2624.1.8c.1s.16m>
- Churchill, B., & Khan, C. (2021). Youth underemployment: A review of research on young people and the problems of less (er) employment in an era of mass education. *Sociology Compass*, 15(10), e12921. <https://doi.org/10.1111/soc4.12921>
- Coşan, B. (2023). *Dünyada ve Türkiye'de Evlilik Yaşını Artışı: Nedenler Muhtemel Sonuçlar ve Politika Önerileri*. Ankara: Nobel Bilimsel Eserler.
- Dikmen, F. H. (2021). Türkiye'de Genç Yetişkinlerde Zamana Dayalı Eksik İstihdamın Özellikleri. *Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 39(2), s. 211-222. <https://doi.org/10.17065/huniibf.744308>
- Dooley, D., Prause, J., & Ham-Rowbottom, K. A. (2000). Underemployment and depression: longitudinal relationships. *Journal of health and social behavior*, p. 421-436. <https://doi.org/10.2307/2676295>
- Dunlavy, A. C., Garcy, A. M., & Rostila, M. (2016). Educational mismatch and health status among foreign-born workers in Sweden. *Social Science & Medicine*, 154, 36-44.
- Emeç, H., Üçdoğruk Birecikli, Ş., & Kümbül Güler, B. (2020). Türkiye'de Gençlerle Eksik İstihdamın Analizi. *Yönetim ve Çalışma Dergisi*, 4(2), s. 137-152.
- Euler, D. (2013). Germany's dual vocational training system: a model for other countries? Gütersloh: Bertelsmann. https://www.bertelsmannstiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/GP_Germanys_dual_vocational_training_system.pdf
- Fausser, S., & Moo-Reci, I. (2023). Visualizing Underemployment Dynamics in Australia: Combining Sankey and Sequence Analysis Plots. *Socius*, 9, p. 1-3. <https://doi.org/10.1177/2378023123116064>
- Green, F., & Henseke, G. (2021). Europe's Evolving Graduate Labour Markets: Supply, Demand, Underemployment and Pay. *Journal for Labour Market Research*, 55(2), p. 1-13. <https://doi.org/10.1186/s12651-021-00288-y>

- ILO (1998). *The Sixteenth International Conference of Labour Statisticians*, Retrieved June 25 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087487.pdf
- Jackson, D., & Li, I. (2022). Transition to work, mismatch and underemployment among graduates: an Australian longitudinal study. *International Journal of Manpower*, 43(7), 1516-1539
- Kaur, M., Goyal, P., & Goyal, M. (2020). Individual, Interpersonal and Economic Challenges of Underemployment in the wake of COVID-19. *Work*, 67(1), p. 21-28. <https://doi.org/10.3233/WOR-203249>
- Kim, S. J., & Choi, S. O. (2018). The effects of job mismatch on pay, job satisfaction, and performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 49.
- Kirazci, F., & Buyukgoze-Kavas, A. (2024). Underemployment, Work Needs, and Job Satisfaction: Does Social Support Matter?. *Behavioral Sciences*, 14(4), 335.
- Klein, M. (2015). The Increasing Unemployment Gap Between The Low And High Educated in West Germany. Structural or Cyclical Crowding-out? *Social Science Research*, 50, p. 110-125. <https://doi.org/10.1016/j.ssresearch.2014.11.010>Get rights and content
- Lee, J., Kapteyn, A., Clomax, A., & Jin, H. (2021). Estimating Influences of Unemployment and Underemployment on Mental Health During the COVID-19 Pandemic: Who Suffers the most? *Public Health*, 201, p. 48-54. <https://doi.org/10.1016/j.puhe.2021.09.038>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior*, 45(1), 79-122.
- Li, N., Liang, H., Gao, Y., & Wu, D. (2022). Short- and Long-Term Effects of Underemployment on Workers' Health: Empirical Analysis from the China Labor Force Dynamics Survey. *International Journal of Environmental Research and Public Health*, 19(24), p. 2-14. <https://doi.org/10.3390/ijerph192416695>
- Low, L. (2011). Singapore's skills development system: Synergies between state and market. In M. R. Godfrey & M. J. Slater (Eds.), *The Technical and Vocational Education and Training System in Singapore: Key Success Factors* (pp. 15-28). World Bank.
- McGowan, M. A., & Andrews, D. (2015). Labour Market Mismatch and Labour Productivity: Evidence From PIAAC Data. *OECD Economics Department Working Papers*(1209), p. 1-51. <https://doi.org/10.1787/18151973>
- Montcho, G., & Carrière, Y., & Mérette, M. (2022). A Dynamic Labor Utilization Framework for Measuring Under-Employment. *Available at SSRN* 3953837. <https://dx.doi.org/10.2139/ssrn.3953837>
- More, S., & Rosenbloom, T. (2021). Job-Field Underemployment and Career Satisfaction: A Relationship of Cause and Effect. *International Journal of Business and Management*, 15(10), p. 1-82. <https://doi.org/10.5539/ijbm.v15n10p82>
- Nunez, I., & Livanos, I. (2010). Higher Education and Unemployment in Europe: An Analysis of the Academic Subject and National Effects. *Higher Education*, 59, p. 475-487. <https://doi.org/10.1007/s10734-009-9260-7>
- Rios-Avila, F., & Saavedra-Caballero, F. (2019). It pays to study for the right job: Exploring the causes and consequences of education-occupation job mismatch. *Levy Economics Institute, Working Papers Series*, (922).
- Robst, J. (2007). Education and job match: The relatedness of college major and work. *Economics of Education review*, 26(4), 397-407.
- Schreurs, B. H., Hamstra, M., Jawadar, I., & Akkermans, J. (2020). Perceived Overqualification and Counterproductive Work Behavior: Testing The Mediating Role of Relative Deprivation and The Moderating Role of Ambition. *Personnel Review*, 50(3), p. 1038-1055. <https://doi.org/10.1108/PR-05-2019-0237>
- Selim, S., Kirel, H., Çelik, O., & Yazıcıoğlu, H. (2014). Türkiye'de İşsizliğin Sosyo-ekonomik Belirleyicileri: Panel Veri Analizi. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 10(22), s. 1-25. <https://doi.org/10.11122/ijmeh.2013.9.19.459>
- Serikbayeva, B., & Abdulla, K. (2022). Education-job mismatch: Implications for individual earnings and aggregate output. *Social Indicators Research*, 163(2), 723-752.
- Sloane, P. J. M. (2020). Overeducation, skill mismatches, and labor market outcomes for college graduates. IZA World of Labor.

- Somers, M. A., Cabus, S. J., Groot, W., & van den Brink, H. M. (2019). Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 33(2), 567-603.
- Tartılcı, H. İ. (2022). Türkiye’de Zamana Dayalı Eksik İstihdam ve Yetersiz İstihdam: Denizli İlinde Nitel Bir Araştırma. Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü. Denizli.
- Taş, M. A., & Özmen, M. (2019). Meslek seçiminde aile desteği ve kariyer uyum yetenekleri ilişkisi: Olumlu gelecek beklentisinin aracılık rolü. *Avrasya Uluslararası Araştırmalar Dergisi*, 7(16), 736-761.
- Taşçı, H. M., & Darıcı, B. (2010). Türkiye’de Eksik İstihdamın Belirleyenleri: HIA ile Bir Mikro Veri Uygulaması. *Maliye Dergisi*(158), s. 278-300.
- Thompson, K. W., Shea, T. H., Sikora, D. M., Perrewe, P. L., & Ferris, G. R. (2013). Rethinking underemployment and overqualification in organizations: The not so ugly truth. *Business Horizons*, 56(1), p. 113-121. <https://doi.org/10.1016/j.bushor.2012.09.009>
- Ünal, H., & Gönülaçan, A. (2019). Türkiye’de Eksik İstihdam Edilenlerin Ortak Özelliklerinin Belirlenmesi: Lojistik Regresyon Analizi. *Maliye Dergisi*, 176, s. 128-139.
- Van de Werfhorst, H. G., & Mijs, J. J. (2010). Achievement inequality and the institutional structure of educational systems: A comparative perspective. *Annual review of sociology*, 36(1), 407-428.
- Van der Berg, S., & Van Broekhuizen, H. (2012). Graduate unemployment in South Africa: A much exaggerated problem. Centre for Development and Enterprise, Stellenbosch University.
- Verhaest, D., & Velden, R. (2013). Cross-Country Differences in Graduate Overeducation. *European Sociological Review*, 29(3), p. 642-653. <https://doi.org/10.1093/esr/jcs044>
- Wiczer, D. (2013). Long-term Unemployment: Attached and Mismatched?. In *2013 Meeting Paper* (No. 1101).
- Xu, Q., & Chen, Y. (2024). Educational mismatch and mental health: Evidence from China. *Social Science & Medicine*, 356, 117140.

